2015-2017 TRIENNIAL STANDARDS REVIEW
PUBLIC COMMENTS ON PRIORITIZATION OF TOPICS

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The following is the summary of the public comments received on the proposed list of topics as part of the Triennial Standard Review 2015-2017. The public comments included here were provided through the online survey, phone calls, and by letters (attached). Only minor edits for clarity were made to the public comments in this document.

These comments were considered during the prioritization process. The final 2015-2017 water quality standards priorities list and the reasoning behind the decisions are available in the final report: 2015-2017 TRIENNIAL STANDARDS REVIEW (TSR) PRIORITIES FOR THE WATER QUALITY STANDARDS PROGRAM

Information on the current status of Wisconsin's TSR process is available on the WDNR website: http://dnr.wi.gov/topic/surfacewater/tsr.html

SURVEY COMMENTS

The survey requested that people select their top 3 from a list of 22 topics related to water quality standards. Survey respondents were additionally asked to provide their reasons for choosing their top 3 topics, their experience with water quality standards, and additional topics they thought should be addressed outside of the 22 provided.

Question: Please explain why you selected these topics as a priority.

Topic-Specific Comments

Ammonia WQC

- Algal blooms and the nitrogen cycle are closely related. As the DNR has recently begun implementation on the new phosphorus rule, the next big step to addressing algal blooms is to limiting all forms of nitrogen entering a water body.
- We are a POTW and we face considerable costs for treatment. Controlling these pollutants at their sources to levels that will allow us to meet current or future limits may not be feasible.
- A toss-up - settled on ammonia as the source of fish kills. Am not sure standards will do much good in that case though, since the problems with ammonia in water seem to be episodic.

Antidegradation Procedures

- Anti-degradation standards will address concerns about increasing impacts of point sources on high quality / outstanding water resources. DNR developed a pink sheet for revising NR 207 in 2009, but those anti-degradation rules were put on hold in order to await EPA guidance. Hopefully they can now move forward.
- Antidegradation standards will address concerns about impacts of point sources on high quality water resources.
- Parts of the Wisconsin antidegradation standards do not meet minimum federal requirements. For example, Wis. Admin. Code § NR 207.05 exempts from antidegradation new or increased discharges that consume 30 percent of remaining assimilative capacity. EPA has recognized that discharges more than 10 percent should not be exempted as de minimis. Wisconsin should ensure that its antidegradation standards, not solely limited to the cited section, are in line with the minimum federal requirements.
- Wild rice is increasingly threatened due to changing water levels, flow, temperature and evidence that sulfate/sulfides and other contaminants are harming viability in the St. Louis River watershed. Encroachment of invasive species in wild rice areas is a serious problem. The wild rice are a native subsistence species for the Ojibwe and other tribes, as well as an economic product. The water quality improvements needed to protect wild rice are beneficial to the fish species and other wildlife that inhabit wild rice habitat. Antidegradation is of special concern upstream of wild rice areas, especially for threats to the Bad River/Kakagon sloughs of potential mining development that would dewater cold water trout and salmon streams and introduce sediment, dewater artesian wells/springs that are currently recharged in the mine areas, heavy metal and acid mine drainage from disturbed pyrite complexes. Endocrine disruptors and pesticides are inhibiting the sustainability/reproductive potential of the Great Lakes fishery, which could provide more sustainable economic use of the resource through sport and commercial fishing.
- We also need to ensure that through regulations and policy tools such as TMDLs, trading, etc. that we are not legalizing pollution, which results in backsliding of water quality.
- DNR committed in 2008 to correct the deficiencies in NR 207, but now appears to have put this long awaited revision to NR 207 on hold based on its perception that WI must await EPA's related rulemaking. IN the meantime new and increased discharges that negatively impact water quality are being permitted without any showing that the discharge is necessary or meets antideg requirements. EPA's federal rule revisions will be complete during the next triennial review period and this topic should remain on DNR"s priority list so work can begin immediately to revise these deficient regulations. Many of the proposed revisions to NR 207 will not be impacted by the federal rule revisions and DNR must continue work on those revisions now, as there is no barrier to continuing that work.

- Expanded anti-degradation standards would help preserve the WI waters that are in relatively good shape. Cheaper to protect than to cleanup.
- Antidegradation as it is key to protecting all of Wisconsin's surface waters and EPA and the DNR indicate that this revision needs to be done.
- I selected degradation because if leave more land in its natural state you eliminate many of the other problems.
- EPA's recommendation to review rules and procedures of anti-degradation is timely and valuable.
- The third priority is updating the antidegradation rules and implementation procedures as one of the key areas for consideration is how to address increased limits due to revised and less stringent water quality criteria. Based on the first and second priorities described above, if arsenic and chloride criteria are revised to be less stringent, but still scientifically defensible, values, then the antidegradation procedures should be reviewed and revised to account for allowable increased limits. This will ensure that permittees who have received approved variances or have been assigned lower limits in their permits can take advantage of the updated science and be given increased, but still protective, limits.
- Antidegradation: We must align WI antideg policies with CWA requirements. This has been a priority for years and was highly rated in the last Triennial Standards Review process.
- Antidegradation Rules should be updated to assure that the most current scientific knowledge and assessment techniques, as well as public engagement are applied to prevent further degradation of Wisconsin surface and ground waters.
- Concerns for antidegradation policy because of the threat to ORW/ERW in my watershed.

Arsenic WQC

- Effects my drinking water as it filters through our ground water sooner or later.
- Arsenic is presently under rated as a carcinogen. Standards need to be tightened to protect society.
- Mining could cause our Great Lake to be polluted, and ARSENIC would be tragic in our lakes/streams. We need to maintain a baseline BEFORE any mining takes place.
- Revising the Arsenic Human Health Criterion in NR 105 (surface water quality criteria) to align with the criterion values in NR 140 and 809 (ground water quality criteria and safe drinking water criteria, respectively) should be a top water quality standard priority for the Department. NR 105, 140 and 809 all include an arsenic criterion for the same reason – it's a human health/cancer criterion. The difference between NR 140 and 809 is that these rules both use the EPA Safe Drinking Water Act arsenic MCL of 10 ug/l. The MCL accounts for treatment system capabilities and costs. NR 105 does not account for treatment technology limitations or costs. Therefore, a public drinking water supply complies with a 10 ug/l MCL; whereas dischargers must meet a 0.2 ug/l limit (50X lower) to waters like Lake Michigan that is used as a public water supply – yet no one drinks directly from the lake. In other words, the standard is overly conservative in that it's protecting one from a risk that does not exist. Aligning all three rules at the 10 ug/l ensures that treatment technology requirements and costs are in-line for municipal public water suppliers and industrial and municipal wastewater treatment systems. Last, Wisconsin is the only state in the Great Lakes region with an HHC value for arsenic as low as 0.2 ug/L. Moreover, there is considerable disagreement over what the EPA MCL should be for arsenic. While this remains unsettled on a federal level, it would be unwise for utilities, other facility owners, and the DNR, to spend time and financial resources directed toward the unnecessarily low current surface water criterion of 0.2 ug/l.
- The arsenic criterion needs revision. It is not in line with the criteria in other Region V states and is at a level that is below ambient conditions.
- I am concerned about the arsenic from coal power plants.

Chloride WQC

- Chloride concentrations in waterways are increasing and more efforts are needed to control sources, understand fate and transport, and measure consequences.
- We have a chloride limit and it is not something we can remove from our waste stream. Much of the Chlorides concentrations in our rivers & streams are coming from non-point safety related applications.
- We are a POTW and we face considerable costs for treatment. Controlling these pollutants at their sources to levels that will allow us to meet current or future limits may not be feasible.

- Chloride levels are generally over EPA chronic standards and often acute standards. They remain high in even summer months. We need criteria for Cl.
- Chlorides will not be solved by PP, if criteria can be less stringent at higher hardness then it should be considered.
- Chloride because this has been raised as an issue of concern in the Dane Co Lakes and suggests a more widespread problem across WI that has the potential to change the fundamental character of our surface waters.
- I feel there are ways to make chloride less toxic, and those factors need to play a part in the limit.
- I regularly monitor local streams for water quality. These three [chlorides, DO, and TSS] are very common problems and need to be addressed. The chlorides are getting worse and we really don't have a handle on it at all.
- Reviewing the chloride criterion based on new toxicological data should be the second highest priority. Ohio, another Great Lakes state, recently promulgated a chloride criterion based on new toxicological data. The WDNR should also review the new toxicological data and account for the updated science when revising the criterion. Using hardness and sulfate concentrations to derive the criterion may result in less stringent, but still scientifically defensible, values. This could reduce the need for utilizing chloride variances in discharge permits which allows for both the WDNR and permittees to better target limited resources.
- The chloride criterion should be revisited as new toxicological data is available, and the potential revision coudl have a positive impact on the Statewide variance for chlorides.
- As indicated in your description, many POTWs currently carry chloride variances. If DNR moves forward with work in this area, it is possible that less stringent criterion would be developed with would reduce the need for chloride variances and reduce the workload for the department.

