



**BUREAU OF WATER QUALITY  
WATER EVALUATION SECTION**

*FINAL REPORT*

**2011-2014 TRIENNIAL STANDARDS REVIEW (TSR) PRIORITIES FOR THE  
WATER QUALITY STANDARDS PROGRAM**

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## 2011-2014 TRIENNIAL STANDARDS REVIEW (TSR) PRIORITIES FOR THE WATER QUALITY STANDARDS PROGRAM

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### TSR PROCESS OVERVIEW

Every three years, the Wisconsin Department of Natural Resources (DNR) reviews Wisconsin’s surface water quality standards and selects specific standards or related guidance for development or revision. This comprehensive evaluation, called the Triennial Standards Review, is required by the federal Clean Water Act and is an essential process to keep Wisconsin's waters swimmable, fishable, drinkable and suitable for use by industry, agriculture and the citizens of the state. This review helps focus DNR efforts to integrate the latest science and technology and federal requirements into how the State regulates surface water quality. In addition, this process assists the Department with its workplanning process and with identifying needed actions for moving projects forward. The Triennial Review process is carried out in two phases:

**Phase 1:       Generate a prioritized list of standards for review**

- Compile potential topics <sup>1</sup>
- Internal ranking
- Public ranking
- Finalize prioritized list

**Phase 2:       Revise or develop each selected surface Water Quality Standard or guidance**

- Internal revision or development
- Advisory Committee (if needed)
- Legal and administrative approval
  - ▶ *If rulemaking is not needed, adopt revisions*
  - ▶ *If rulemaking is needed, continue through rulemaking process and complete all applicable Act 21 requirements*
- Submit report to EPA on all revisions during the triennium

### PURPOSE OF REPORT

The purpose of this document is to inform the public of the final list of topics selected for triennial review during the 2011-2014 cycle, describe the general process used to develop this final list, and provide a general rationale for this list.

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<sup>1</sup> In this document, the term “*topic*” refers to potential standards or guidance for review while “*project*” corresponds to standards or guidance selected for revision.

## **2011 TOPIC LIST FOR PRIORITIZATION**

Topics that are eligible for Triennial Standards Review include:

1. Surface Water Quality Standards that need revision or development
2. Guidance that delineates which Water Quality Standards apply in specific cases (e.g., stream classifications)
3. Guidance that provides direction on implementing a surface water quality standard

Internal staff and external partners were solicited for potential topics to be included in the 2011-2014 Triennial Standards Review. These topics were combined with those WDNR has already committed to working on to develop the complete list of topics to prioritize.

### **Topics already prioritized for upcoming triennial cycle (2008 – 2011)**

The Department has identified five Triennial Standards Review topics that will receive automatic high priority for review during the upcoming triennial cycle. These are:

#### **Group A: Standards/guidance with revisions/development currently in process**

1. Antidegradation
2. Chapter NR 217, Wis. Admin. Code, Implementation Guidance
3. Pollutant Trading Guidance Assessment Methodology

#### **Group B: Standards/guidance that WDNR is already committed to addressing in the upcoming cycle**

1. Revisions to ch. NR 106, Wis. Admin. Code, Water Quality Standard Implementation Rule
2. Revisions to Chloride Implementation Guidance

### **Topics to be Ranked**

From the solicitation process, the Department identified another twenty-six potential triennial review topics that need to be ranked and prioritized. Through internal and external ranking these topics were sorted into the following groups, and a final list of topics (Groups A, B, and C) was selected for triennial review during the 2011-2014 cycle. For those that remain in Groups D and E, a brief identification of any follow-up actions needed to move those topics forward in the future is prepared.

#### **Group C: Standards/guidance that are priorities for the upcoming cycle**

#### **Group D: Standards/guidance that should be revised/developed but are not priorities for the upcoming cycle**

#### **Group E: Standards/guidance where barriers to development currently exist**

## **2011 TOPIC LIST FOR PRIORITIZATION (CONT.)**

*Topic descriptions are available in Appendix A.*

### **Topics to be ranked and sorted into groups:**

1. Surface Water Quality Criteria for Frequently Detected Toxic Substances
2. Surface Water Quality Criteria for Infrequently Detected Toxic Substances
3. Chloride Water Quality Criteria
4. Use Designations
5. Wild Rice Designated Use
6. Outstanding & Exceptional Resource Waters – *Process Revision*
7. Outstanding & Exceptional Resource Waters – *Implementation*
8. Blue-Green Algal Toxin Surface Water Quality Criteria
9. Total Suspended Solid Water Quality Standard
10. Dissolved Oxygen Water Quality Criteria
11. Revised BOD Limits Policies to Protect Ambient Dissolved Oxygen Concentrations
12. Pesticide Water Quality Standards
13. Mixing Zones for Bioaccumulative Contaminants
14. General Review of Variances in ch. NR 104, Wis. Admin. Code
15. Implementation of Narrative Standards
16. Application of Standards to Nonpoint Sources and Storm Water
17. Chapter NR 212, Wis. Admin. Code, BOD Wasteload Allocation Updates
18. TMDL Development Guidance and Implementation
19. Phosphorus Index Efficiency
20. Guidance to Derive Site-Specific Criteria for Phosphorus
21. Guidance to Derive Site-Specific Criteria for Toxic Metals, Heat, and Other Substances

### **Group E Topics- Standards/guidance where barriers to development currently exist:**

1. Bacteria Surface Water Quality Standards
2. Algae Standards for Coastal Great Lake Waters
3. Water Quality Standard for Pharmaceutical Byproducts
4. Nitrogen Surface Water Quality Standards
5. Develop Phosphorus Nearshore or Whole Lake Models for Great Lakes

## **FINAL 2011-2014 TSR PRIORITIZATION LIST**

### **Group A: Standards/guidance with revisions/development currently in process**

1. Antidegradation
2. Chapter NR 217, Wis. Admin. Code, Implementation Guidance
3. Pollutant Trading Guidance Assessment Methodology
4. Guidance to Derive Site-Specific Criteria for Phosphorus

### **Group B: Standards/guidance that WDNR is already committed to addressing in the upcoming cycle**

1. Revisions to ch. NR 106, Wis. Admin. Code, Water Quality Standard Implementation Rule
2. Revisions to Chloride Implementation Guidance

