



Compilation of Public Comments Received Regarding Draft 2010 Minnesota Water Plan

Background

According to *Minnesota Statutes*, section 103B.151, the Environmental Quality Board is to coordinate a comprehensive long-range water resources plan for the state every ten years. The draft *2010 Minnesota Water Plan* was available for public comment from September 1 to October 1, 2010. The draft report and online submission form were posted on the EQB website and a solicitation for comment was emailed to agency members and other EQB customers. Additionally, the EQB discussed the plan and solicited public comment at its September 16, 2010 board meeting.

The draft plan was prepared in cooperation with EQB member agencies and is the latest in a long history of bringing together agencies and others with an interest in achieving sustainable water management. The many local, regional and state stakeholder efforts convened in recent years also were an important part of this effort.

Comments

The EQB received comments from the Minnesota Farm Bureau, the Corn Growers Association, the Clean Water Council and four private citizens. The comments are included on the subsequent pages in the order they were received:

- September 3, 2010, private citizen, received via online submission
- September 24, 2010, private citizen, received via online submission
- September 30, 2010, Minnesota Corn Growers Association, received via online submission
- September 30, 2010, private citizen, received via letter and online submission
- September 30, 2010, Minnesota Farm Bureau Federation, received via letter
- October 4, 2010, Clean Water Council, received via letter
- October 30, 2010, private citizen, received via email

Public Comment Received via Online Submission Form

Roman Kanivetsky

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City: Saint Paul

I think this document is written in the format as business- as-usual and represent traditional environmentalism point of view rather than sustainability. Instead considering the water resources sustainability as a resource on the loan across generations this document suggests that it is gift from our ancestors. Although this document calls for unified approaches for ground water and surface water systems it presents all results in detached fashion with respect to sustainability. The science used in this report is traditional science based only on human needs at the expense of ecologic integrity.

First of all, the new thinking, and knowledge and know-how are needed in order to break away from the present status quo. This knowledge should be based on linkage of economy and water resources. It should be based on new science of sustainability that integrates global, regional and local perspective to shape a place-based understanding of the interaction between environment and society. The failure of present economy is evident in a threefold economic, social and environmental crisis. These crises cannot be dealt separately because they are powerfully linked. This will require integration of place base science. Because human activities and stresses for the most part dealt at the land surface the land unit is central to focus this integration. And therefore we need to understand the earth as a system. This Earth system should be understood through the integration across the discipline-based branches of geophysical, biological, social and technological fields. The sustainability science also needs to integrate across geographical scales to eliminate convenient, but ultimately, artificial distinction between global, continental, regional and local perspectives. In addition, sustainability science will need to integrate across interconnected human activities such as energy, agriculture, habitation, and transportation needs that presently are dealt separately.

Specifically, for water resources sustainability the critical is place-based sustainability science. Fortunately, the place-based science also provides a conceptual and operational framework within which progress in integrative understanding and management are possible. A grand query of sustainability science is the scale relationships. The pursuit of such understanding is the central task of sustainability.

With respect to water resources sustainability this task can be met only by system science approach in which all characteristics of hydrologic cycle should be linked to all characteristics of biophysical, social and technological cycles. To accomplish this we need new thinking in designing monitoring system of water cycle components to provide a signal of degradation syndromes for navigation toward sustainability. It should be done in multi-scale organization.

The system of indicators of water resources sustainability is essential for inclusion into systems of economic indicators to inform society over coming decades on the progress in navigation toward sustainability. Regularly reported observations of natural and social phenomena facilitate the provision of systematic feedback. Water levels in the wells and gaging station on their own are not indicators of water sustainability. One example of such indicator is Water Sustainability Index (WSI). WSI is the ratio of renewable supply to water need for human and ecological services. This indicator is derived from watershed characteristic method developed at the University of Minnesota and is applicable at a multi-scale organization. This indicator is powerfully linked to economic indicators. The popular GDP index is not good measure for sustainable development. It can outweigh the benefits and thus reduce sustainable well-being. Other systems are much better, like New Economics Foundations Happy Planet Index and the Genuine Progress Indicator (GPI). GPI aims to measure and distinguish between worthwhile economic growth and growth that reduces wellbeing. The literature review indicates that GDP has steadily increased since 1950 and yet GPI peaked in about 1975 and has been gradually decreasing ever since a 35-year recession in sustainable well-being! (W. Rapp, 2010). It is interesting to note that Hubbard Curve also predicted 1975 as the peak of oil supply worldwide. And 1975 also corresponds roughly to beginning of gradual decline of natural capitals in Minnesota, including freshwater. This example indicates the importance of place-based research and linkages from global to local scales.

This document also should strongly emphasis the need for knowledge of ecosystem services and payment for it from global to local scales as a way to manage water sustainability using economic incentives. Also, incentives for technical innovation are needed that produce more human and ecological values with elimination of environmental damage. Besides, the incentives structure must be developed in a way to function across state and national boundaries and across generations because the spatial and temporal extent of sustainability issue. Finally, there is need for new institutions for integrating disciplinary knowledge in place-based, problem-driven research efforts at a multi-scale.

timestamp: 2010-09-03 20:01:35

Public Comment Received via Online Submission Form

Rob Sando

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City: Roseau

I have reviewed the draft and I have concerns with Strategy #3. It was noted that local entities need more resources (ie: monies) in order to carry out the local objectives. Recently a couple of watersheds in the Red River Valley participated in hearings for the Lessards monies. After their respective hearings, they did not receive funding but if you look at the appropriations it was heavy in agency appropriations!

My concern is that the local resource specialists have viable FDR and NRE projects but when it comes time for the monies to pay for the project, the monies, permits are getting difficult to obtain. I would hope that possibly the influence of this document could help assist the "locals" in obtaining the necessary resources to plan and execute projects.