Copper WQC

- Copper mine with under-regulation.
- I hope that restricting copper will make mining in the Bad River watershed less feasible.
- We would like to submit these comments to the Wisconsin Department of Natural Resources (WDNR) as part of the Triennial Review of surface water quality standards on behalf of our client, the International Copper Association and Copper Development Association (ICA/CDA). ICA/CDA played a significant role in sponsoring scientific research used in development of the freshwater Biotic Ligand Model (BLM) for copper, which was adopted by the United States Environmental Protection Agency (EPA) in its latest national ambient water quality criteria (EPA 2007). ICA/CDA is now interested in encouraging efforts by states and tribes to incorporate these latest recommended EPA national criteria for copper into their water quality standards programs. We understand that WDNR is considering updating its copper criteria and using the BLM to reduce copper variance workload. Thus, the purpose of this letter is to support the WDNR in its consideration of using the BLM to calculate aquatic life criteria for copper, as currently recommended by EPA. Wisconsin's current aquatic life criteria used to derive copper standards, like most states' criteria, only take into account hardness as a factor that modifies toxicity. Using only hardness as a modifying factor for metals criteria is an outdated approach that excludes a substantial body of peer-reviewed scientific literature demonstrating that additional modifying factors can and should be incorporated into regulatory benchmarks or standards, while providing the same levels of aquatic life protection required under the Clean Water Act (EPA 1985, 1994, 2001, 2007). Like most metals, copper toxicity is a function of its bioavailability, which in addition to being controlled by hardness, is also strongly related to other important factors such as dissolved organic carbon (DOC), alkalinity, pH, and temperature. The key strength of the BLM is that it accounts for multiple factors—in addition to hardness—that mitigate or exacerbate copper's toxic effect on aquatic life. Similar to copper, BLMs have been developed and validated and are available for regulatory use for several other metals, including zinc, lead, nickel, and cadmium. While EPA has yet to develop formal recommended national ambient water quality criteria using BLMs for these other metals, the models are widely available and are being applied in regulatory programs in several European countries and Canada. ICA/CDA fully supports and shares their desire to move towards bioavailability models such as the BLM as being the current state of both scientific and regulatory practice. There also are practical advantages for using the BLM; it is a cost-effective regulatory tool compared to other site-specific toxicity test procedures (e.g., water-effect ratios), and the BLM software is publicly available, sanctioned by EPA, and requires only brief training to generate rapid and useable output. While the model is widely considered to be useful for derivation of site-specific water quality criteria, we suggest its best application is on a state-wide basis for any discharger with sufficient water quality data to run the BLM. This would enable individual permit writers and permittees to collaborate directly to use the BLM to derive permit limits, thereby minimizing or eliminating the need to go

through a lengthy and expensive rulemaking process. BLM-based criteria provide a practical means of deriving demonstrably more accurate levels of aquatic life protection across a broad range of water quality conditions, and with sufficient flexibility to support most any regulatory application framework. Please let us know how we can assist WDNR in its consideration of the BLM during this review. GEI or ICA/CDA could help in a variety of ways, including preparation of written or oral testimony supporting the technical basis of the BLM, or providing guidance on application of the BLM to water quality criteria and what type of implementation approach would best fit your available datasets. GEI would also be glad to review datasets, if provided by WDNR, to evaluate potential BLM-based criteria for Wisconsin waters. ICA/CDA has also sponsored BLM training sessions over the past several years, and they have been well-attended by both regulators and the regulated community. If desired, it may be possible to provide this course or related education materials if you would find that helpful as a means of helping inform the public and stakeholders as to the basis and application of the BLM. We appreciate the opportunity to provide you with this prospective proposal. Please let us know if you have any questions. We look forward to discussing this with you further. Sincerely, GEI CONSULTANTS, INC. Robert W. Gensemer, Ph.D. Senior Ecotoxicologist

Cyanobacterial Toxin and Cell Density Water Quality Criteria and/or Guidance

- Agricultural runoff has increased with the proliferation of CAFOs in Wisconsin, leading to major problems with toxic blue green algal growth that threatens public health and recreation.
- Agriculture in WI is virtually unregulated. The erosion and sedimentation caused by agriculture is perhaps the largest single factor contributing to the poor water quality of WI lakes and rivers.
- Algae blooms are the worst water quality problem in the state.
- Algae is primarily due to non-point runoff.
- Algal blooms and the nitrogen cycle are closely related. As the DNR has recently begun implementation on the new phosphorus rule, the next big step to addressing algal blooms is to limiting all forms of nitrogen entering a water body.
- Based on runoff of non-point pollution.
- I'm concerned about lake water quality for recreation.
- Known local conditions and concerns for health.
- Because WI had one of the first deaths in the nation from blue-green algae, that is important.

Dissolved Oxygen WQC

- DO is needed to maintain water quality.
- I'm also concerned about fish and macroinvertebres that are sensitive to climate change, which is why I selected dissolved oxygen.
- DO quantification is important because it can be used as an indicator for other pollutants (e.g. P, N, TSS) and for TMDL implementation.
- Dissolved Oxygen simply sorely needs scrutiny, not having been updated since the 1970s.
- The current DO standards are not protective of aquatic life, particularly cold water species.
- I regularly monitor local streams for water quality. These three [chlorides, DO, and TSS] are very common problems and need to be addressed.
- I'm concerned about the DO standard which is out of date.

Endrin Chronic WQC

- Endrin could lead to mutations and die offs of animals

Floristic Quality Assessment Criteria for Wetlands

- Effects my drinking water as it filters through our ground water sooner or later.
- Wetlands critical to maintain clean rivers and lakes.
- These topics are related. Wetlands are filters of surface water. Surface water carries pollutants that humans introduce to the water. Not all pollutants are regulated or understood.

Nearshore Great Lakes Algae Standard

- Cladophora is an increasing problem that impairs the ability of a large number of people to enjoy the lakeshore.
- Agricultural runoff has increased with the proliferation of CAFOs in Wisconsin, leading to major problems with toxic blue green algal growth - including a growing dead zone near Green Bay- that threatens public health and recreation.
- Algae blooms are the worst water quality problem in the state.
- Algal blooms frequently interfere with activities on recreational waters, beaches and shorelines on Lake Michigan. Algae may harbor bacteria causing human illness and cause beach closures or warnings. A qualitative scale was developed by WDNR's Office of Great Lakes for documenting Cladophora densities and corresponding information has been collected by beach managers along beaches of the Great Lakes. However, current standards are imprecise as to what constitutes an algae impairment. Therefore, Wisconsin should develop clear water quality standards for algae in Lake Michigan waters and on shorelines.
- Phosphorus is also a huge problem--and many of our waters are not swimmable due to cladophora.
- Cladophora is present due to increased pollutants.
- Development of models of phosphorus, cladophora and other algae pollution are necessary now. It is likely that these models could drive WPDES permit limits for discharges of nutrients. Because permittees are currently in process of developing strategies to reduce nutrient discharges those decisions should be made with adequate knowledge of nutrient reductions required to meet water quality standards for nutrient related discharges in the Great Lakes. Rule requiring limits based on these models were adopted in late 2010 and permits impacted by the models have been and are currently being issued, or have been administratively delayed due to lack of models.
- Great Lakes algae standard because of concern expressed by the Great Lakes Commission and Lake Michigan's proximity to high population concentration for both drinking, commercial and recreational water uses.
- Nearshore algae are a major problem along areas of Lake Michigan and deserves more attention.
- Nearshore algae disrupt the citizen's ability to connect with this resource, impairing his/her level of awareness & understanding of water quality and health. Assessing Cladophora is an important step.
- Near-shore water quality is a primary component of the economic success and quality of life for the residents of Wisconsin.
- Several lakes almost become unusable due to green algae or blue algae.
- The algae build up in the Great Lakes (and virtually every other water in WI) is extremely troubling. Reference the serious situation in the near shore area of Lake Erie affecting Toledo.
- The Great Lakes are a globally significant resource with deteriorating water quality and decreasing value in the eyes of the public. A near shore algae standard would begin to address the problems that threaten tourism and recreation

Nitrogen WQC

- Algal blooms and the nitrogen cycle are closely related. As the DNR has recently begun implementation on the new phosphorus rule, the next big step to addressing algal blooms is to limiting all forms of nitrogen entering a water body.
- While Algal Water Quality Criteria/Guidance Development are important, I believe it's more important to address the root causes of these algae blooms (nitrogen).
- Excess Nitrogen is a big problem when it comes to our surface water's ability to sustain life.
- We are a POTW and we face considerable costs for treatment. Controlling these pollutants at their sources to levels that will allow us to meet current or future limits may not be feasible.
- Currently, phosphorus is the element used as a standard for detecting nutrient pollution. Nitrogen has an effect on dissolved oxygen and pH, which in turn profoundly affect aquatic life. We need to be able to show that nitrogen is damaging to our waterways by testing against a standard. Considering the situation in Iowa with Nitrogen pollution and what is beginning to be a serious issue with Nitrogen in many parts of the state, it seems irresponsible not to have some sort of standard. I personally know many people who already have had to buy reverse-osmosis filtration systems just so they can safely drink their tap water.
- Control of Nitrogen levels can effect algal blooms and ammonia levels as well as DO issues.
- EPA has committed to the development of nitrogen criteria for the state of Wisconsin if DNR does not proceed with development. According to EPA's website the analysis of the data and information to support these criteria

was to be completed by early 2013, and DNR must move forward with adoption of these criteria during this triennial review period.