### **Group C: Standards/guidance that are priorities for the upcoming cycle**

1. TMDL Development Guidance and Implementation
2. Blue-Green Algal Toxin Surface Water Quality Criteria
3. Use Designations
4. Wild Rice Designated Use
5. General Review of Variances in ch. NR 104, Wis. Admin. Code
6. Nitrogen Surface Water Quality Standards
7. Total Suspended Solid Water Quality Standard
8. Outstanding & Exceptional Resource Waters – *Process Revision*

### **Group D: Standards/guidance that should be revised/developed but are not priorities for the upcoming cycle**

1. Surface Water Quality Criteria for Frequently Detected Toxic Substances
2. Surface Water Quality Criteria for Infrequently Detected Toxic Substances
3. Chloride Water Quality Criteria
4. Outstanding & Exceptional Resource Waters – *Implementation*
5. Dissolved Oxygen Water Quality Criteria
6. Revised BOD Limits Policies to Protect Ambient Dissolved Oxygen Concentrations
7. Pesticide Water Quality Standards
8. Mixing Zones for Bioaccumulative Contaminants
9. Implementation of Narrative Standards
10. Application of Standards to Nonpoint Sources and Storm Water
11. Chapter NR 212, Wis. Admin. Code, BOD Wasteload Allocation Updates
12. Phosphorus Index Efficiency
13. Guidance to Derive Site-Specific Criteria for Toxic Metals, Heat, and Other Substances

### **Group E: Standards/guidance where barriers to development currently exist**

1. Bacteria Surface Water Quality Standards
2. Algae Standards for Coastal Great Lake Waters
3. Water Quality Standard for Pharmaceutical Byproducts
4. Develop Phosphorus Nearshore or Whole Lake Models for Great Lakes

## **RATIONALE FOR PRIORITIZATION LIST (BY TOPIC)**

### **Group A: Standards/guidance with revisions/development currently in process**

1. Antidegradation
  - **Rationale:** Antidegradation was listed as a “Group B” priority during the 2008-2011 TSR cycle. Since other TSR priorities have been completed and Antidegradation continues to be a high priority for key externals including U.S. EPA, antidegradation has been moved to a “Group A” priority for this listing cycle.
2. Chapter NR 217, Wis. Admin. Code, Implementation Guidance
  - **Rationale:** Wisconsin Water Quality Standards for Phosphorus became effective December 1, 2010. Since then, WDNR staff have been working extensively to develop meaningful guidance to help implement these standards. WDNR, as well as externals, continue to consider this topic a top priority, and WDNR will continue to address this issue during the 2011-2014 TSR cycle.
3. Pollutant Trading Guidance Assessment Methodology
  - **Rationale:** WDNR has begun developing guidance to help internal staff and external partners implement a pollutant trading program. WDNR will continue this effort into the 2011-2014 TSR cycle.
4. Guidance to Derive Site-Specific Criteria for Phosphorus
  - **Rationale:** This topic was the fourth highest priority for externals. Internal staff also ranked this issue among the top priorities for the 2011-2014 TSR cycle. Because of the needs for, and time-sensitivity to, this guidance document and ch. NR 217, Wis. Admin. Code, implementation, WDNR has committed to making this topic a “Group A” priority for this cycle. WDNR staff are actively working to address this issue.

### **Group B: Standards/guidance that WDNR is already committed to addressing in the upcoming cycle**

1. Revisions to ch. NR 106, Wis. Admin. Code, Water Quality Standard Implementation Rule
  - **Rationale:** WDNR considered this topic to be a priority once other TSR topics are completed.
2. Revisions to Chloride Implementation Guidance
  - **Rationale:** WDNR considered this topic to be a priority once other TSR topics are completed.

### **Group C: Standards/guidance that are priorities for the upcoming cycle**

1. TMDL Development Guidance and Implementation
  - **Rationale:** WDNR and other externals consider TMDL development and implementation a top priority. In order to develop and implement TMDLs in an efficient and cost-effective manner, additional guidance is needed to help streamline this process. WDNR will work to develop guidance to address this need as resources become available.
2. Blue-Green Algal Toxin Surface Water Quality Criteria
  - **Rationale:** Concerns associated with blue-green algae include discolored water, taste and odor problems, dissolved oxygen depletions, and toxin production which can harm human health, domestic animals, and wildlife. The Department agrees that a comprehensive review of algal toxin toxicity is required to determine if surface water quality criteria should be calculated for the protection of humans and domestic animals. WDNR will work to address this need as resources become available. This issue was the fifth highest priority of externals.
3. Use Designations
  - **Rationale:** Use designations are a fundamental building block of many water programs and are a federal and state law requirement. Wisconsin’s designated use program has not been updated since 1991. WDNR along with key externals identified the need to comprehensively review the designated use program to determine: a) if updates to listed variance waters or the designated use system are needed; and b) how to best address these issues. WDNR will work to address this need as resources become available.
4. Wild Rice Designated Use

- **Rationale:** After reviewing this topic, WDNR believe that a comprehensive review of the overall designated use program would address this need. Please review the Use Designation response for more detail.
5. General Review of Variances in ch. NR 104, Wis. Admin. Code
    - **Rationale:** After reviewing this topic, WDNR believe that a comprehensive review of the overall designated use program would address this need. Please review the Use Designation response for more detail.
  6. Nitrogen Surface Water Quality Standards
    - **Rationale:** Nitrogen continues to be a high priority for many key external groups and U.S. EPA. However, we do not believe sufficient data is present to calculate a scientifically defensible water quality standard for nitrogen. WDNR does not have full scientific understanding needed to develop standards within the upcoming TSR cycle. WDNR will review existing data as well as collect and analyze new data to help improve our scientific understanding of this pollutant in Wisconsin's waters. This need will be addressed as resources become available.
  7. Total Suspended Solid Water Quality Standard
    - **Rationale:** Total Suspended Solids (TSS) are a primary cause of water quality impairments in the state of Wisconsin. However, it is unclear if sufficient data is present to calculate a scientifically defensible water quality standard for TSS. In order to determine the feasibility of a TSS water quality standard in Wisconsin and to improve our scientific understanding of this issue, a review of existing data is required. WDNR will work to address this need as resources become available.
  8. Outstanding & Exceptional Resource Waters – *Process Revision*
    - **Rationale:** Outstanding & Exceptional Resource Waters (OERWs) was listed as a “Group B” priority during the 2008-2011 TSR cycle and continues to be a need within the program. A lack of resources prohibited WDNR from addressing this issue during the previous TSR cycle. WDNR will work to address this need as resources become available.