Thanks for letting me comment.

timestamp: 2010-09-24 08:27:23

Public Comment Received via Online Submission Form

DeVonna Zeug

Email: tanner@mncorn.org

Address: 16640 220th Street

City: Walnut Grove

September 30, 2010

Environmental Quality Board

MDA Commissioner Gene Hugoson, Chair

658 Cedar St., Suite 300

St. Paul, MN 55155

Dear Chair Hugoson:

I am writing on behalf of nearly 6,000 members of the Minnesota Corn Growers Association (MCGA) to offer the below comments in response to the draft 2010 Minnesota Water Plan.

It is our mission is to identify and promote opportunities for corn growers while enhancing quality of life.

Hypoxia (Page 15)

This paragraph fails to point out the complexity of the hypoxic zone in the Gulf of Mexico and, as is usually noted in current scientific reports, nutrient sources are not limited to agricultural runoff. Urban nonpoint and point sources, such as lawns and industrial discharges, as well as sewage treatment plants also contribute.

Implementation Principle #1 Optimized Coordination (Page 29)

We are pleased that this is the number one principle listed. Citizens are frequently frustrated with what they perceive to be an unnecessarily complicated set of regulations by multiple agencies with jurisdiction over water issues.

Implementation Principle #4 Adaptive Management (Page 30)

This is a very important principle and it should be highlighted that the impaired waters process was intentionally designed to be an iterative effort informed by newly discovered information.

Recommendations Improve Access to Environmental Data (Page 48)

In addition to sharing environmental data, public access to guidance regarding the many government agencies and their various responsibilities related to water management programs will better ensure.

I sincerely appreciate your consideration of these comments and would be happy to answer any follow up questions.

Sincerely,

DeVonna Zeug, President

Minnesota Corn Growers Association

timestamp: 2010-09-30 22:49:01



SCOTT COUNTY NATURAL RESOURCES

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Memorandum

September 30, 2010

To: Environmental Quality Board

From: Paul Nelson, Natural Resources Program Manager, Scott County

Re: Comments on Draft 2010 Minnesota Water Plan

Cc: Michael Sobota, Scott County Community Development Director
John Jaschke, Director Minnesota Board of Water and Soil Resources
Steve Woods, Assistant Director Minnesota Board of Water and Soil Resources
Ray Bohn, Minnesota Association of Watershed Districts
Mark Zabel, MASWCD
Annalee Garletz, AMC

This memorandum serves to transmit my comments on the Draft 2010 Minnesota Water Plan. Thank you for the opportunity to review, and for considering these comments. The comments submitted represent my views and experience. They are consistent with the Scott County Water Plan and natural resource program efforts, and the Scott Watershed Management Organization Comprehensive Water Resources Management Plan. However, the comments have not been specifically reviewed or endorsed by the County Board. Comments are organized by overall general comments and then by comments related to specifics of the draft report.

General Comments

1. In general I found the document hard to read. Not because of style or sentence structure, but because I was looking for actual information on what has been accomplished and what various folks are doing, and could not get an overall sense of that. And also because I was looking for linkage between the six conditions and problems identified on page 11 and then the recommendations/roadmap presented in Chapter 4. I could not find that linkage – or find descriptions of how the strategies in the roadmap address these specific conditions and problems.
2. The document seems very incomplete as it does not discuss what is happening at the local level. Much work activity is being done at the local level, but that is not acknowledged. Granted it is not being done uniformly across the state, but where water resource management is being done well its because of local leadership. Local efforts are only mentioned in two places. The first is Strategy #3 - Restore and Enhance Local Capacity. I appreciate the recognition that state cuts, un-allotments and shifts have affected local government capacity. However, there is more to it than that – in many places local governments are still taking a leadership role in water management. My experience is that the resources we invest in getting conservation on the land greatly exceed those invested by the state. The second place is where there is a call to reorganize local management under Strategy #4 - Employ Water Resource Management



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Units. As described in the specific comments, I'm not sure I agree. Given this bias I think the document should probably be renamed "2010 Minnesota State Agencies Water Plan."

3. A couple of strategies seem to be missing that I would place as high priority:
 - a. Actually getting conservation on the land and in the water.
 - b. Relooking at the impaired waters process to address some of the potentially fatal flaws/misleading problems. If the state is truly interested in adaptive management as a principle, it's time to look at the impaired waters process and ask the question whether it's really producing the outcomes that we want, and will it efficiently and fairly lead to improved water quality. A lot of money is being invested in this process.

Specific Comments

- A. Chapter 1, page 8 Recent Activities. I realize this is only intended to be a snapshot of efforts, but its very incomplete with no mention of efforts by Watershed Organizations, completion of Local Water Plans by municipalities, County Water Plans, or consideration of water resources issues in recently completed land use plan updates.
- B. Chapter 2 page 11 six conditions and problems. There needs to be linkage showing that the strategies in Chapter 4 are designed to address the identified conditions/problems.
- C. Chapter 2 page 12 "Minnesota Water Principles." They sound nice and I can't disagree with any, but I wonder where these come from? Are they officially endorsed by someone? What makes them the "Minnesota Water Principles?"
- D. Chapter 2, page 13 fifth bullet. "Decreasing capacity of local government..." This bullet as stated is not completely true. I would say there is unequal capacity and in some places capacity has decreased, but in many places local capacity has increased and we're doing more with less and less state assistance. Many metro area cities now employ a Water Resources Engineer, metro area Watershed Organizations have also realized that they can get more done by having their own staff and have indeed staffed up. Many outstate Watershed Districts have also increased their capacity. This gets back to the issue of not representing what's being done locally. As the document currently stands it gives the impression that locals are not doing much. I would argue differently that locals are doing a lot, but that it is unequal spatially across the state; but where water management is being done well locals are leading. Where it is working well should be looked at as models – instead everyone seems to be looking at the Red River Basin Model – but there are other (equally or more) successful models.
- E. Chapter 3 – I found all the discussion about who does what report and why distracting and meaningless, taking away from the ability to find information about the status of water resources.
- F. Chapter 3- page 19 seventh paragraph starting with "Improvement in the state..." Credit to MDA and MPCA is well deserved, but its missing credit to the BWSR and the local delivery system for conservation through SWCDs, and Watershed Organizations. I know (prior to the Clean Water Fund) that the municipalities, the SWCDs (leveraging federal dollars), land owners themselves and Watershed Organizations fund more than 10 times as much conservation practice implementation in Scott County as does the state.