- Nitrogen standards have been a bug-a-boo issue for years. Time to get on with establishing standards protective of our neighbors downstream. Addressing these issues would have greatest effect on the largest number of WI waters.
- Nitrogen affects aquatic life, love my frogs and fish, we need standards to test against.
- Nitrogen is present when nutrient pollution occurs; need more tools to identify quantity and quality of pollution and its effect on stream and river ecosystems.
- I selected nitrogen because farmers are using too much nitrogen.
- Nitrogen is important for nutrient loading issues and Gulf Coast Hypoxia.
- Nitrogen: It makes sense to address nitrogen as another key nutrient for nonpoint source pollution control while phosphorus implementation is going on.
- Nitrogen is having a major impact in creating dead zones downstream of Wisconsin.

Pesticides WQC

- Pesticides are degrading our water quality (and soil health) and harming aquatic life, but have gotten limited attention or focus in the past. We need to better understand the short and long term effects of these pollutants on water quality and aquatic species.
- Added farm runoff pollution is deteriorating the quality of our water for other uses. Of particular concern are neonicinitiods.
- Ag Runoff
- Based on runoff of non-point pollution.
- Effects my drinking water as it filters through our ground water sooner or later.
- We need to know what pesticides and endocrine disruptors lurk in the groundwater that we use for drinking and what the acceptable limits are for consumption of such.
- We have documented intermittent very high orthophosphate levels in Little Sturgeon Bay. This needs to be pursued in view of the heavy alga problems.
- Unregulated toxins and pesticides are negatively affecting the health of land and aquatic organisms and humans in ways that are complex and relatively not understood. The lack of a precautionary principal is alarming and we should not ignore these chemicals that potentially have long lasting effects on our ecosystems and humans.
- My highest priority concern is fertilizer and pesticide runoff into our lakes and rivers. Those pollution sources cause algae blooms and other health problems for people, fish and wildlife.
- Concerns from the new pesticides and old need to be reviewed so we can further enjoy the fish, wildlife and recreation we so enjoy. Without life in the water or healthy interactions of the life our water quality will suffer and so will the opportunities for whatever we would like to do concerning water quality.
- Recent and drastic increases in pesticide use and unregulated contaminants have potentially major negative impacts, which are not fully understood yet today.
- Similarly, I thought that the topic of "pesticides" is one of the larger battles and work to mitigate this threat could have wider positive impact than some of the other options.
- I am very uncomfortable with pesticides in our water, especially those which we know little about and are poorly regulated.
- Pesticides are killing much more than pest insects.
- Pesticides: Negative results in health of animals/humans.
- the chemicals crop farmers use are dangerous

Sulfate WQC

- Developing sulfate standards will address potential impacts on wild rice from proposed mining activities in northern WI.
- Sulfate standards will address potential impacts from proposed mining activities in northern WI.
- Wild rice is increasingly threatened due to changing water levels, flow, temperature and evidence that sulfate/sulfides and other contaminants are harming viability in the St. Louis River watershed. Encroachment of invasive species in wild rice areas is a serious problem. The wild rice are a native subsistence species for the

Ojibwe and other tribes, as well as an economic product. The water quality improvements needed to protect wild rice are beneficial to the fish species and other wildlife that inhabit wild rice habitat. Antidegradation is of special concern upstream of wild rice areas, especially for threats to the Bad River/Kakagon sloughs of potential mining development that would dewater cold water trout and salmon streams and introduce sediment, dewater artesian wells/springs that are currently recharged in the mine areas, heavy metal and acid mine drainage from disturbed pyrite complexes. Endocrine dusruptors and pesticides are inhibiting the sustainability/reproductive potential of the Great Lakes fishery, which could provide more sustainable economic use of the resource through sport and commercial fishing.

- Both Wild Rice Designated Use Development and Sulfate have direct impacts on the health of wild rice populations in Wisconsin, and, therefore, the health of wild rice-based tribes in Wisconsin. Like walleye, the health and availability of the wild rice population is essential to respecting tribal rights and interests in northern Wisconsin.
- Developing water quality criteria for sulfates is important as recent studies provide new insight.
- Sulfate - Important as backstop for mining discharges. Align State WQS with Tribe WQS, wild rice use designation should be considered with other use designation revisions.
- Sulfates will play a critical role in determining the impacts on mining in Wisconsin, both ferrous and nonferrous.
- Sulfate pollution is a potential factor that would be important to preserving wild rice beds on the Bad River watershed in the event a mine is constructed in the Penokee Hills.
- I am concerned about the potential for sulfate pollution from the Penokee Hills strip mine also.
- Both sulfate and wild rice go together. It seems from the debate over the Gogebic Taconite project and other proposed mines in the past that WI needs higher standards for dealing with the harm that mining can do to wild rice which is an important cultural resource.

Total Suspended Solids (TSS) or Suspended Sediment

- Addressing the amount of TSS in surface waters and managing to reduce TSS will also address other water quality issues.
- Agriculture in WI is virtually unregulated. The erosion and sedimentation caused by agriculture is perhaps the largest single factor contributing to the poor water quality of WI lakes and rivers.
- This is a very prevalent water quality issue in Wisconsin and in the Driftless area. There are only standards in place now to sample and measure, not to assess the importance of each TSS finding. Again, a standard is critical if any actionable information is to be gathered from monitoring programs.
- TSS assessment of streams may help determine if the best professional judgment of concentrations is appropriate. It is even possible that on a case basis these are too restrictive and too many water bodies are listed for TSS.
- TSS chokes off sensitive animal and plant life.
- TSS, there are currently standards in place to sample and measure TSS, but not to assess the importance of the findings.
- Total Suspended Solids are often measured but apparently not actionable. TSS is often affected by snowmelt and rainfall but also by human and human-related activity. To the extent that human activity may be regulated to reduce TSS, we need to know what this measurement means for plant, animal and microbial life.
- I regularly monitor local streams for water quality. These three [chlorides, DO, and TSS] are very common problems and need to be addressed.
- I selected suspended solids because if you reduce this you reduce the runoff that causes many problems.
- Many orgs are changing over from turbidity measurements to clarity measurements; state standards would be useful and directly comparable with MN.
- Many rivers and streams have high TSS levels.
- The TSS criterion should be reviewed to keep in line with the TMDL developments around the State to address waterbodies impaired by TSS.
- The largest single problem in the waterways in Wisconsin is the deposit of total suspended solids which becomes sediment in our waterways.
- The largest single problem in the waterways of Wisconsin is the deposit of total suspended solids or suspended sediment.
- The sediments choice was based on the number of streams where sediment is the impediment.

Unregulated pollutants (eg/flammables, endocrine disruptors)

- The public is alert to potential problems caused by pharmaceuticals and personal care products and we need to be able to understand and express the risks related to these pollutants.
- Unregulated pollutants are degrading our water quality (and soil health) and harming aquatic life, but have gotten limited attention or focus in the past. We need to better understand the short and long term affects of these pollutants on water quality and aquatic species.
- Ag Runoff
- Based on runoff of non-point pollution.
- Pharmaceuticals/Endocrine Disruptors are really a Producer Responsibility, although more public education, drop-offs and monitoring activities would help. Also, we need data collection to facilitate research.
- While all are important, the unregulated contaminants pose the largest threat because we know so little about their effects, therefore they are the highest priority.
- We consume these waters, irrigate crops, and interact closely in immeasurable ways. Many of the pesticides, herbicides, and industrial chemicals have not been extensively researched to determine a truly 'acceptable' amount for drinking, wildlife survival, and recreational waters.
- Very concerned about endocrine disrupters in the environment and general clean water for the state.
- Unregulated toxins and pesticides are negatively affecting the health of land and aquatic organisms and humans in ways that are complex and relatively not understood. The lack of a precautionary principal is alarming and we should not ignore these chemicals that potentially have long lasting effects on our ecosystems and humans.
- Endocrine disruptors are a major problem not being addressed due to the challenges associated with them. These substances need to be dealt with for the long term health of animals, including humans.
- Recent and drastic increases in pesticide use and unregulated contaminants have potentially major negative impacts, which are not fully understood yet today.
- I think that there are large threats with non-regulated chemicals and that it is time to turn our attention to these.
- I chose unregulated pollutants so that more data can be obtained regarding unknown chemicals.
- Pharmaceuticals/Endocrine Disrupters are a Producer Responsibility, more public education is needed, as well as funding for drop-offs and monitoring activities.