**Group D: Standards/guidance that should be revised/developed but are not priorities for the upcoming cycle**

1. Surface Water Quality Criteria for Frequently Detected Toxic Substances
  - **Rationale:** This issue was the second highest priority for externals. WDNR also recognizes the need and importance of this issue. Due to vacancies and reduced budgets, WDNR chose to focus on higher priorities for this TSR cycle. If more attention is given to a specific pollutant of concern, WDNR may choose to develop criteria for that specific pollutant. WDNR will continue to monitor this area and respond to issues as they arise. This topic may be a higher priority during the next TSR cycle.
2. Surface Water Quality Criteria for Infrequently Detected Toxic Substances
  - **Rationale:** Because these pollutants of concern are infrequently detected in Wisconsin's waters, it is unclear if these pollutants are having a considerable impact on Wisconsin's waters. Due to vacancies and reduced budgets, WDNR chose to focus on higher priorities for this TSR cycle.
3. Chloride Water Quality Criteria
  - **Rationale:** U.S. EPA has not made a formal determination on Ohio's chloride water quality criteria. If U.S. EPA approves Ohio's chloride criteria, WDNR may choose to revise Wisconsin's chloride criteria to reflect this new toxicological information. This criteria revision would not occur until the 2014-2017 TSR cycle.
4. Outstanding & Exceptional Resource Waters – *Implementation*
  - **Rationale:** WDNR has committed to develop guidance for OERW listing as resources become available during this TSR cycle. See Outstanding & Exceptional Resource Waters – *Process Revision* for details. The “process revision”-phase needs to be completed before the implementation stage can begin.
5. Dissolved Oxygen Water Quality Criteria
  - **Rationale:** This issue was not ranked as a high priority by externals. In order to use WDNR resources most effectively to meet the top needs of the program, WDNR will not focus on this issue on this TSR cycle.
6. Revised BOD Limits Policies to Protect Ambient Dissolved Oxygen Concentrations
  - **Rationale:** This issue was not ranked as a top priority by externals and internal staff. In order to use WDNR resources most effectively to meet the top needs of the program, WDNR will not focus on this issue for this TSR cycle.
7. Pesticide Water Quality Standards
  - **Rationale:** This issue was not ranked as a top priority by internal staff. In order to use WDNR resources most effectively to meet the top needs of the program, WDNR will not focus on this issue for this TSR cycle.

## 8. Mixing Zones for Bioaccumulative Contaminants

- **Rationale:** This issue was not ranked as a top priority by externals and internal staff. In order to use WDNR resources most effectively to meet the top needs of the program, WDNR will not focus on this issue for this TSR cycle.

## 9. Implementation of Narrative Standards

- **Rationale:** This issue was not ranked as a top priority by externals and internal staff. In order to use WDNR resources most effectively to meet the top needs of the program, WDNR will not focus on this issue for this TSR cycle.

## 10. Application of Standards to Nonpoint Sources and Storm Water

- **Rationale:** This issue was the top priority for externals. A fundamental goal of the water division is to achieve water quality criteria in all waters; the Department recognizes the need to address point and nonpoint source pollution to achieve this goal. In reviewing the options, the Department felt that controlling nonpoint source pollution was best achieved through ch. NR 151, Wis. Adm. Code, implementation, adaptive management, pollutant trading, and TMDL development and implementation. Therefore, WDNR will focus on these other projects to help address nonpoint source pollution to waters of the state. See TMDL development guidance and implementation for details.

## 11. Chapter NR 212, Wis. Adm. Code BOD Wasteload Allocation Updates

- **Rationale:** This issue was not ranked as a top priority by externals and internal staff. In order to use WDNR resources most effectively to meet the top needs of the program, WDNR will not focus on this issue for this TSR cycle.

## 12. Phosphorus Index Efficiency

- **Rationale:** This issue is being addressed by other partners including UW-extension, USGS, DATCAP, UW-Madison, and others. In order to use WDNR resources most effectively to meet the top needs of the program, WDNR will not focus on this issue for this TSR cycle.

## 13. Guidance to Derive Site-Specific Criteria for Toxic Metals, Heat, and Other Substances

- **Rationale:** Internal staff and externals identified phosphorus site-specific criteria guidance as a higher priority than site-specific criteria guidance for these other pollutants of concern. Therefore, WDNR will focus on completing the phosphorus guidance document before addressing this need. This topic may be revisited during the next TSR cycle.

### Group E: Standards/guidance where barriers to development currently exist

#### 1. Bacteria Surface Water Quality Standards

- **Rationale:** The pathogen indicator applicable to Wisconsin lakes, rivers, and streams is currently fecal coliform. In 1986, U.S. EPA published revised federal surface water quality criteria for bacteria, adopting an *E. coli* criteria. U.S. EPA is under a federal consent decree to adopt new criteria by October 2012. As soon as the new federal criteria available, Wisconsin will need to pursue revisions to ch. NR 102, Wis. Adm. Code, to update the criteria for surface water pathogen indicators and may possibly need to also revise ch. NR 210, Wis. Adm. Code, as it relates to disinfection of wastewater.

#### 2. Algae Standards for Coastal Great Lake Waters

- **Rationale:** Algal blooms have become an increasing problem along the Great Lakes coastline from an aesthetic and human health standpoint. WDNR currently needs more scientific data to address this issue. WDNR may choose to revisit this issue once additional data become available.

#### 3. Water Quality Standard for Pharmaceutical Byproducts

- **Rationale:** WDNR needs more scientific data to address this issue. WDNR may choose to revisit this issue once additional data and toxicological studies become available.