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- G. Chapter 3 page 23. Good to see that water being consumed faster than it is being replenished being referenced.
- H. Chapter 3 page 24 first full paragraph states that the 2010 Water Availability Assessment Report concludes “the greatest threat to having sufficient water to assure our many and varied needs comes from how we have manipulated the landscape without due consideration of its impacts on our water quantity, water quality, and the ecosystem.” I understand that you are taking this conclusion from another report and restating it, and I agree with the statement. I also think it could be expanded to be the basis of most of our water quality problems, not just water supply issues. However, where I find a gap is in taking this finding and proceeding to implementation strategies. There seems to be the perception that current land development is causing the problems. This could have some truth for water supply and the increased need for high capacity wells, but is not necessarily true for surface water quality or groundwater quality. We already have many layers of regulations that work well for preventing further degradation of surface water and groundwater with development, and in fact in many cases improve things. We also have planning mechanisms already in place with land use planning and watershed planning (although I admit there could be better linkage between the two). My experience is, and what I have challenges dealing with, are correcting problems caused by land alterations that have previously taken place. Much of Minnesota is already altered. For Sand Creek watershed there are hundreds of miles of ditching, over 10,000 acres of drained wetlands, and other drainage improvements/hydromodification that are now being manifested in over thirty miles of stream bank erosion – in just a 270 sq mi watershed. Minneapolis and Saint Paul have been altered a couple of times. The problem is the historic alterations that were not built using the standards we have today – we need resources to deal with these historic problems, new development is pretty well regulated. In other words there is a need for a strategy that calls for getting conservation on the land and in the water.

Also relying on development/redevelopment as the fix to historic problems will not produce results quickly. For Sand Creek much of the watershed is not slated for development over the next thirty years – so the historic problems will not be fixed by more regulation of land use permitting! Also I’m not sure it is legal to make people applying for land use permits to mitigate impacts caused by others – may only be able to regulate in proportion to the impact they cause.

- I. Chapter 4 first paragraph: were locals involved or consulted?
- J. Page 29 Implementation Principal #1 – Optimized Coordination. I do not want to undermine the importance of good coordination, but I’d like to offer an alternative view on how to handle it, in addition to coordination being “promoted and expanded, and communicated” as called for in the draft. It seems to me that much of the problem is a lack of focus and strategic role identification. If the agencies had their roles defined strategically, truly accepted them, and then focused on them; there would be a lot less overlap, interference and confusion about who is doing what. This would require a lot of initial coordination to define roles, but once defined the various parts, if they remain focused, will operate as a system. I’m not sure that any of the strategies in the current draft address this.



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- K. Implementation Principle #4 - Adaptive Management. This is an important part of informed decision making processes, however, I'm starting to see it used as an excuse to not tell the public what the real cost of implementation is, or whether a water quality standard is actually attainable. So some warning is in order not to use this as a way to kick the can down the road. The public and those investing in improved water quality deserve answers to these questions. My experience is that people will contribute toward improving water quality if they believe that their efforts are meaningful and will accomplish something. What I'm afraid of is that they will contribute and change behaviors, but when the desired outcome does not materialize, they will feel their trust was violated.
- L. Implementation Principle #6 – Education and Outreach. First paragraph second sentence is not necessarily true. Local government doesn't rely on the state for guidance and direction. We do our own analysis and policy making with the state being consulted or in partnership in some cases. Also landowners largely get their advice and technical assistance locally through the SWCDs, and/or other local units of government.
- M. Strategy #1 – Increase Protection Efforts. I understand why protection is important both from preserving high quality resources and its less costly to preserve than restore. But I don't understand the perception that more resources (presumably dollars) need to be directed toward protection. The whole differentiation between restoration and protection in terms of capital dollar investments is not a productive conversation. I would argue: 1) that you use different tools for protection versus restoration. For protection regulations are more effective, for restoration some interference (capital improvement) is needed to improve an already altered system in addition to regulation that prevents things from getting worse; 2) there already exists many layers of regulations designed to protect resources, and 3) for the most part these regulations appear to be working as water quality trends are generally positive. For the most part we have stopped or slowed the degradation, but with the highly altered landscape that already exists we need to focus capital improvement dollars on undoing the historic problems leading to restoration. Further, I would argue that if we added up all the money used for regulation and wastewater infrastructure that protects water bodies; that the amount would be very large and would not be much different (or even more) than the capital dollars that go toward restoration.
- N. Page 35 last bullet. Readers should not have to go to another document to find recommendations.
- O. Chapter 4 page 39, Strategy #3 thank you for recognizing the importance of supporting local capacity.
- P. Chapter 4 page 40, Recommendations. Consider adding a couple of additional recommendations
 - a. Recommend mentoring, job exchange and leadership development programs. As I pointed out earlier there are a lot of good things being done locally, but it is unequal. However, where water resources management is being done well, locals are leading. The key to this is having leaders.
 - b. Recommend enabling subordinate service districts by counties in the metro area. I realize the Met Council does not want competing sanitary district, but having this tool would help our ability to manage specialty districts for stormwater maintenance, and dedicated open space/natural areas. I would assume that Met Council would be agreeable to statute changes that allow these types of districts for



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metro counties, or they would be open to wording that gave them approval authority.