Water Quality Criteria Frequency and Duration Requirements

- Work on this topic should aim at developing standards for how many times and for how long digressions from acceptable standards may occur. Frequency and duration standards are not in place for the most part, only the magnitude of each digression. (for example, with new standards, a smaller elevated coliform level repeated over time might carry as much weight as a more elevated coliform level found only once). If our monitoring can show smaller elevations repeated multiple times, this information may be actionable, or may at least warrant attention.
- WQC that have only maximum limits, don't address severity of amount and duration of any exceedances. Should consider policy to address if short and or low level exceedances are protective of water quality and should not be enforced.
- With more frequent testing water should be purer and less contaminated.
- Frequency and duration, how often a coliform is found in the water and how long it is there is more important than a one-time spike.
- Frequency and Duration: currently, no action is taken on many surface waterways unless fish kills occur. We need other actionable standards. Lower-level pollution over time may be damaging stream and rivers.
- I am hoping that work on water quality criteria might be an "umbrella" project that could have multiple positive effects on WI waters.
- Freq & duration of exceedances are crucially important in understanding overall water quality.

Wild Rice Designated Use

- Wild rice is important.
- Wild Rice Use Designation should be part of the current complementary DNR Use Designation rule process.
- Wild rice is increasingly threatened due to changing water levels, flow, temperature and evidence that sulfate/sulfides and other contaminants are harming viability in the St. Louis River watershed. Encroachment of

invasive species in wild rice areas is a serious problem. The wild rice are a native subsistence species for the Ojibwe and other tribes, as well as an economic product. The water quality improvements needed to protect wild rice are beneficial to the fish species and other wildlife that inhabit wild rice habitat. Antidegradation is of special concern upstream of wild rice areas, especially for threats to the Bad River/Kakagon sloughs of potential mining development that would dewater cold water trout and salmon streams and introduce sediment, dewater artesian wells/springs that are currently recharged in the mine areas, heavy metal and acid mine drainage from disturbed pyrite complexes. Endocrine dusruptors and pesticides are inhibiting the sustainability/reproductive potential of the Great Lakes fishery, which could provide more sustainable economic use of the resource through sport and commercial fishing.

- Wild Rice is an excellent measure of water quality and of related wetlands health. Wild Rice is also extremely important to the religion and overall well being of Wisconsin Tribes such as the Bad River tribe on Lake Superior.
- Both Wild Rice Designated Use Development and Sulfate have direct impacts on the health of wild rice populations in Wisconsin, and, therefore, the health of wild rice-based tribes in Wisconsin. Like walleye, the health and availability of the wild rice population is essential to respecting tribal rights and interests in northern Wisconsin.
- Great human health is what we all strive for in our lives. We want to have clean water for our use for drinking and daily lives. Plants as wild rice support the logic that waters that have this species are mostly clean and free from contaminants.
- I find wild rice areas are so few.
- Hopefully prioritizing wild rice will block mining activity in the Bad River watershed.
- I'm concerned for wild rice on Tribal lands.
- Stds related to wild rice have been batted around for years; it's time to set some numbers.
- The wild rice beds next to Lake Superior in the Bad River Watershed are my priority.
- Bad River rice beds are nearby and in my watershed.
- Both sulfate and wild rice go together. It seems from the debate over the Gogebic Taconite project and other proposed mines in the past that WI needs higher standards for dealing with the harm that mining can do to wild rice which is an important cultural resource.

The following topics received no specific comments: Carbaryl WQC, Phenol WQC, Selenium WQC, Cadmium WQC, and Acrolein WQC.

General Comments

- Lake Michigan is the drinking water for a large number of Wisconsinites. Also, it supports a huge fishing and tourist industries. 150 invasive organisms have already changed the lake. Access to clean drinking water will continue to be a serious world issue. We need to protect Lake Michigan, one of our greatest assets. It will strengthen our economy and maintain our quality of life.
- I live on Lake Superior and believe our watersheds and the lake should be protected from all pollution.
- clean water supports quality habitats
- Lake Onalaska is being overrun with weeds. This is increasing sedimentation also. It’s a man-made lake, so it shouldn't be just swamp for migrating birds.
- My work on watersheds in Kenosha county, hoping to rehabilitate the ecosystem function of Pike Creek, Pike River, wetlands, to protect our drinking water in Lake Michigan.
- Managing water as a natural resource is essential to maintaining our quality of life and the strength of our economy, as well as to ensuring its availability to support the mix of natural flora and fauna which is unique to our state. Decisions about water use and management must be made with consideration for public safety and the impact those decisions will have on all current and future generations of stakeholders.
- I want the WDNR to focus on water quality issues related to quality of life/recreational use.
- I selected these because I think that prioritizing them will potentially have the greatest positive impact.
- Concern for present & future health of humans & animals. Incentives to find alternative practices should be given to the few who pollute the environment of the many.
- Of the 22 topics, these 3 seem the most applicable to sustain or improve the quality of the lake that I live on.

- Concerned for health of my family and the environment, clean air and clean water are essential for good health of both.
- Adaptive Management Handbook: Specifically, we are interested in seeing more clarification on the definition of specific situations in which modeling or site-specific criteria can be used to show compliance; Finally, we believe that a number of the items on the list for prioritization should be carried out as important factors in the implementation of the phosphorus standard, including dissolved oxygen, TSS, and cyanobacteria standards. TMDL development and implementation for phosphorus should account for all of these criteria.
- Surprise is hardest to deal with for the state. Monitoring broadly will help to see problems forming while actions can be chosen on a reasoned basis.
- The development and implementation of a site specific criteria process would result in more certainty for permittees and give another potential compliance option when trying to comply with the more stringent phosphorus limits.
- As I stated on the previous page, get serious about nutrient load from agriculture. Laws must be passed to prohibit farmers from pasturing livestock in streams, allowing manure and other fertilizer to wash off of fields into streams, and fertilizing fields right up to the edge of a stream. The Chetek chain of lakes, and Tainter and Menomin are pea soup due to the Red Cedar watershed being swamped with nutrient load from agriculture.
- The three chosen topics will have significant financial impacts to customer base if not addressed correctly.
- As chair of the EARTH committee for the Racine Dominicans, WATER is one of our important issues. This topic is very important.
- Drinking water is a top priority.
- I'm an RN and really concerned about health issues.
- From the descriptions, I think all the issues are important.
- They are the most wide spread problems.
- They set broad regulation standards, which are much needed.
- This was a difficult decision. Generally the three selected seem to stand out as three vital water concerns which affect the public directly.
- These seemed to me to have the widest general effect on water standards.
- Higher likelihood of improved water quality.
- High costs to community.
- It seems they would have the most overall impact into investigating and controlling the multitude of contaminants in Wisconsin waters.
- I feel that the topics I selected are broad enough to include some of the other topics as subtopics. i.e. addressing dissolved oxygen issues will also impact nitrogen pollution.
- I have watched water quality diminish on the Wisconsin River and Lake Petenwell. I live on the shoreline.
- I followed the advice of a trusted authority.
- Long Term perspective for anti-deg, short term issue of acute toxicity, plus TSS necessary to regulate water quality properly.
- It is essential to implement TMDLs, otherwise they are useless.
- LWV studies.
- Our local pond, as many other bodies of water in Wisconsin, is a place for people to swim. Hence my concern about the three topics I chose.
- Overall quality.
- Overgrowth of lake weeds over 25 year period.
- Seem the most important and ongoing issues to me.
- To let you know I am a concerned citizen who has interest in many environmental issues. These three are my present choices.
- Wastewater professional
- Water chain events
- As explained in my comment, there should be no ranking, these are all concerns. We should have clean water, free of chemicals and pollutants.