#### 4. Develop Phosphorus Nearshore or Whole Lake Models for Great Lakes

- **Rationale:** Nearshore or whole lake models have yet to be developed or approved by the Department. However, WDNR is working with external partners including U.S. EPA to identify a model to address this need. Since this issue extends to all Region V and Great Lakes states, U.S. EPA is leading this effort. WDNR will continue to work collaboratively with its partners to address this issue. This issue may receive more attention in Wisconsin depending on the outcome of the project with U.S. EPA.

## APPENDIX A: 2011 TOPIC DESCRIPTIONS

### **Group A: Standards/guidance with revisions/development currently in process**

- 1. Antidegradation:** U.S. EPA has received comments to Wisconsin's antidegradation procedures and has evaluated them for consistency with federal law and guidance. In response, U.S. EPA has encouraged Wisconsin to review and revise its administrative rules and implementation procedures to address seven key areas: 1) public participation; 2) protection of existing uses; 3) definition of increased load; 4) threshold for determining significant lowering of water quality; 5) increased limits due to revised and less stringent water quality criteria; 6) criteria for determining necessary social & economic development; and 7) application of antidegradation to stormwater discharges. The Department has acknowledged that revisions to policies and procedures may be needed. The Department is currently reviewing the antidegradation policies from U.S. EPA and other Region 5 states to determine the extent of the changes needed. Rulemaking would be necessary to formalize any revisions to current policies and procedures..

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin  
Chapter NR 207, Wis. Adm. Code, Water quality antidegradation

- 2. NR 217 Implementation Guidance:** Surface water standards for nutrients are a fairly new concept for Wisconsin and the nation. Nutrient standards are distinctive from water quality standards for toxic substances, and therefore have several novel implementation procedures. Wisconsin's water quality standards for phosphorus took effect on December 1, 2010. However, implementation guidance has not been available to clarify the implementation elements described in ch. NR 217, Wis. Adm. Code. Without sufficient guidance, decision-making ambiguities and inconsistencies will likely occur. The Department should consider developing a comprehensive guidance document to facilitate appropriate implementation of phosphorus standards. This guidance document should address several key specific questions such as: 1) definition of "unidirectional flow:" stratification based on the surface area/max depth equation, and 3) the difference between a reservoir and impounded flowing water based on the 14 day residence time. This guidance document should also address implementation procedures such as adaptive management, the use of the phosphorus index, and phosphorus monitoring requirements.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 217, Wis. Adm. Code, Effluent Standard and Limitations

- 3. Pollutant Trading Guidance:** Pollutant trading is an enticing option for permitted entities to achieve compliance with WPDES permit limits, particularly phosphorus limits, as it allows a discharge to achieve compliance with a limit in the most economically efficient manner possible. The Department has been actively developing guidance to inform staff and external audiences on pollutant trading implementation strategies. The Department should continue to develop and revise pollutant trading guidance as experience is gained in this approach.

Related Rule(s): To be determined

### **Group B: Standards/guidance that WDNR is already committed to addressing in the upcoming cycle**

- 1. Revisions to ch. NR 106, Wis. Adm. Code, Water Quality Standard Implementation Rule:** Concerns have been expressed by U.S. EPA and other groups regarding various aspects of Wisconsin's water quality standard implementation rule described in ch. NR 106, Wis. Adm. Code. Several aspects of ch. NR 106, Wis. Adm. Code, have been identified as potentially needing change to make it consistent with federal regulations including mercury variance procedures, limit calculations for sites with no upstream dilution flow, bioaccumulating substances mixing zone phase-out, and the chlorine residual exemption, among other things. The Department developed a Natural Resource Board pink sheet March 2010 to address these

issues. To date, however, other priorities have prevented the Department from updating ch. NR 106, Wis. Adm. Code.

Related Rule(s): ch. NR 106, Wis. Adm. Code, Procedures for calculating water quality based effluent limitations for toxic and organoleptic substances discharged to surface waters  
Chapter NR 809, Wis. Adm. Code, Safe drinking water  
Chapter NR 140, Wis. Adm. Code, Groundwater quality

- 2. Revisions to Chloride Implementation Guidance:** In 2000, the Department adopted surface water quality standards and implementation rules for chloride in point sources. Since their adoption, these rules have been used in developing limitations and, in some cases, water quality standards variances in permits to achieve progressive reductions in the levels of chlorides discharged to surface waters. The rules intent is to reduce chloride discharges through implementation of source reduction measures, a process that continues to need clarification. To remove ambiguities and improve decision-making consistency, the Department should revise existing guidance to address chloride implementation issues.

Related Rule(s): ch. NR 105, Wis. Adm. Code, Surface water quality criteria for toxic substances and organoleptic substances discharged to surface waters  
Chapter NR 106, Wis. Adm. Code, Procedures for calculating water quality based effluent limitations for toxic and organoleptic substances discharged to surface waters  
Chapter NR 809, Wis. Adm. Code, Safe drinking water  
Chapter NR 140, Wis. Adm. Code, Groundwater quality

### **Topics to be Ranked and Sorted into Groups C and D**

- 1. Surface Water Quality Criteria for Frequently Detected Toxic Substances:** Revisions to Chapter NR 105 are necessary to synchronize Wisconsin's toxic substance criteria with federal criteria promulgated by U.S. EPA. Proposed revisions for three substances— ammonia, cadmium, and selenium— are intended to provide appropriate protection for human health as well as fish and aquatic life for chemical species that are frequently detected in Wisconsin discharge water. U.S. EPA has requested the Department evaluate these criteria to ensure that Wisconsin's water quality criteria are consistent with federal criteria for these frequently detected pollutants.

Related Rule(s): Ch. NR 105, Wis. Adm. Code, Surface water quality criteria for toxic substances

- 2. Surface Water Quality Criteria for Infrequently Detected Toxic Substances:** Revisions to Chapter NR 105 are necessary to synchronize Wisconsin's toxic substance criteria with federal criteria promulgated by U.S. EPA. Proposed revisions for three substances— acrolein, endrin, and phenol— are intended to provide appropriate protection for human health as well as fish and aquatic life for chemical species that are not frequently detected in Wisconsin discharge water. U.S. EPA has requested the Department evaluate these criteria to ensure that Wisconsin's water quality criteria are consistent with federal criteria for these infrequently detected pollutants.