- Q. Strategy #4 - Employ Water Resource Management Units. I don't know what the goal statement is trying to say. We already have the authorities to set up watershed management organizations on a hydrologic basis, and those organizations have the ability to use a systems approach if they so choose.
- R. Strategy #4 – Employ Water Resource Management Units – just a thought – where I've seen water quality improvements lately, are at a very local scale.
- S. Strategy #4 – Employ Water Resource Management Units. I think what you are saying is to reorganize to the basin or subbasin scale. I'm not dismissive of that idea, but again I think many existing watershed organizations are doing great things. It took a while for BWSR to learn how to engage and encourage them, and it took a while for the watershed organizations themselves to mature, but that is just as good a model as going to this proposed structure, and the current model is continuing to improve. The key really is whether you have leaders. Also planning and assessment may be Ok at a larger scale; but my experience is that prioritization and implementation needs to be done more locally. People are motivated to do things when they think it will have a result on something they care about. That is more likely at a small scale. Likewise people are more likely to change behaviors when asked by someone they trust. Again locals are perceived as more trustworthy. Also don't want to move implementation (if it involves regulation or land use) away from the local government authorities that do that now – these authorities are important. Thus, consider planning and assessment at the major watershed scale with prioritization and implementation more local with existing organizations.
- T. Strategy #4, page 43 Defining Benefits. I don't see any of the benefits described, except the first bullet point, as unique to using larger management units. These can be achieved with good planning and assessment at the local watershed scale or even the water body scale. Same with inclusiveness of protection – that is not unique to larger scale.
- U. Strategy #4 Recommendations consider adding: using and enhancing existing local delivery systems to deliver conservation locally.
- V. Strategy #7 – Provide Up-To- Date Implementation Tools. In the absence of a strategy or recommendation calling for getting more conservation on the land and in the water it seems a little weird to have a strategy calling for addressing water resource concerns by an adaptive approach to updating tools. Seems to me we want an adaptive approach to getting more conservation on the land where its needed the most. Tools are useful but are not the overall outcome. I would suggest something that says: focus, focus, focus, and then focus some more on getting conservation on the land where its needed the most.

Public Comment Received via Online Submission Form

Paul Nelson

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City: Sahrkopee

Comments are being sent to Mr John Wells in memo format since the memo could not be copied into this box, and no other e-mail address was provided for submitting comments.

Paul Nelson

Natural Resources Program Manager

Scott County

timestamp: 2010-09-29 17:17:20



September 28, 2010

Princesa VanBuren Hansen, Principal Water Planner
Environmental Quality Board
658 Cedar St., Suite 300
St. Paul, MN 55155

The Minnesota Farm Bureau Federation (Farm Bureau) has reviewed the Draft 2010 Minnesota Water Plan as presented by the Environmental Quality Board. We believe this comprehensive summary of water resource planning and policy in Minnesota is a worthy effort. The rich history of our state's ongoing commitment to sustained water quality and quantity is nicely summarized in the second chapter of the document.

Please consider the following comments from Farm Bureau related to the Draft 2010 Minnesota Water Plan:

Page 15 – Hypoxia

While the media and certain environmental groups have focused the blame for the hypoxic zone in the Gulf of Mexico on farms, we would hope that your report would recognize that this is a complex issue. This paragraph, by failing to acknowledge any other sources of pollution, implies that agriculture is the sole source. As usually noted in current scientific reports on Gulf hypoxia, nutrient sources include runoff from farms, urban areas, sewage discharges, and industrial discharges. These other sources need to be mentioned.

Page 30 – Adaptive Management

This is a very important principle and it should be highlighted that the impaired waters process was intentionally designed to be an iterative effort informed by newly discovered information. "Adaptive Management" is frequently mentioned by agencies dealing with water issues; however, in practice, new information is slow to be incorporated (refer to our hypoxia comments above as an example). This needs to be more than just lip service.

Page 52 – Targeting

The concept of targeting can and should be applied in a broader fashion than what is indicated by the title of this strategy. The title seems to indicate that targeting is only useful for the identification and protection of high risk areas. Limited resources also need to be targeted to high priority areas to have the greatest impact on preserving and protecting our waters.

Farm Bureau thanks you for the opportunity to comment on the Draft 2010 Minnesota Water Plan. If you have questions, please contact Chris Radatz, Director of Public Policy at 651-768-2100 or cradatz@fbmn.org.

A handwritten signature in black ink that reads 'Kevin Paap'.

Kevin Paap
President

Clean Water Council

Advising the Legislature and the Governor on state programs to restore and protect Minnesota's waters.

2009-2010

Council Members:

David Bennett

Fishing organizations

Marilyn Bernhardson, Chair

Soil and water conservation districts

Pamela Blixt

Watershed districts

Earl Bukowski

Rural counties

Keith Buttleman

Metropolitan Council

Delvin Haag

Cities

Keith Hanson

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Statewide farm organizations

Mark Knoff

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State higher education system

Paul Torkelson

Statewide farm organizations

Agency Representatives

Larry Kramka

Department of Natural Resources

Joe Martin

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Pollution Control Agency

Steve Woods

Board of Water and Soil Resources

September 28, 2010

Environmental Quality Board

658 Cedar Street, Suite 300

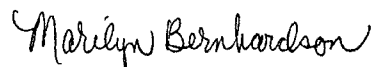
St. Paul, MN 55155

Dear Board Members:

The Clean Water Council of Minnesota has reviewed the Draft 2010 Minnesota Water Plan as presented by the Environmental Quality Board. We believe this comprehensive summary of water resource planning and policy in Minnesota is a worthy effort. The rich history of our state's ongoing commitment to sustained water quality and quantity is nicely summarized in the second chapter of the document. The Council is especially pleased with the principles and strategies outlined in Chapter 4 as these points closely reflect the principles and strategies endorsed by the Clean Water Council.