Mining

- Some of our most pristine and last standing traditional wild rice fields are in danger due to loosening of water quality and other environmental rules/regulations to allow quicker/easier approval and development of mining operations in the Penokees and elsewhere. There is also solid evidence to show that mining the Penokees as proposed will release sulfurs into the waters and air which will devastate surrounding lands, plants and waterways including Native wild rice lands. Loosening water and environmental standards and assessment requirements is counter to protecting and maintaining clean drinking and habitat waters and wetlands. I chose the three top issues and made my comments to focus attention on the need to set, maintain and monitor strict water quality standards before, during and after mining, industrial and big ag operations because we are, as I type, facing critical threats to what remains of our clean and healthy water resources do to over use, abuse and lack of protection of our water resources. Water is at the heart and soul of the beauty, vitality and health of the lands and all peoples, creatures, wildlife and resources of our awesome state of Wisconsin.
- WI DNR needs to put more work into the proposed Penokee mine. It should protect our environment, not the interests of foreign business.
- I live in Bayfield WI and am concerned with mining in the Lake Superior basin and its effects on water.
- Mining could cause our Great Lake to be polluted, and ARSENIC would be tragic in our lakes/streams. We need to maintain a baseline BEFORE any mining takes place.
- Our local aquifer is under threat by a mining company and the wild rice and drinking water are threatened.
- All three are Lake Superior related and more specifically, sulfate standards and wild rice designated use concern potential impacts from the proposed iron mine. Now is the time to pay attention to these topics prior to a mine permit application

Concentrated Animal Feeding Operations (CAFOs)

- Water quality and quantity is being negatively impacted with the addition of large CAFO farming expansion in WI.
- Threats to surface water and ground water. We have seen the impact of CAFO pollution on the Wisconsin River and surrounding lake due to the lack of regulation and enforcement of existing laws of CAFO's and agricultural run-off.

Urban & Agricultural Runoff

- We put way too many chemicals on our lawns and land, when we could use native plants that do not require them.
- Urban runoff is a growing concern in the state as impervious surfaces increase.
- The fertilizers and other pollutants entering some of our State's lakes is ridiculously high. Runoff from heavy rains leads to huge aquatic biologic growth that is not beneficial whatsoever.
- The greatest cause of water quality degradation is non-point source runoff from agricultural practices and urban sources. Suspended solids carrying nitrogen and phosphorus need better control. Setting water quality standards for TSS, N, and P will start the process for implementing best management practices in agricultural and urban landscapes.
- All are based on runoff of non-point pollution.
- MY WELL WATER QUALITY IS DETERIATING AND IS BEING POLLUTED BY AGRICULTURAL SOURCES.
- Added farm runoff pollution is deteriorating the quality of our water for other uses.
- Ag Runoff
- Agriculture in WI is virtually unregulated. The erosion and sedimentation caused by agriculture is perhaps the largest single factor contributing to the poor water quality of WI lakes and rivers.

Question: Other priority topic(s) to consider. Please specify.

Topics not included in the 22 given

- 1.Blue Green algae bloom from agricultural run-off. 2, Lack of adequate rules and enforcement of CAFO and high capacity wells
- CAFO manure runoff
- Conserving and quality of drinking water.
- Continue work on previously identified priorities (e.g. phosphorus site specific criterion) where little work appears to be done
- Dissolved oxygen, specifically BOD impact on Green Bay and other waters.
- Effects of runoff on the Great Lakes.
- Highest Priority: Finish the site-specific criteria rule (Board Order No. WT-17-12)
- How to best monitor surface water to pinpoint sources of pollution? Water quality standards are essential but we must also be able to identify the source/s of impairment/s.
- Increase educational efforts!
- It is high time to stop farmers from pasturing livestock in streams and fertilizing fields within 200 feet of streams. It is no mystery why so many of our waters are pea soup with the high nitrogen and fertilizer loads that farmers are introducing into our lakes via streams in the watershed. If farmers aren't smart enough or simply don't care is sad, they shouldn't be allowed to introduce any nitrogen into a stream. It enrages me to see them allowed to pasture cows right in the stream or see spring run-off full of manure rushing off their pasture land into local streams. You want to fix our lakes, address the obvious source of the problem.
- Limit the use of water by crop farmers (many times I've seen irrigation running while it is raining, just to put on more chemicals).
- Manure runoff is the base cause of most of these.
- Runoff from the over fertilization of lawns by home owners and lawn service companies. There are inland lakes that ban the use of “chem lawn" applications from May 1st through October. 31st. Lake Onalaska in La Crosse County could be your test lake for this idea. I have observed lake weed/plant growth intensify as the homes around the lake have been upgraded to mansions with large lawns that are maintained to have no weed growth and be uniformly green in color. My priorities reflect this observation over a 25 year period. If you would like to contact me please feel free I would love to talk to you and show you around Lake Onalaska in La Crosse County. daunallen@gmail.com
- Stricter Standards/regulations to protect water quality/supply from mining/industrial/big ag development, operations and post operations degradations.
- Support the Great Lakes Compact and Take into account the cumulative effects on local and regional water use.
- TEST FOR AGRICULTURAL WASTE PRODUCTS.
- Testing agricultural waste in lagoons for bacteria, antibiotics and developing remediation before spread.
- Updates to Adaptive Management Technical Handbook to address concerns of regulated community.
- Use of native plants to reduce chemicals - fertilizers, herbicides, pesticides.
- Water Quality Criteria monitoring and permit conditions for the application of aquatic herbicides.

Topics within the 22 given

- Chloride Water Quality Criteria
- Cyanobacterial Toxin and Cell Density, Unregulated pollutants, Dissolved Oxygen, Endrin Chronic, Sulfate
- Develop Water Quality Standards for unregulated pollutants and recommend that duration and frequency be defined for each pollutant in the water quality standards in Wisconsin Administrative Code So state and federal agencies can monitor water quality.
- Dissolved O2, Nitrogen, Sulfates, ammonia, exceedance of water quality standards for more pollutants and unregulated pollutants.
- Dissolved Oxygen
- Dissolved Oxygen Water Quality Criteria
- Endocrine disruptors water criteria and source; Pesticide water quality criteria.

- I totally support the LWV position statements on this and pesticides.
- Pesticides Water Quality Criteria- I would have put this 2 or 3 but D.O. & Nitrogen are somewhat related. I think pesticides are important to consider for effects of WWTP bioassay testing.
- Sulfate water quality criteria.
- Update ammonia water quality standards.
- Wisconsin seems to lag Minnesota in assessing the impact of unregulated pollutants such pharmaceuticals and endocrine disruptors so this is and area for increased focus on analysis, public awareness and prevention.

Dissatisfaction with Process

- ALL OF THESE. It is outrageous to identify TWENTY TWO (22) serious priorities for WI waters and request that stakeholders select THREE.
- How about all of the above? This ranking is bogus. We need clean water, free of all pollutants and hazardous chemicals.

Question: What is your experience related to the priority topics you have chosen?

- Experience working with wetlands as a consultant and understanding the hydrologic cycle (which everyone should be required to know).
- I have learned about them in school and been involved with them in my work.
- I work at DNR.
- Some study of.
- I have seen green lakes where I wouldn't swim. I like to eat wild rice.
- I have a BA in field biology, am a farmer and naturalist.
- I've served on a Lake District.
- Our otherwise beautiful lakes can be rendered polluted, smelly, and toxic just following a heavy rain storm. Cities need to be held accountable also. Some city's storm sewer drains usually dump directly into our lakes. This means that property several miles away needs to also be regulated. Any runoff in that particular watershed needs to be either treated or the use of fertilizers needs to be banned altogether.
- I am a local coordinator for the Water Action Volunteers stream monitoring program
- Fishing and water quality testing with Door Property Owners.
- Have a science background and worked in the field of wildlife. Enjoy recreating in our landscape by viewing wildlife, hunting & fishing and by watching and participating in the process in the past. Am a concerned citizen that our water quality is not taken serious enough and how it affects everything.
- I am an aquatic ecologist, retired from the Nat'l Park Service.
- I spent my career as a professional civil engineer in water resource management and water pollution control activities. I worked for the WDNR, USEPA, Minn. PCA, Fox Valley Water Quality Planning Agency, Neenah-Menasha Sewerage Commission, and a private consulting engineer.
- I have no scientific credentials related to water quality. However, as a non-tribal member, I have an increasing understanding of northern Wisconsin tribal cultures, especially Chippewa cultures, and the importance of healthy and abundant wild rice in northern Wisconsin.
- I'm not entirely clear what this question is asking. Is this asking if I have background knowledge? Is this asking if I have personal experience with developing water quality criteria, using pesticides, or identifying non-regulated chemicals? My background is in botany and molecular biology. I teach secondary and tertiary students and write science content for educational materials. I am interested in stewardship of our lands and waters.
- I am a fisherman and hunter/gatherer.
- 40+ years of environmental study and operation/maintenance/management of wastewater treatment facilities, however the impacts from non-source pollutants should not be ignored in this review.
- I have worked in the environmental consulting and water industries for 20 years.
- I have lived in Bancroft/Plainfield area for 37yrs.
- We are a POTW and we face considerable costs for treatment.
- The smaller Lakes of the central sands of WI are disappearing with expanded Hi Cap wells and Factory Farming. The quality of area lakes are also suffering from excessive runoff of AG. Lake Petenwell was seen from space due to excessive Blue/ green Algae Bloom and was featured on ABC World News. Groundwater in area CAFO region is contaminated with E-Coli and extremely high nitrate count. Kewaunee County has undrinkable well water due to CAFO expansion. These are a huge threat to groundwater quality, quantity, and personal wells.
- My dissertation is on the proposed Penokee Mine. I'm a former watershed specialist with the WDNR and worked on water quality issues in the Great Lakes and Lake Superior.
- I drink water, I fish, swim and grow food.
- I teach biology and environmental science at the high school level.
- Growing up on the Rock River and Lake Koshkonong was a great experience that should be shared by people of every generation. Algal blooms are the single most troublesome problem affecting the public's use of these waters.
- President of Wild Ones Green Bay Chapter.
- civil & environmental engineering graduate who cares about water quality and water supply affecting people, fish, and other organisms.