Related Rule(s): Ch. NR 105, Wis. Adm. Code, Surface water quality criteria for toxic substances

- 3. Chloride Water Quality Criteria:** The Ohio Department of Natural Resources has recently proposed revised chloride criteria based on new toxicological data available in 2009. These criteria are related to sulfate and chloride concentrations in waterbodies. Wisconsin's chloride criteria are currently unrelated to these water quality parameters. The Department should review new toxicological data to ensure Wisconsin's chloride criteria are providing the appropriate level of protection for fish and aquatic life species.

Related Rule(s): Ch. NR 105, Wis. Adm. Code, Surface water quality criteria for toxic substances

4. **Use Designations:** Federal law requires states to assign a use designation to surface waters in order to determine the water quality goals for those waterbodies. Wisconsin has assigned uses for: a) General Use, b) Fish & Other Aquatic Life Use; c) Public Health & Welfare Use, d) Recreational Use; and e) Wildlife Use. These designated uses do not take into account recent scientific data as they have been in place since 1976, with the most recent updates in 1991. Based on new scientific data, various waterbodies across the state may have been listed incorrectly, and are therefore not receiving the adequate level of protection. Furthermore, Perspectives on the conditions associated with each of the use designations vary widely between different affected groups, including regulated entities, environmental advocates, and the general public. This has led to significant confusion about Wisconsin's water quality management objectives and has created conflicts in the expectations of the DNR among those many constituents. In response, DNR initiated an effort to re-design its use designations to be ecologically and scientifically defensible, understandable to affected parties, and supported by well designed monitoring initiatives. In order to utilize the re-designed use designations and correct the shortcomings of the current designated use system the Department needs to review and update codified Use Designations.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 104, Wis. Adm. Code, Uses and designated standards and secondary values  
Chapter NR 207, Wis. Adm. Code, Water quality antidegradation

5. **Wild Rice Designated Use:** Wild rice is an important ecological and cultural resource in Wisconsin, particularly in tribal areas. However, the distribution of wild rice has been greatly reduced from its historical range within the Great Lakes region and specifically within Northern Wisconsin and the Menominee Indian Reservation. In order to support the preservation and restoration of wild rice in Wisconsin, the Department should consider developing a wild rice designated use. Using such a designation – in addition to development of appropriate water quality criteria – would ensure that the water quality goals of the waterbody would support and maintain wild rice.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 104, Wis. Adm. Code, Uses and designated standards and secondary values  
Chapter NR 207, Wis. Adm. Code, Water quality antidegradation

6. **Outstanding & Exceptional Resource Waters – Process Revision:** Federal law requires states to identify and protect “High Quality Waters”. In Wisconsin, these waters are referred to as Outstanding or Exceptional Resource Waters (O/ERWs) and are enumerated in ss. NR 102.10 and NR 102.11, Wis. Adm. Code, respectively. Waterbodies that are assigned the special O/ERW designation have additional protections afforded them that are not automatically provided for waterbodies not given these designations. The Department has yet to standardize the O/ERW designation process. Therefore, the method to add or delete waters from the list of O/ERWs is yet unclear to staff and citizens of the state. An effort to update this process should be considered.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 207, Wis. Adm. Code, Water quality antidegradation

7. **Outstanding & Exceptional Resource Waters – Implementation:** Pending the outcome of the process redesign, the Department may initiate a review of previously codified Outstanding and Exceptional Resource Waters (O/ERWs). In addition, the Department may consider additional waters for inclusion in the O/ERW designation.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
NR 207 Water quality antidegradation

- 8. Blue-Green Algal Toxin Surface Water Quality Criteria:** Certain species of blue-green algae (also known as Cyanobacteria) can produce different types of toxins that can be harmful to humans and animals (i.e., fish, dogs, swine, cattle). These toxins are produced naturally during the annual growing season and pose the greatest risk when an algal population reaches “bloom” conditions – often indicated by floating green mats or large scum layers that resemble spilled paint. When these algal cells are swallowed, the toxins may be released into the digestive system and cause life-threatening damage to internal organs and/or the central nervous system. In some cases, simply coming in contact with the cells in the water can cause skin rashes and respiratory problems for hyper-sensitive people. The Department should work with partners to comprehensively review the toxicity of specific algal toxins to determine if surface water quality criteria should be calculated for the protection of humans and domestic animals.

Related Rule(s): ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 105, Wis. Adm. Code, Surface water quality criteria for toxic substances  
Chapter NR 809, Wis. Adm. Code, Safe drinking water  
Chapter NR 140, Wis. Adm. Code, Groundwater quality

- 9. Total Suspended Solid Water Quality Standard:** Excess suspended solids in waterbodies can be caused by a number of factors including excess soil erosion, wastewater discharge, snowmelt, and stormwater runoff. In the water column, suspended particles scatter and absorb light rays instead of transmitting them, thus decreasing light penetration. Less light penetration may adversely affect aquatic ecosystems by reducing the number of rooted plants which yields less protective in-water habitat for fish and other aquatic life. The Department should review the impacts of TSS on waterbodies to determine if surface water quality criteria should be calculated for the protection of fish and aquatic life. These criteria may also be beneficial for streamlining TMDL development and impaired waters listing.

Related Rule(s): ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 106, Wis. Adm. Code, Procedures for calculating water quality based effluent limitations for toxic and organoleptic substances discharged to surface waters  
Chapter NR 151, Wis. Adm. Code, Runoff Management  
Chapter NR 809, Wis. Adm. Code, Safe drinking water  
Chapter NR 140, Wis. Adm. Code, Groundwater quality

- 10. Dissolved Oxygen Water Quality Criteria:** Wisconsin’s minimum water quality criteria for dissolved oxygen (DO) were developed in the early 1970’s and have not been updated. Since that time, several challenges to the appropriateness of the DO criteria have been made in formal and informal reviews of WPDES permits for wastewater treatment facilities. Most often the challenges surround the question of whether or not the DO criteria are adequately protective of threatened and endangered fish and other aquatic life species. Maintaining adequate concentrations of DO is vitally important for supporting fish, invertebrates and other aquatic life. Any effort to review the applicability of DO criteria would need to consider the multiple use designations currently a part of ch. NR 102, Wis. Adm. Code.