The Council looks forward to an ongoing dialogue with the Environmental Quality Board regarding this report, and many other aspects of our work relative to water quality and quantity issues.

Sincerely,



Marilyn Bernhardson

Chair, Clean Water Council

MB/mkr

Public Comment Received via Email

To whom it should concern,

I am a Minnesotan and have reviewed the Draft 2010 Minnesota Water Plan. I am disappointed in the content of this draft. I acknowledge and appreciate the efforts of all those involved in mitigating the damage that our culture has put upon our natural resources. I intend my comments, general and specific, to improve the content of the final version of the 2010 Minnesota Water Plan and to challenge experts and decision makers to a slightly new direction. I apologize in advance for any grammar errors or incomplete ideas as I did not have the time to thoroughly edit this document.

General comments:

1. Don't use passive voice, the authors make it sound like magic is doing everything. People are doing the stuff (the polluting, the groundwater withdrawal, the data gathering, the decision-making), say who they are.
2. In general the general goals of this plan are good, but in general it fails to identify general sources of contaminants. Failure to acknowledge sources makes it difficult to achieve sustainable water management goals. It is not until page 50 that the reader learns that the authors know that agriculture, mining, urban development, forestry, and mining are the major sources of unsustainable water issues. I understand the need to remain general, but these are general industries and should be mentioned at the get-go.
3. The tone of this document was more on the need to obtain more funds and data, then on how to solve our water sustainability issues. This is not to say that funds and data are not needed but, the authors never explain what they intend to do with these funds and when the data collection will be enough.
4. Sometimes, I think the authors hit on the real cause and solution to water sustainability in Minnesota, but then they delve into more funding, more coordination, more data. Something has to be said for following your gut feeling and ignore the bureaucratic programming to request more funds, get more data, and coordinate more. Enough! I'm asking you to make the BEST decision based on the info we have.
5. Clearly define stakeholder. Am I a stakeholder? Are polluters the authors don't want to offend stakeholders? Also, I would like to know how the government ranks stakeholder interests. That is, are the interests of an individual Minnesota discounted over the monetary interest of polluters?
6. Water supply management. New housing and commercial developments should be required to meet their landscaping water supply needs by rainfall, not aquifer water. Native plants. If folks want water guzzling lawns and other non-native plants, fine, but they should not allowed to do this with our current and future drinking water to keep it alive. Cisterns. But, how do we get a cistern to pump water? If human ingenuity can create popcorn flavored jelly beans, I have no doubt we can create cistern pumps that meet the demands of residents and businesses (we might even already engineer effective submersible pumps).
7. How do we stop pollution? I don't know, but not allowing pollution to reach our public waters, including aquifers, is a start. If our laws are such that a person can be charged with indecent exposure

and disorderly conduct for being nude on private property with a view visible to public property (Prior Lake American 2007, 2010) then I am sure crafty lawyers / legislatures can draft something that says you can use X chemicals or farm without regard to soil but you can't discharge that to public waters, including groundwater. We've done a good job handling "point" sources of pollution, but its not like its gnomes doing the "non-point" source polluting. It is farmers, homeowners, etc. We need to stop the consequences of their personal choices. The law requires that farmers have a 16.5ft buffer along public ditches, but there is no other buffer requirement on most other waterways... and no consideration given to aquifers. With the growing number of impaired waters its CLEAR that this system is INADEQUATE to protect Minnesota waters. REQUIRE a buffer say 50ft (or whatever your data is telling you)... be cautious, this is OUR water we are talking about. A farmer should not be allowed to buy fertilizer and pesticide unless the farm has been certified as having the required buffers (we require IDs to buy alcohol and cigarettes). A surcharge / tax is placed on ALL fertilizers and pesticides will pay for this program and the cost of restoring damage already done. It captures the some of the big sources of non-point source pollution (farmers and homeowners).

8. There is a great reluctance upon the part of scientists (especially industrial chemical scientists) and lawmakers to consider adequately the social, economical, and biological consequences of introducing man-made chemicals and fertilizers to our water ways and failure to adequately protect the public from the consequences (ie lack regulations). Regular citizens place scientists and lawmakers in a position of trust; they assume that protection measures are adequate. But clearly they are not.

Specific Comments:

All italicized words are from the draft 2010 Minnesota Water Plan. My comments are in regular text.

Well-managed industry, agriculture, housing, manufacturing, power generation, and public water supply systems are all necessary elements to nurture and sustain communities. (page 23). What do the authors mean by well-managed? I think that these areas are all ready well-managed for profit or maximum distribution, activities which often degrade communities.

...each growth and development decision needs to include consideration of its effect on the water supply and associated water resources (page 23). Of course, but our current system rubber stamps projects on through that are "good for the economy" despite negative affects to the water supply and associated water resources. The Environmental Assessment Worksheet/ EIS process is supposed to help in this regard but in reality its been just a bump in the road to developing a project. Many developers are too eager to earn maximum profit at any cost, and decision makers are too eager to garner the taxes associated with fulfilling the developers wishes. How can we change this mindset and save our water resources (among others).

We need to learn how to reduce our withdrawal not to exceed the rate of recharge (page24). I think it's the government that controls withdrawal, why are withdrawals allowed for frivolous this like "perfect" lawn watering etc. Have people forgot about cisterns? Have people forgot that lots of plants grow without the need of watering by groundwater? Providing drinking water is a valid government function, providing lawn water or irrigation in unsuitable farming country is NOT.