- I can't fish in these lakes past July 1st most years because they are foul smelling and looking due to all of the algae blooms mostly from farmers.
- From being in the field.
- My experience is my 60 years of living, playing, using and protecting the natural environment of my home, the awesome and beautiful water rich state of Wisconsin. My experience is that I am finding it harder to find places to travel to or live in Wisconsin that are free from the noise, water and other resource pollutions caused by mining, industrial and big ag operations. I travel to or have connections with and stay informed about all areas of Wisconsin and have been involved in natural resource conservation efforts all of my adult life. I am appalled and frightened at the current seeming disregard for the integrity of our natural waterways, landscapes and life giving resources present in our legislature and environmental protection agencies today. We are losing the awesome drinking water quality WI once boasted of. We are losing our beautiful swimming lakes, fishing spots and hiking areas to water pollution and draw down. We are losing wildlife, plant life, water life, human health and our clean, life giving water and other natural resources to the irresponsible use and abuse or our natural resources for commercial developments that offer little or no long term economic gains for WI citizens and often end up lining the coffers of out of state corporations and industrial magnates. In other words I am concerned and disgusted by the apathetic land and resource give away and corruption currently at play in WI governance. This is not the WI I grew up in, this is not the environmental management I want my taxes, my representatives and my protection agencies to allow or turn a blind eye to. I want the environmentally progressive, aware, protective and culturally vibrant natural heritage that used to be an inherent part of Wisconsin life back so my children, grandchildren and all peoples of WI can continue to thrive in and enjoy the healthy natural environment I grew up in.
- I am a volunteer Citizen Water Monitor and I own land in the Vernon County with coldwater springs and a trout stream.
- Water recreation. Retired Environmental Engineer.
- Concern regarding failure of legislature to protect northern Wisconsin's natural resources.
- Increased algae bloom and health risks associated with it. Decreased recreational use of polluted waters. Threats to our ground water because of rising nitrate levels. Threats to tourism economy because the water stinks so bad from the algae bloom people avoid it.
- My degree in the biological sciences has included research into the health effects of environmental contaminants.
- None, really. I'm thinking about the water quality testing done by the Root-Pike WIN and the City of Racine.
- The revised mining laws will put the Bad River Watershed and Lake Superior at risk of acid runoff from the proposed iron mine.
- I have over 20 years' experience in the environmental law and policy industry, including nearly seven years working on issues affecting the Great Lakes.
- I've watched water quality in Wisconsin deteriorate over the past 10 years or so and observed as regulations have been attacked.
- Work with point and non-point sources.
- Background in biology, biochemistry, and pathology.
- We live in farm country, and have seen over the years the decline in pollinators, birds, frogs, and fish. What's next? Us?
- I am Environmental Health Sanitarian.
- Work in water quality lab and interact in the environment as a citizen.
- My academic background is in environmental science with work experience in agricultural run-off and water quality.
- 40 years working for one of the most effective environmental regulatory entities on the planet...the ...Minnesota Pollution Control Agency.
- Research biologist, CARPC commissioner, Town Supervisor.
- Working as a volunteer for the Waterford Waterway Management District.
- Working as a volunteer for the Waterford Waterway Management District.
- Civil Engineer specializing in land development, storm water management, water resources conservation.
- Live on a lake with non-point pollution issues.
- Wastewater professional.
- High. Worked for a time in water chemistry.

- Extensive.
- 10 years' experience as aquatic biologist.
- Riparian owner, ground and surface water study, village trustee dealing with public wells and wastewater treatment.
- Volunteer with the Bad River Watershed Association.
- Green slime or algae on Chetek chain of lakes.
- 2 year fight against a big polluting CAFO attempting to move into our town and the lack of DNR doing it's job to protect the areas water resources.
- We work with municipal wastewater treatment facilities to ensure compliance with their WPDES permit.
- We sail sailboats on Lake Onalaska. The lakes usable area has been more then cut in half in the last 10 years by weeds and sedimentation. Last year I watched from shore as a power boater with a huge engine (like 60 horse power) was stuck in the middle of the lake, caught on weeds. I am heartbroken by the way this beautiful lake has been mismanaged by outsider environmental dogma.
- We live in a watershed area, Lake Desair area.
- Lake user, sailor, environmentalist.
- My spouse is a professional hydrologist.
- Limited.
- Clean Wisconsin works in many areas relating to water quality, including implementation of Clean Water Act, point and nonpoint source pollution controls, runoff, and development of water quality criteria.
- I am a concerned citizen of Wisconsin who is not a professional in biological science but who tries to remain current on these types of topics and also who is concerned on maintaining the incredible natural beauty of Wisconsin and all health related aspects regarding human and animal health.
- Too much sediment is harmful to our lakes and streams.
- Work as an outreach specialist on water quality for UW.
- Have seem local impairments for priority 1 and 2.
- Novice-level water monitoring; background in wildlife ecology and aquatic farming
- We currently carry a chloride variance.
- Civil Engineer.
- I have a surface water well and want to know about my water and also water, clean water is our most important resource. "Water, water every where and all the boards did shrink, water, water every where and not a drop to drink." Paradise Lost
- I have a degree in geology from UW Madison and have been involved in environmental education. Also, I read books...nonfiction...science...and I understand what I am reading...
- Wastewater Operator for 25 years
- I am a person who enjoys clean water and have a well that I'd like to maintain without worrying about it becoming toxic with insecticides/herbicides. Also, am a cancer survivor who is concerned about the increase in cancer in our community.
- Chloride levels are always elevated in the winter due to road salting infiltration. Residential water softening is the other hurdle to overcome with chlorides.
- Some learning/involvement with water standards at the former Badger Army Ammunition Plant and the cleanup issues there. Concerned citizen.
- I've been working with our Fox River-Green Bay CAC, AOC and learning lots...So much to do..
- WPDES permittee.
- Medium.
- GEI has extensive experience in the derivation and implementation of copper BLM-based criteria for state, municipal, and industrial clients. GEI has also been active in promoting the adoption of copper BLM-based standards in state Triennial Reviews, so state water quality standards reflect the latest nationally recommended criteria.
- Limited, but would like to learn more.
- Our treatment plant has a chloride variance.