Related Rule(s): ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 104, Wis. Adm. Code, Uses and designated standards and secondary values  
Chapter NR 212, Wis. Adm. Code, Waste load allocated water quality related effluent limitations  
Chapter NR 151, Wis. Adm. Code, Runoff Management

- 11. Revised BOD Limits Policies to Protect Ambient Dissolved Oxygen Concentrations:** In order to prevent dissolved oxygen from dropping below the applicable criteria, the Department has required some WPDES permit holders to achieve biochemical oxygen demand (BOD) effluent limitations of 5 mg/L and 10 mg/L for summer and winter, respectively. Though current regulations sometimes require levels below 10 mg/L in the summer, water quality biologists have questioned whether these low levels are necessary in all cases for protection to fish and other aquatic life species. In addition, the methodology for calculating

BOD limits is based on small stream models that were prepared for Wisconsin streams in the 1980s. The methodology – referred to as the “26-lb. Method” is guidance available to staff who calculate effluent limitations. This guidance needs to be evaluated to determine if there are alternatives that should be considered on a case-by-case basis and whether or not the 26-lb. method should be codified.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 210, Wis. Adm. Code, Sewage treatment works  
Chapter NR 212, Wis. Adm. Code, Waste load allocated water quality related effluent limitations  
Chapter NR 809, Wis. Adm. Code, Safe drinking water  
Chapter NR 140, Wis. Adm. Code, Groundwater quality

- 12. Pesticide Water Quality Standards:** New data on the toxicity of pesticides and pesticide metabolites (i.e., breakdown products) to humans, fish, and other aquatic-dependent life is being generated continuously. In addition, new pesticides are being brought to market regularly, many which have no published state or federal water quality criteria. In conjunction with the Department of Health Services and the Department of Agriculture, Trade and Consumer Protection, the Department should review its current criteria for pesticides to determine which, if any, need to be updated. A comprehensive review should also be initiated to identify which pesticides and metabolites need to be evaluated in surface waters and which should have water quality criteria developed to ensure adequate protection of humans, fish, and other aquatic life.

Related Rule(s): Ch. NR 105, Wis. Adm. Code, Surface water quality criteria for toxic substances  
Chapter NR 151, Wis. Adm. Code, Runoff Management  
Chapter NR 809, Wis. Adm. Code, Safe drinking water  
Chapter NR 140, Wis. Adm. Code, Groundwater quality

- 13. Mixing Zones for Bioaccumulative Pollutants:** Mixing zones are limited areas associated with point source discharges in which water quality standards may be exceeded. The area associated with these zones varies according to the types of pollutants and the type of protection warranted (i.e., acute, chronic, etc.). As a part of the federal Great Lakes Water Quality Initiative of 1995, EPA required states to eliminate mixing zones altogether for certain bioaccumulative pollutants. To be consistent with federal law, Wisconsin must revise its mixing zone provisions to eliminate such mixing zones.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 106, Wis. Adm. Code, Procedures for calculating water quality based effluent limitations for toxic and organoleptic substances discharged to surface waters  
Chapter NR 212, Wis. Adm. Code, Waste load allocated surface water quality related effluent limitations

- 14. General Review of Variances in NR 104:** Federal law allows variances to surface water quality standards under certain conditions. State law also allows variances to standards as they pertain to the imposition of effluent limitations in a WPDES permit (See s. 283.15(5)(b), Wis. Stats.). In either case, all surface water quality standards and associated variances to those standards are to be reviewed each permit term to determine if the conditions for granting the variance continue to be applicable. The variances that have been approved in ch. NR 104, Wis. Adm. Code, should be reviewed on a case-by-case basis to determine whether or not they should remain in effect. Examples of the type of variance that needs to be reviewed include:
- Fecal coliform thresholds of 1,000 cfu/mL for several water bodies in Southeastern Wisconsin as compared to the statewide standard of 400 cfu/mL;
  - Water body specific standards that apply to a physical feature like a dam that no longer exists such as the variance(s) for the Milwaukee River to the North Avenue Dam;
  - Less stringent criteria for dissolved oxygen for the portion of the Flambeau River near Park Falls and a portion of the Wisconsin River near Rhinelander; and
  - A segment-specific non-continuous hydrologic classification for Newton Creek near Superior.

Related Rule(s): Ch. NR 104, Wis. Adm. Code, Uses and designated standards and secondary values

- 15. Implementation of Narrative Standards:** S. NR 102.04(1), Wis. Adm. Code, contains provisions for surface water quality standards commonly referred to as “narrative standards.” These standards are intended to address water quality problems that are objectionable to the human senses such as odor, unsightliness, taste, etc. and that generally interfere with aquatic life in surface water. Although implementation of these standards through WPDES permits and conditions is possible, sustainable permit conditions must be supported by reasonable scientific evidence. The Department should consider creating criteria that more carefully define the basis for permit decisions based on narrative standards to remove ambiguities or varying interpretations of whether a discharge needs to be regulated to attain these standards.

Related Rule(s): ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 106, Wis. Adm. Code, Procedures for calculating water quality based effluent limitations for toxic and organoleptic substances discharged to surface waters

- 16. Application of Standards to Nonpoint Sources and Storm Water:** Current rules do not provide specific mechanisms to determine how nonpoint sources and storm water must be controlled to maintain surface water quality. In some instances, point sources are required to meet permit effluent limitations, while nonpoint and storm water sources are not being regulated to the same degree even though these sources have a greater effect on water quality. Revisions to administrative rules are needed to effectively obligate pollutant reductions from nonpoint sources when it is probable that imposition of point source controls alone will not positively affect receiving water quality. Standardized obligations from nonpoint and storm water sources in these instances will also improve the effectiveness of TMDL development and implementation.