We will need to manage land uses to ensure that water recharge to our groundwater systems has had sufficient time or treatment to remove contaminants before entering surface subsurface flow pathways. (page 24). Why don't we just STOP contaminating? If the chemicals or concentration of chemical is not

naturally occurring, its suspect. It seems like we just approve of chemicals or projects because they appear to do an immediate good (provide us energy, give us higher productivity, etc.) and we just hope that the chemicals are safe. Hope is not a plan. Man-made chemicals and concentrations of chemicals not naturally occurring (mercury, estrogens, etc.) should be guilty until proven innocent.

Looking forward, we must become much wiser about how we are managing the lands and waters of Minnesota if we hope to have the desired availability and quality of water to provide the quality of life we desire (page 24). Bingo! Hope is not a plan. Just identifying that we have not managed the land and water well is not enough, we need to understand WHY. What is the source of stupidity. Is it greed? How can we hope to change if we don't check our culture of greed and profit at the expense of others? The authors really address none of these factors, so how can it succeed in improving our future?

Metropolitan Area Water Supply Planning

... the [Metropolitan] region's water resources are adequate to meet demands for the foreseeable future (page 25). I have not read Met Council's plan, but this summary of it does not address what are the main demands for our water resources, specifically groundwater withdrawal. Is it drinking water? Is it garden watering? Lawn watering? Clothes washing? Pools? Car washing? 5 minute showers? 40 minute showers? The government is providing a service of pumping and treating drinking water. This water is used for a variety of functions. The government should determine a basic amount of water needed per household for NEEDS (drinking water, basic sanitation) and charge a high premium for water above that level. This level is where government is serving a WANT (I want a green lawn, I want a pool, I want etc.) If folks don't like it, instead of government providing water they can collect free rainwater to quench their wants. Be the government!

Implementation principle #1—Optimized coordination

Looking forward, there is a recognition that natural resource challenges are great, the implications of decision making are significant, and the resources to address the challenges are finite (page 29). Here and throughout this document the authors fail to identify the source of the challenge. The land stewards of Minnesota prior to the treaties did not have these natural resource challenges. Is it our culture of greed that is creating these challenges. Is it profits (money wise or in leisure) at the expense of others? Say what the REAL challenge is. Also know that FAILURE to make decisions may be just as significant as making decisions.

When coordination is administered well it leads to improved efficiencies and program adoption. Page 29. Sure. But how does coordination address the challenge?

Implementation principle #4—Adaptive Management

Water resources need to be managed to meet a growing number of competing needs, at multiple scales, and over the long-term, and in many situations where high levels of uncertainty exist. (Page 30). True. In all of your data gathering can you tell me which competing need wins over other needs? Is the need to make money or the need to consume at a wasteful level trump all other needs. We need to see what is really a need and what is really a want. And manage accordingly.

The ability to act must be supported by the ability to react quickly and with the best resources available (page 31). What?!? What kind of plan is this? So we are actively choosing to NOT be proactive, and be reactive. We will just let polluters pollute and THEN act when its unsustainable? This is foolish. Am I really wearing rose-colored glasses if I expect more out of the presumably educated authors and decision makers?

Restoring water quality, hydrology, and ecosystems...degraded by human activity...may..take decades...There must also be a recognition that the complexity of natural systems...is so great that despite scientific work and understanding... uncertainty will persist. However, with an appropriately designed monitoring and evaluation process the management decisions can be periodically refined to improve effectiveness and ultimately reach management goals. (page 31). The authors acknowledge the complexity of nature and that you can't easily undo human degradation. Here I think they are head on the right track to solving the problem, but instead they talk about MONITORING. Hooey! Aren't we certain that there is some uncertainty about the "safety" of releasing man-made chemical on the land and water and that it can take YEARS to clean up? Why do we let these detrimental practices continue? Wouldn't halting or stopping the release of pollution into our land and waters be a better solution than monitoring and redefining management goals? Again, just because something is "good for the economy" doesn't mean its good.

...long term measure and targets to track: ... -financial measures...-environmental measures...-social measures (page 32). BINGO!!! Social measures! First you need to identify the social expectations that have lead to our environmental problems. You must realize that not all cultures have / had the social expectation that we have. The Dakota and Ojibway folks who were the land stewards before the U.S Government did not treat the land in the awful way we do. Why do we do it? If we can correct this flaw in our culture we will be okay. (Greed, profit at the expense of others, normalized waste). I think the authors have really hit on something when they identifies social measure. I think this is the most important thing to change, but perhaps they hardest. Setting environmental measures and raising funds will be much easier. Just say NO to polluters! Make polluters pay a surcharge to use their abusive products (see general comments).

The state agencies recognize that they desired actions to protect water resources must take place in the landscape, which often results from the actions of individual landowners, communities, local government and business community. However, these landowners and decision makers depend on the state to provide guidance and direction based on the best available science and data. (page 32). Like a wild child just looking for structure, for too long have the WANTS of landowners, communities, local gov and businesses driven the abuses against our natural resources. The government needs to set back and do a self-correction. The government SHOULD provided what is NEEDED by landowners, communities, local gov and business community using the best available science and data. The government should NOT cater to WANTS. Also they should challenge local governments and business to do things more efficiently with existing resources. For example does a local government or ethanol plant really need a new well or do they need to reduce wasteful water usage? Challenge them to become more efficient with existing resources instead of catering the their nagging demand for more, more, more.

Strategy #1—Increase protection efforts.