- I represent the Wisconsin Wildlife Federation, 193 hunting, fishing and trapping organizations that are greatly concerned about the adverse water quality impacts on fish and wildlife habitat. We study and follow these issues carefully. Thank you for the opportunity to comment.
- I monitor a local stream and all my life I have been amazed at the shortsightedness of the human race when it comes to protecting their own drinking water. Why is it that we are willing to pollute our own water for a profit? California doesn't get it. They have turned nature into an industrial farm and now as these farms go bankrupt they seek someone besides themselves to blame!
- Involved in similar type issues and have witnessed the negative impacts
- The League of Women Voters of Wisconsin in May 2014 updated its positions on Water Quality and Quantity through a process of member study and consensus. Our new positions are available at: http://www.lwvwi.org/IssuesAdvocacy/NaturalResourcesWaterQuality.aspx
- In regards to arsenic, two of our facilities that discharge to Lake Michigan (with an ambient background arsenic concentration around 1 ug/L) are currently seeking variances for the human health criterion. We recognize the significant time and financial resources required to apply for and receive a variance including hiring a consultant to conduct treatment technology evaluations and cost-effectiveness studies; researching literature and developing the application materials; and communicating in meetings and through phone calls with the agencies. The Department must also commit a significant amount of time and resources to review the application and draft materials for EPA's review. A conclusion is still yet to be reached on our variance applications, which were submitted over a year ago. Revising the NR 105 Arsenic criterion to better align with the values in NR 140 and 809 would solve the equity issue between drinking water utilities, held to a standard of 10 ug/L, and the industrial and municipal utilities, currently held to a standard of 0.2 ug/L. The risk to public health would not change, and time and resources would be made available to achieve other priorities. In regards to revising the chloride criterion, we do not have any experience seeking a chloride variance, but based on our experience to obtain arsenic variances for two of our facilities, we recognize that it is a time-intensive and significant resource-laden process. Revising the criterion to be less stringent, yet scientifically defensible based on updated toxicological data, is the sensible thing to do. It would free resources from the Department and the permittees to achieve other priorities, and it would maintain protection of fish and aquatic life. If the arsenic and chloride criteria are revised to be less stringent, then the antidegradation procedures need to allow for increased limits.
- Wisconsin resident and lakefront cottage property owner (Jefferson Co).
- Using Lake Michigan
- I do not have any outstanding experience but have a lot of interest in protecting our water.
- I live on the shores of Lake Michigan and am especially concerned about the environmental impact on our rivers and lakes.
- Retired chemist.
- My main experience is concern for all the chemicals we place on our lawns that run into our water sources. I certainly do not want what happened in Toledo, Ohio to happen in any of our waterways.
- None, just an average citizen.
- As a human, I cannot live for more than a few days without water. It is more expensive to clean-up water systems than to prevent contamination by regulation, testing and enforcement.
- Interest in topic. Study of frogs in detention ponds/natural ponds. Coursework environmental science masters.
- MY WELL WATER QUALITY IS DETERIATING AND IS BEING POLLUTED BY AGRICULTURAL SOURCES.
- As a co-coordinator of the Crawford Stewardship Project, I help to facilitate a citizen based water quality monitoring program below the swine CAFO near Wauzeka and we also have a monitoring site below the frac sand mine in Bridgeport as well as several other streams across Crawford County. We have seen many instances of elevated nutrient levels as well as more than 10 times the levels of e-coli that would be considered safe for a public beach at times. We have had great difficulty getting any of our findings acted upon, often due to lack of standards.
- Nonprofit advocacy staffer and Wisconsin resident.
- Smelling the algae along Lake Michigan shores.
- I live in WI.

- Retired registered nurse, last worked in Endocrine and Diabetes clinic. Concern that endocrine disrupters are linked to diabetes and other health problems.
- 20 years of research on mining issues including water quality related to wastewater and non-point discharges from hard rock mining in ore with potential for sulfate pollution.
- I have grown up on Lake Michigan and have seen what our carelessness has done to harm it. Tourists have asked me if it was safe to be on our beach with the nasty algae. I do not know how to answer. In the interest of industry and jobs we have allowed horrible chemicals to enter our water. We have lost the use and enjoyment of our many lakes and rivers. We need to give clean water the priority it deserves.
- I've heard about cyanobacterial dangers on the news - its effect on animal and human health. Other than that I have very little experience in working with the priority topics I chose. I simply want local bodies of water to be safe for the children who use them. The three categories I chose seemed to encompass the need for good and consistent water quality standards - hence my choices.
- I was fishing a trout stream in which I found many dead trout. I later learned that the stream had been flooded with pesticides during a recent heavy rain. Up until then, it had been a very productive trout stream.
- Eat organic food to avoid cancer-causing pollutants; live near water with blue-green algae and take part in local water monitoring of streams and lakes. have my well water tested
- I am a concerned citizen, an avid paddler and fisherman, and an advocate for Wisconsin's water resources. I am a WAV2 citizen monitor, and have also participated in frog and toad monitoring and Project RED.
- Studied Lake Michigan and water issues past 10 years -LWV involvement
- Swimming in the St. Croix River on a daily basis.
- We submit a Chloride target value report to DNR and our findings are that most likely sources are beyond practical control, water softeners and road salt.
- Background in Environmental Studies and Biology; worked on road salt legislation in the past; Worked on passing the Great Lakes compact;
- Employed at WWTP holding WPDES permit. Assist in-plant staff review of permit renewals last 5 permit cycles.
- Health and human interest are paramount!
- 1. Getting blamed for cladophora problems. 2. Data collection regarding chloride, pharmaceuticals, and personal care products. 3. Operating pharmaceutical collection programs
- I have been sick after swimming in our lakes and promised the parents of the child who died I would do all I can to reduce blue green algae pollution.
- I am a water quality biologist. I'm also concerned about bacteria. WDNR is supposed to tell EPA of what standards they are going to choose for recreational use by the end of this year I think? 2017 is too late.
- I filter my drinking water that is sometimes brown
- Personal experience.

Survey Respondent List

Survey respondents were not required to leave a name or contact information. This list is of those who voluntarily identified themselves. Of the 157 participants 90 self-identified.

Name	Company
Adam Lechner	Village of Brownsville
Alison Castronovo	Wisconsin Electric Power Company (d/b/a We Energies)
Alyssa shelstad	
Amy Klusmeier	
Andrea Kaminski	League of Women Voters of Wisconsin
Andy Weidert	
Annette Waitzman	
Ben Meyer	(private citizen)
Betsy Lawton	Midwest Environmental Advocates
Bill Hess	Campbellsport Wastewater Facility
Bill Krouse	Wild Ones
Bobbi Rongstad	
Brad Huza	walCoMet
Bruce Markert	1942
caryn treiber	
Chandra Miller Fienen	
Cheryl Nenn	Milwaukee Riverkeeper
Cliff White	
Darrin Bauer	
Daun Allen	La Crosse Sailing Club
Dave Blouin	Sierra Club
David Morehouse	
David Taylor	MMSD
Dennis Draves	
Duane Larson	
Elizabeth Wheeler	Clean Wisconsin
Forest Jahnke	Crawford Stewardship Project
Gary Pulford	Courte Oreilles Lakes Association (COLA)
George Meyer	Wisconsin Wildlife Federation
Glory Adams	
J. Hansen Schmitt	
James Servais	
Jayne Jenks	Waukesha County Parks and Land Use
Jeff Harenda	City of Waukesha WWTP
Jeffrey R. Baylis	
Jim Deuster	
Jim Smith	Applied Technologies, Inc.
Joan Elias	
John Bertelson	
John Gondek	GEI Consultants, Inc.
John Isom	
Joyce Metter	
Judy Horwatich	
Judy Archibald	
Julia Noordyk	University of Wisconsin Sea Grant Institute
Julie Arneth	

Kassie McManus	
Kate Gillogly	UW-Parkside
Kurt Pagel	Door Property Owners
Linda Atkins	Mrs.
Linda Merline	
Linda ZIllmer	Village of Birchwood
Liz Wessel	
Lyman Welch	Alliance for the Great Lakes
Marc Schultz	Waukesha County
Margaret Hoefer	Stafford Rosenbaum (Representing MEG - Wastewater Division)
Margaret Lahti	
Marge	
Marge Palleon	LWVLMR
Maria Lichter	
Mary Dougherty	League of Women Voters- Ashland and Bayfield Counties
Meg McLaughlin	DeForest High School
Meg Turville-Heitz	University of Wisconsin-Madison
Mike Leathen	La Crosse Sailing Club
Mike Sawyer	
Natalie Schneider	City of Brookfield
Nate	
Nicholas Schwartz	NA
Pam Fischer RN	TunaFisch Fantasies: Art From the Heart (owner and practitioner)
Patricia Finder-Stone, RN, MS	LWV/De Pere Bd of Health/CACAOC
Pete Chase	WGNHS
Peter Block	
PETER L. WYATT	
Peter Sigmann	Little Sturgeon Area Prop Owners
Ralph Fischer	
Randy Thater	City of Waukesha
Rep. Brett Hulsey	WI State Assembly
Rick Potter	
Rick Potter	
Rick Stel	Retired
Rick Wenzel	City of Brookfield FRWPCC
Sara Ramaker	
Scott Pitta	
Shahla Werner	Sierra Club--John Muir Chapter
Sister Paula Marie Jarosz, O.P.	Racine Dominican
Steve Beranek	
Sue Lewis	
Thomas Windau	retired
Tom Nowicki	Milwaukee Metropolitan Sewerage District
Victoria L Cerinich	

EMAILS & PHONE CALL

John Coleman, Great Lakes Indian Fish and Wildlife Commission

From: john.coleman
To: Beranek, Ashley E – DNR
Subject: Triennial Review topics
Date: Friday, December 12, 2014 4:03:14 PM
To: Ashley Beranek
Water Quality Bureau/Water Division
Water Evaluation Section & Lakes and Rivers Section
Wisconsin Department of Natural Resources

Ashley,

Thank you for the opportunity to participate in the survey you developed, however after reading over the materials you sent, we decided that filling out the survey would not be very productive because of our lack of background on some of the topics in the survey. I apologize for holding up the survey while we figured this out. We decided instead to identify the items in the "2015 – 2017 Triennial Review Topics for Ranking" spreadsheet that we feel are important to our members based on GLIFWC staff expertise and experience. They are ordered by approximate priority, the highest at the top of the list.