Related Rule(s): ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 106, Wis. Adm. Code, Procedures for calculating water quality based effluent limitations for toxic and organoleptic substances discharged to surface waters  
Chapter NR 212, Wis. Adm. Code, Waste load allocated water quality related effluent limitations  
Chapter NR 809, Wis. Adm. Code, Safe drinking water  
Chapter NR 140, Wis. Adm. Code, Groundwater quality

- 17. NR 212 BOD Wasteload Allocation Updates:** Chapter NR 212, Wis. Adm. Code, contains BOD wasteload allocations for the Fox and Wisconsin Rivers. These allocations were based on industrial and municipal wastewater treatment plant loadings using production and design data from the early 1980s. Since that rule was adopted, several of the pulp and paper mills have closed, changed ownership, changed production processes or otherwise modified their operations such that the basis for the allocations may no longer be fair and equitable. Additionally, municipal wastewater loadings have increased due to population increases. A review of the allocation formulae should be undertaken to determine whether changes to the allocations of BOD for these rivers (or segments thereof) is appropriate or needed. Other changes in the rule relating to transfers of allocation or allocations of reserve capacity also are in need of evaluation.

Related Rule(s): Ch. NR 212, Wis. Adm. Code, Waste load allocated surface water quality related effluent limitations

- 18. TMDL Development Guidance and Implementation:** The Department has been actively developing TMDLs for waterbodies including, but not limited to the Fox River, Rock River, and the Wisconsin River. The Department should complete these TMDLs in a timely manner and implement the approved wasteload and load allocations to control point and nonpoint sources and improve the water quality of these waterbodies. These experiences should be used to generate a comprehensive TMDL program guidance document to improve Department efficiency at developing and implementing TMDLs.

Related Rule(s): To be determined

- 19. Phosphorus Index Efficiency:** In January 2011 ch. NR 151, Wis. Adm. Code, was updated to require croplands, pastures, and winter grazing areas to average a phosphorus index (P-index) of 6 or less over the accounting period in order to control nonpoint sources of phosphorus to waterbodies. During implementation of these requirements, the Department should be proactive in collecting data to determine if these P-index values are sufficient to achieve the surface water quality goals of the waterbody. Based on the results, the Department should determine if code modifications are required to ensure that nonpoint sources are being sufficiently protective of surface water quality with respect to phosphorus enrichment.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 151, Wis. Adm. Code, Runoff Management  
Chapter NR 217, Wis. Adm. Code, Effluent Standard and Limitations

- 20. Guidance to Derive Site-Specific Criteria for Phosphorus:** Wisconsin has developed numeric water quality criteria to protect fish and aquatic life from the effects of excess phosphorus. Some waterbodies, however, may have unique physical and/or biological characteristics that render the statewide criteria for phosphorus ineffective or inappropriate. Site-specific conditions may cause statewide criteria to be over or under-protective than necessary to maintain a balanced indigenous biological community. The Department has not specified procedures for deriving site-specific criteria for nutrients including phosphorus pursuant to s. NR 102.06(7), Wis. Adm. Code. The Department should develop guidance to inform staff and external audiences about standard procedures that can be used to develop site-specific criteria for nutrients. Site-specific criteria will likely receive continued interest in the future, particularly during implementation of nutrient criteria.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 217, Wis. Adm. Code, Effluent Standard and Limitations

- 21. Guidance to Derive Site-Specific Criteria for Toxics, Heat, and Other Substances:** Wisconsin has developed numeric water quality criteria to protect human health, aquatic life, and wildlife from the effects of both toxic and conventional pollutants. Some waterbodies may have unique physical and/or biological characteristics that render the statewide criteria ineffective or inappropriate.. Site-specific conditions may cause statewide criteria to be over or under-protective than necessary to maintain a balanced indigenous biological community. The Department has not specified procedures for deriving site-specific criteria for heat, toxics, or other substances pursuant to ss. NR 102.27(2) and NR 105.02(1), Wis. Adm. Code. The Department should develop guidance to inform staff and external audiences about standard procedures that can be used to develop site-specific criteria.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 105, Wis. Adm. Code, Surface water quality criteria for toxic substances  
Chapter NR 106, Wis. Adm. Code, Procedures for calculating water quality based effluent limitations for toxic and organoleptic substances discharged to surface waters

### **Group E: Standards/guidance where barriers to development currently exist**

*Note: Group E topics are not included in the public participation survey.*

- 1. Bacteria Surface Water Quality Standards:** The pathogen indicator applicable to Wisconsin lakes, rivers, and streams is currently fecal coliform\*. In 1986, U.S. EPA published revised federal surface water quality criteria for bacteria, adopting an *E. coli* criteria. U.S. EPA is under a federal consent decree to adopt new criteria by October 2012. As soon as the new federal criteria available, Wisconsin will need to pursue revisions to ch. NR 102, Wis. Adm. Code, to update the criteria for surface water pathogen indicators and may possibly need to also revise ch. NR 210, Wis. Adm. Code, as it relates to disinfection of wastewater.

\*In the open waters of the Great Lakes, Wisconsin's standards and the applicable criteria is *E. coli*.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
NR 210 Sewage treatment works

- 2. Algae Standards for Coastal Great Lake Waters:** Algal blooms have become an increasing problem along the Great Lakes coastline from an aesthetic and human health standpoint. These blooms can interfere with recreational activities on coastal waters, beaches and shorelines. Algae can also harbor bacteria causing human illness that can lead to beach closures or warnings. These harmful effects can significantly decrease the economic value of these resources. To respond to this issue, the WDNR's Office of Great Lakes developed a qualitative scale 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 algae impairment. Therefore, Wisconsin should develop clear water quality standards for algae in coastal waters.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 106, Wis. Adm. Code, Procedures for calculating water quality based effluent limitations for toxic and organoleptic substances discharged to surface waters  
Chapter NR 809, Wis. Adm. Code, Safe drinking water  
Chapter NR 140, Wis. Adm. Code, Groundwater quality

- 3. Water Quality Standard for Pharmaceutical Byproducts:** Pharmaceutical byproducts and personal care products (PCPPs) have been found in low but surprising quantities throughout the Great Lakes. Existing research illustrates that these products are a cause for concern as they have been linked to several problems such as intersex fish. In an effort to be proactive and protective of humans and wildlife, Wisconsin should consider developing water quality standards for these pharmaceutical byproducts. An additional element of this issue is for Wisconsin to consider how to include PCPPs in its surface water monitoring program to determine the scale of this potential problem in the state.