...If contamination is introduced, it cannot usually be immediately detected, and once detected it may be extremely difficult and expensive to clean up. (page 35) If contamination is introduce? By who? Caterpillars? Oak trees? Walleye? Aliens? Come on, contamination is done by PEOPLE not magic. Don't use the passive voice! If we know that we can't detect it immediately and that it usually difficult and expensive to clean up why do we let people spread chemicals on the land or store toxic chemical. Remember hoping it doesn't cause damage is not a plan. Scientists KNOW that this stuff is bad. Its time our decision makes stand against those who make money at the expense of our natural resources.

Yet, monitoring by the MPCA indicates that at least 40% of our surface waters... are impaired. (page 34). So, Minnesota has about 4,000 impaired waters. Are they each battling a different demon or in general is it sedimentation because there is little or no vegetation between the offending activity and our water, is it because of pesticides, is it because of man-made chemicals, is it because of fertilizers. Say what they general problems are. We need to know WHY these things were done. What is driving this social conscience? What can decision makers do in response?

Recommendations—increase protection and prevention efforts

...foster sustainable practices (page 35). NO you should be DEMANDING sustainable practices.

...incorporate protection into planning efforts (page 35)... No DEMAND protection be built in. We have a building code and fire codes that helps keeps structures safe for users. These codes increase the cost of building and can the profits of the construction industry. Yet it was seen as a PUBLIC GOOD. Can't we have a LAND USE code that helps keep our mutual natural resources safe? Yes it may initially be negative impact "business as usual" for the agriculture, mining, and forestry industries, but it would be a PUBLIC GOOD.

...Employ compliance and enforcement techniques and voluntary practices (page 35) So how's that going? Can we just expect 60% impaired water by 2020? Are we just hoping this will work? No, you the government need to DEMAND via law that pollution is not allowed. Polluters can pay for the enforcement when they buy pesticides, fertilizers, our hire landscapers, whatever

Per capita water use over the last ten years has increased 6% (page 36). What are people using this water for? If we knew the answer to that couldn't we arrest the demand by not catering to it? Again are we catering to water needs or water wants?

...no sense of urgency to conserve (page 36). Again the government should not be catering to water wants, only water needs. That is, conservation of water should only be part of the discussion.

Strategy #2—Promote wise and efficient use of water

Minnesotans...expect to find [water] available everywhere in quantity and quality that meets their demands at minimal cost (page 36). Is it the role of the government to meet all the water demands of Minnesotans? Government should provide for needs, folks should pay extra for wants. If folks are making money using or discharging into public waters (including aquifers) then we should EXPECT them not to water or pollute. If they want to waste and pollute, make THEM pay.

The agencies will look for opportunities to promote water conservation and wise use in all aspects of water management. (page 38). Look for opportunities? If the government only caters to water needs that the goals of conservation and wise use are inherent. Its when we start catering to water wants, which are often wasteful, that we need to look for opportunities.

Recommendations---promote wise and efficient use of water (page 38). I general, the recommendations all sound goodish. But I have been hearing these all my life, how is working? Not well, if we've been saying it for 30 years or more. Instead of promoting, encouraging, and looking for opportunities governments needs to be DEMANDING wise and efficient use of water.

The state recognizes that inorder for water management to be effective, there needs to be support from local governments, non-profits, and landowners (page 39). I don't get it, you're the government and you

provide the infrastructure for water and issue the permits. Don't look for support, just put your foot down. Say no to WASTE, say no to POLLUTION. If water users WANT to WASTE and POLLUTE they should PAY MORE.

Increasing funding for local projects is not the only answer (Page 39). Local water managers should not have to scramble for funds to combat the impacts of water waste and pollution. WASTERS AND POLLUTERS should PAY EXTRA if the government is going to allow them to WASTE AND POLLUTE. User fees!

A key aspect of state water plan strategy is to ensure local governments have access to the needed information.... New levels of coordination with local governments are essential for implementation of sustainable water resource management (page 40). Really? The key is access to information and coordination is essential. This is it. This is how you all plan to fix our impair waters is information and coordination. Maybe I'm just being an armchair quarterback back but wouldn't STOPPING pollution and waste via laws and users fees be a better answer. I'm not saying access to information and coordination are not important, but they should not be our first line of defense/offense.

Recommendations—restore and enhance local capacity (page 40-41). I read: more funding, more information, more coordination. We need to stop polluting and wasting. Try instead, more laws and more user fees to pay for enforcement, monitoring and clean-up.

Strategy #5—Collect Information Necessary for Water Management Decisions

The state is employing a thoughtful, integrated, and collaborative approach for collecting, prioritizing information, in targeted locations and within timeframes that will inform water management decisions. (Page 44). To modify a line from the 1990's. "It's the pollution, stupid!"

It has long been recognized that effective water resource management requires sufficient data and information about hydrologic systems to inform sound decision making (page 44). In 1904, William T. Hornaday was the director the New York Zoological Park. At the time, market hunters were killing massive amounts of game birds, like the once abundant prairie chickens and passenger pigeons in Minnesota, to sell at markets in Chicago and New York. Fashionistas harvested birds to sell their feathers in hats in Europe. Some species never recovered from this period of unsustainable harvest. Mr. Hornaday said, "To study birds in an academic way while scores of species are being exterminated, and make no effort to arrest the slaughter, is exactly like the music-making of Nero while Rome was being destroyed by fire." It appears that we are guilty of this same assault on Minnesota waters. I challenge that we must act now, the number of impaired waters are growing due to inaction. Water resource managers know how hard it is to restore waterways. We don't necessary need more info, we need more action.

While gaps [in critical groundwater data] still remain, the state is on a path to address many of those gaps over the next 10 years, provided funding continues (page 44). Provided funding continues? What? We are permitting people to manufacture chemicals, we allow people to spread these chemicals on the land, we grant water appropriation permits, we permit mining operations... all these things are "good for the economy", and all these things can lead to polluting Minnesota waters and depleting water resources. Those who manufacture chemicals, those who spread these chemicals, those who withdraw groundwater, those who mine, SHOULD pay for monitoring efforts related to their actions. It should not be a question of if there is enough money in the budget for monitoring.