The following comments are submitted by GLIFWC staff with the explicit understanding that each GLIFWC member tribe or any other tribe may choose to submit comments from its own perspective.

Thank you,
john coleman

1 Wild Rice Designated Use Development - Consistently our member tribes have asked that there be better protection of wild rice, wild rice habitat and waters that support wild rice. Development of a wild rice designated use would be a positive step in that direction.

2 Sulfate - Protection of wild rice is a very high priority for our member tribes. Establishment of a water quality sulfate standard that contributes to the protection of wild rice and wild rice habitat is strongly supported. However, sulfate is not the only water quality threat to wild rice, for example, high specific conductance may be detrimental. A sulfate standard should be part of a water quality package that aims to protect wild rice, wild rice habitat and waters supporting wild rice. In addition, within the process of developing a sulfate standard, we encourage consideration of sulfate's role in mercury methylation and subsequent biaccumulation in aquatic food webs.

3 Unregulated pollutants (eg/flammables, endocrine disruptors) - We support the development of water quality standards for unregulated pollutants. Tribal members are disproportionately affected by exposure to environmental contaminants as a result of their increased utilization of natural resources (e.g., subsistence fishing). At this point, their exposure levels are largely unknown due to lack of information about sources and concentrations in water and food sources within Wisconsin. Our member tribes support the development of water quality standards that will help ensure access to safe, high quality, and abundant natural resources.

4 Total Suspended Solids (TSS) - The impacts of TSS on aquatic ecosystems is substantial, yet it is a poorly regulated pollutant. While TSS may not be strictly toxic in the formal sense, it degrades aquatic ecosystems to the extent that they become unsuitable for many forms of life. The development of standards and methods to regulate and reduce the discharge of TSS should be a high priority.

5 Antidegradation Procedures Revision - In the past we have felt that some state processes for antidegradation determination did not fully implement the intent of the CWA and were inconsistent among the states. We welcome revisions that would clarify the procedures, make them more consistent with other states and more effectively prevent or minimize degradation.

6 Water Quality Criteria Frequency and Duration Requirements Development - We support the establishment of frequency and duration criteria for groups of pollutants as a step towards clarification of the sampling needed to demonstrate compliance with water quality standards.

7 Selenium - The new EPA criteria for selenium add significant complexity to setting standards for selenium. While the scientific basis for standards should be rigorous, the methodology for determining those standards should be kept as straight forward as possible. It is not clear to us that the protection provided by the new criteria justifies the added complexity of those criteria. We would support a state effort to provide at least as much protection as the federal criteria yet using a less complex approach.

8 Copper - Use of the Biotic Ligand Model has been considered in Michigan and our member tribes have expressed skepticism of its use for two reasons: First, it further complicates an already complex and difficult to understand process for setting water quality standards; and second, it is unclear that use of the BLM for setting water quality standards would provide greater protection to fish, game, plants and other aquatic organisms. Our review of proposals for its use in the U.P. of Michigan appeared to indicate that in most cases the use of the BLM would weaken standards. Any weakening of state water quality standards would not be supported by our member tribes.

9 Chloride - Chloride is a ubiquitous and persistent pollutant that degrades many of the waterways in the state. We would not support a weakening of the chloride standard and encourage efforts to better regulate chloride discharges due to road salt applications.

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Bruce Markert

From: Bruce Markert
To: Beranek, Ashley E – DNR
Subject: Water Quality Standards
Date: Friday, August 01, 2014 7:38 PM

I would like to see some major work on quantitative benthos work on all of the major rivers in WI with follow-up every 10-15 years.

Out streams are becoming increasinginly degraded and the State needs to develop a grading system based on quant. data.

Based on this data we can start to implement a process to start protecting and improving these streams.

I just don't think that the Triennial standards review is getting the job done.

Bruce Markert
Slinger, WI

Jane Mussey, Crawford Stewardship Project

From: Jane Mussey
To: ashley.beranek@wisconsin.gov
Subject: comments - triennial review
Date: July 30, 2014 10:29:15 AM CDT

HI

Thank you for providing this opportunity to comment on
DNR's surface water standards triennial review.

I am the co-coordinator for Crawford Stewardship Program, a non-profit
organization concerned with water quality in the Driftless area, especially as relates
to nutrient management plans conducted by concentrated animal feeding operations
and overseen by DNR.

We praise the work of DNR personnel "on the ground". As a new member to the group, I am
extremely impressed by the knowledge and responsiveness of DNR staff.

1) We do have general concerns about DNR personnel shortages. It is apparent to us that DNR does
not have adequate personnel to effectively oversee all the NMPs in the state.

2) In our experience, NMPs do not have enough land to spread manure on, especially under variable
weather and soil conditions.

3) We are concerned about the responsiveness to suspected nutrient pollution incidents.
It is our understanding that there will be no regulatory response unless it results in a fish kill.
We hope that the Frequency and Duration topic will help with this issue.

Thank you. Your comments would be appreciated.

--Jane Mussey
Co-coordinator
Crawford Stewardship Project

Phone Call with Chris

Chris wished to remain anonymous. The following is a summary of their comments:

- Fac sand mining concerns:
    - Companies are not releasing information on the types of chemicals used.
    - Chemicals are going into our groundwater and surface waters.
    - There need to be more regulation of these practices.
- High Voltage Transmission Line Tower installation
    - Again, companies are not releasing information on the types of chemicals used.
    - There are concrete bases being put into the ground.
    - Concerned about the pesticides used for plant maintenance around these concrete blocks.
- CAFO operations
    - Concerned about the lack of regulations around the discharges from these operations.
    - This impacts our groundwater and surface waters.

REPRESENTATIVE HULSEY'S LETTER

One letter was received by WDNR about the Triennial Standards Review during the public comment period and it was sent by State Representative Brett Hulsey who also participated in the public survey. The letter begins on the next page.

WISCONSIN LEGISLATURE

P.O. BOX 8952 · MADISON, WI 53708

August 7, 2014

Ashley Beranek
101 S Webster Street
Madison WI 53707-7921

Dear Ms. Beranek,

Thank you for taking the time to solicit input from Wisconsin citizens on how the DNR plan, over the next three years, will be prioritized and implemented. The variety of chemicals that occur naturally and are additionally discovered in higher levels in our lakes, rivers, ponds and streams continues to grow due to more polluters dump these, at times, harmful levels which can be both devastating and costly to clean up.

As former chair of the Dane County Lakes and Watersheds Commission, I understand the importance of this to our economy and our water users, the millions of boaters, anglers, hunters, and campers in Wisconsin. Our 15,000 lakes are a major draw for our $16 billion tourist economy.

As indicated in the survey, my top three priorities are blue-green algae, arsenic, and sulfate pollution. With only three choices from the abundant list of potential hazardous materials to be addressed by the DNR, I do not think this will be adequate enough to insure the people of Wisconsin that their water bodies and potential drinking water will be safe. Blue-green algae is the one thing that can cause acute illness and death. A young man died in my district swimming in a golf course pond. Arsenic levels appear to be a result of coal burning, and sulfate pollution is a major risk from the proposed strip mine in the Penokee Hills.

When the EPA "encourages" the DNR to revise its anti-degradation rules which are basic common sense procedures, I am not surprised that our water quality standards have worsened. These simple steps should already have been implemented and part of a procedural review so the EPA isn't concerned with how the DNR is maintaining the state's rivers, lakes and other bodies of water. If this had been continually performed, some of the other topics listed may not even exist.

The key questions that need to be answered in this review are:

- What is DNR's plan to clean-up Lakes & Rivers already impaired?
- How do you plan to pay for those plans?
- What is in its 2015-2017 ranking plan?

On Arsenic, the DNR does not mention coal-fired power plants as a source for arsenic to enter surface water. It included mining, spills and runoff as manmade processes, but stated arsenic enters through volcanic action and forest fires, but no manmade fire producing industries? Arsenic is one of the most dangerous chemicals in our water. Besides the natural and created occurrences of arsenic, we must also address the coal-fired power plant pollution which is not listed in the DNR description as a potential harm to surface water. This should be added and you should coordinate with the air program to reduce the sources of this pollution as a hazardous air and water pollutant.

WISCONSIN LEGISLATURE

P.O. BOX 8952 · MADISON, WI 53708

Additionally, an overall question is once the plan is chosen and refined, what is the DNR's plan to pay for implementing it? Will it be through additional fees, cuts to programs or parts of its overall budget request, or a request for additional funds? I know Gov. Walker increased the cost of clean water for many local governments.
This is important to define the goals and strategy to improve water quality. But since these are the issues of what exists in our bodies of water, they must be addressed.

Thank you again for doing this and please include answers to these questions in the final document and directly to me.

Sincerely,

Brett Hulsey
State Representative
78th Assembly District
(608) 266-7521
Rep.Hulsey@legis.wisconsin.gov