Related Rule(s): Ch. NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 106, Wis. Adm. Code, Procedures for calculating water quality based effluent limitations for toxic and organoleptic substances discharged to surface waters  
Chapter NR 809, Wis. Adm. Code, Safe drinking water  
Chapter NR 140, Wis. Adm. Code, Groundwater quality

- 4. Nitrogen Surface Water Quality Standards:** U.S. EPA water quality criteria guidance requires all states to develop nitrogen criteria as well as phosphorus criteria. Currently, DNR regulates nitrogen only as a toxic substance through implementation of surface water quality standards for ammonia. However, nitrogen also acts as a *nutrient* for many plant species and can contribute to nuisance plant and algal growth in surface waters. The result of these nuisance conditions may be depletions of dissolved oxygen or very extreme pH conditions – neither which support a balanced fish and aquatic life community. A review of nitrogen as a nutrient may result in additional surface water quality criteria to complement numeric criteria for phosphorus – the other nutrient associated with nuisance conditions in lakes, rivers, and streams.

Related Rule(s): Chapter NR 102, Wis. Adm. Code, Water quality standards for Wisconsin surface waters  
Chapter NR 210, Wis. Adm. Code, Sewage treatment works  
Chapter NR 809, Wis. Adm. Code, Safe drinking water  
Chapter NR 140, Wis. Adm. Code, Groundwater quality

- 5. Develop Phosphorus Nearshore or Whole Lake Models:** Pursuant to s. NR 217.13(4), Wis. Adm. Code, the Department shall set phosphorus effluent limits for discharges to the Great Lakes consistent with nearshore or whole lake model results approved by the Department. Nearshore or whole lake models have

yet to be developed or approved by the Department. The Department should develop these models in order to implement the phosphorus water quality criteria in the Great Lakes.

Related Rule(s): Ch. NR 217, Wis. Adm. Code, Effluent Standard and Limitations

**APPENDIX B: EXTERNAL COMMENTS RECEIVED BY WDNR**

Appendix B provides a summary of external comments received during the public comment period. The online survey tool “Survey Monkey” was the primary method used to receive external rankings and feedback. This survey was open for 45 days and closed on August 25, 2011.

<b>Question 1: Please rank your top three priorities for the 2011-2014 TSR cycle.</b>					
<b>Answer Options</b>	<b>Individual Responses Received</b>				
	<b>Highest Priority</b>	<b>Second Highest Priority</b>	<b>Third Highest Priority</b>	<b>Rating Average</b>	<b>Total Response Count</b>
Surface Water Quality Criteria for Frequently Detected Toxic Substances	13	3	7	1.74	23
Surface Water Quality Criteria for Infrequently Detected Toxic Substances	0	5	2	2.29	7
Chloride Water Quality Criteria	4	2	1	1.57	7
Use Designations	5	4	2	1.73	11
Wild Rice Designated Uses	1	0	1	2.00	2
Outstanding & Exceptional Resource Waters - Process Revision	1	3	0	1.75	4
Outstanding & Exceptional Resource Waters - Implementation	2	1	2	2.00	5
Blue-Green Algal Toxin Surface Water Quality Criteria	7	6	5	1.89	18
Total Suspended Solid Water Quality Standard	3	4	5	2.17	12
Dissolved Oxygen Water Quality Criteria	0	1	1	2.50	2
Revised BOD Limits Policies to Protect Ambient Dissolved Oxygen Concentrations	0	3	1	2.25	4
Pesticide Water Quality Standards	3	7	5	2.13	15
Mixing Zones for Bioaccumulative Contaminants	0	1	2	2.67	3
General Review of Variances in NR 104	0	0	2	3.00	2
Implementation of Narrative Standards	0	0	1	3.00	1
Application of Standards to Nonpoint Sources and Storm Water	13	9	8	1.83	30
NR 212 BOD Wasteload Allocation Updates	1	0	2	2.33	3
TMDL Development Guidance and Implementation	7	8	1	1.63	16
Phosphorus Index Efficiency	7	6	9	2.09	22
Guidance to Derive Site-Specific Criteria for Phosphorus	5	4	11	2.30	20
Guidance to Derive Site-Specific Criteria for Toxic Metals, Heat, and Other Substances	0	3	0	2.00	3
<b><i>Number of externals who answered question</i></b>					<b>72</b>

**Question 2: Other priority topic(s) to consider. Please specify.**

1. Develop an aggregate measure(pesticide, blue green algee, toxins) of water quality, providing public with recommendations for swimming, boating, water skiing etc.
2. Establishment of biocriteria for FAL and Recreational Use protection.
3. INVASIVE JAPANESE/MYSTERY SNAIL AND RELATED PARASITIC INFECTION (SWIMMERS ITCH
4. measurement of contaminates in public waters from fireworks
5. Pharmaceuticals
6. Phosphorus Index Efficiency, Pesticide Water Quality Standards and Use Designations
7. Quantify Groundwater Amounts available in Wisconsin Aquifers
8. Revise dam removal standards to provide remediation,restoration before removal of dams.
9. The explosive and dangerous growth of CAFO's. This is no longer a debatable subject..they are morally and ethically and environmentally a looming disaster..

***NOTE:** Because these topics were not submitted during the topic solicitation phase of the Triennial Standard Review process, they were not able to be ranked during the 2011-2014 Cycle. These topics will be included as potential topics for the next TSR Cycle (2014-2017).*

**EXTERNAL SATISFACTION WITH 2011-2014 TSR EXTERNAL COMMENT PROCESS**

Question 1: Please indicate your satisfaction with the TSR ranking process from the following statements.								
Answer Options	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	No opinion	Rating Average	Response Count
I understood the TSR topics and felt comfortable providing feedback	7	20	2	0	0	0	1.83	29
The Department website was useful and easy to understand	5	18	6	0	0	0	2.03	29
The survey was easy to use	15	13	1	0	0	0	1.52	29
The survey captures my opinions well	5	17	6	1	0	0	2.10	29
I was satisfied with my opportunity to participate in the TSR ranking	7	19	3	0	0	0	1.86	29
<i>Number of externals who answered question</i>								<b>29</b>