It may not be a monetary tax, but these industries and certain landowners are putting a tax of pollution on all Minnesotans and not paying their fair share. For one, they should not be allowed to pollute. For two, they should pay for the consequences of their actions. They should not be making money or enjoying leisure via polluting ways and EXPECT someone else to pay to repair the damages they wrought. Wake up government ! and don't allow pollution or devise an upfront surcharge to polluting endeavors to pay for monitoring and restoration activities.

My sentiments on this topic mimic that of a Minneapolis "back lotter" in 1867. "My house is a good way back, and I have a good cistern and a good well and anax and I keep insured. I don't want to be taxed for water to squirt on a lot of shopkeepers on Bridge Street, who make enough profit to pay for waterworks or engines and such, if they want them. The mill men have good fireworks for putting out the mills if they catch a-fire, and they didn't ask nobody on Bridge Street, nor Washington Avenue, nor no other street to pay for it or help pay for it, and they showed their sense...I am disgusted thinking what we've got coming...I suppose a good many folks with plenty of money won't get easy till the city does something to ease them." (Source: Minneapolis Tribune, June 16, 1867).

The POLLUTORS, the businesses with BIG water appropriation permits, and the landowners with those "perfect" lawns, have the money to pay for monitoring and restoration. They should not be taxing Minnesotans, present and future, with bad water just so they can get on easy.

Conversely groundwater recharge from unsustainable land use and surface water can transport chemical constituents to the ground water system (page 46). Be the government. Folks should not be allowed to discharge chemicals to ANY water course, including our clean aquifers! We know the uncertainty, we know that it may take years to show up, we know that we don't know what they affects on humans are... so why, WHY? Does the government let it happen. Oh! It is good for the economy. You can take that one to the grave! I'm already angry that the Minnesota Department of Health does not recommended that I eat more than one fish meal a MONTH from Minnesota waters thanks to mercury pollution in Minnesota waters. But coal! It sure was great for the economy. But not humans, not their eggs and sperm, their unborn and nursing children. Clean fish and clean water is a gift and we piss on it.

Strategy #7—Provide up to date implementation tools. (page 49). Best management practices and incentives? Give me a break. How has this been going? Are our water getting any cleaner in general thanks to BMPs and incentives? No, these measures are INADEQUATE to accomplish the task of cleaning our waters. Especially given that so many are permitted to PROFIT via polluting ways. BMPs and incentives appear to not be effective because the polluters care more about PROFIT than our water resources. Do we provide the construction industry with Best Building Practices and provide incentives to build safe structures? No they have certifications, building and fire codes, they have building inspections, etc. Why not the same with the agriculture, mining, and forestry industry to keep our waters safe? What is the government afraid of? Why are industry stakeholders more important than HUMAN stakeholders?

Also crying about how hard it is to manage our water resources because there are so many variables makes me angry. I don't hear the civil engineer cry when he to build a road over mucky wetland soils instead of easy upland soils. It is hard work and costs lots of money to amend the mucky wetland soils. But the civil engineer gets the job done despite the variation. I don't hear the civil engineer cry how hard it is to cut down the a northern Minnesota forest vs a central Minnesota forest with some many different trees and shrub species. No the civil engineer just bulls through the problem and build

whatever. The civil engineer doesn't worry about getting funding extra... the construction projects are viewed as a public good and are "good for the economy". So I know it can be the same with hydrologists and other natural resource managers if they just stop crying and sell their goods a good for the public and good for economy.

Agriculture best management practices (page51) I think the authors should heed their own advice in the last paragraph. BMPs are not working effectively to protect Minnesota waters because the agriculture industry is not adopting them. We need LAWS that adequately protect our water resources and they need to be enforced. The agriculture industry PROFITS via polluting ways at the expense of everyone down stream. This is a PUBLIC BURDEN.

I would like to see that list of existing laws and how there are barriers to their effectiveness. I know that in Scott County the list of impaired waters is growing and the main cause of impairment was agricultural pollution. But without adequate laws we can not stop further degradation. The agriculture industry in only required to have a 16.5ft vegetated buffer along public ditches and most waterways have no requirement for a buffer. Is 16.5 ft and no buffer adequate to protect our waters? Obviously not, we don't need more data to tell us that. We need more buffers, there is already extensive scientific literature on vegetative buffers. So pick a conservative width (conservative in terms of protecting our water not in terms of ag profits) ~50ft and make it laws on ALL waterways.

Should government help pay for farmers to install vegetative buffers? NO. We don't pay the construction industry for hard hats and harnesses and other safety equipment, we should not pay the agriculture industry for safety nets either.

But we can't tell private industry what to do on their private property? Oh really. In Prior Lake there have been several instances of people on private lakeshore property being charged with incident exposure and disorderly conduct for being naked. They were naked on private property but visible from public waters. So the agriculture industry does what they do on private property but their sediments, their fertilizers, their chemicals flow into PUBLIC waters (surface and ground).

A farmer should not be allowed to buy fertilizer and pesticide unless the farm has been certified as having the required buffers (we require IDs to buy alcohol and cigarettes). A surcharge / tax is placed on ALL fertilizers and pesticides will pay for this program and the cost of restoring damage already done. It captures the some of the big sources of non-point source pollution (farmers and homeowners).

I don't see how this system is much different than the building code system we have for the construction industry.

My apologies again on grammar and incomplete thoughts. I have taken my personal time to make these comments. I would appreciate if they are truly considered and not just rubber- stamped over. I am a reasonable, if only a hard working woman. I pray for your good sense and a healthy future Minnesota.

Victoria Ranua
Homo sapien®