

Planning Water Quality Work for the Next 3 Years: DNR's Triennial Standards Review

Kristi Minahan & Meghan Williams

Government Affairs Seminar

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What is the Triennial Standards Review?

Every three years, WDNR reviews Wisconsin's water quality standards and related guidance as required by the Clean Water Act

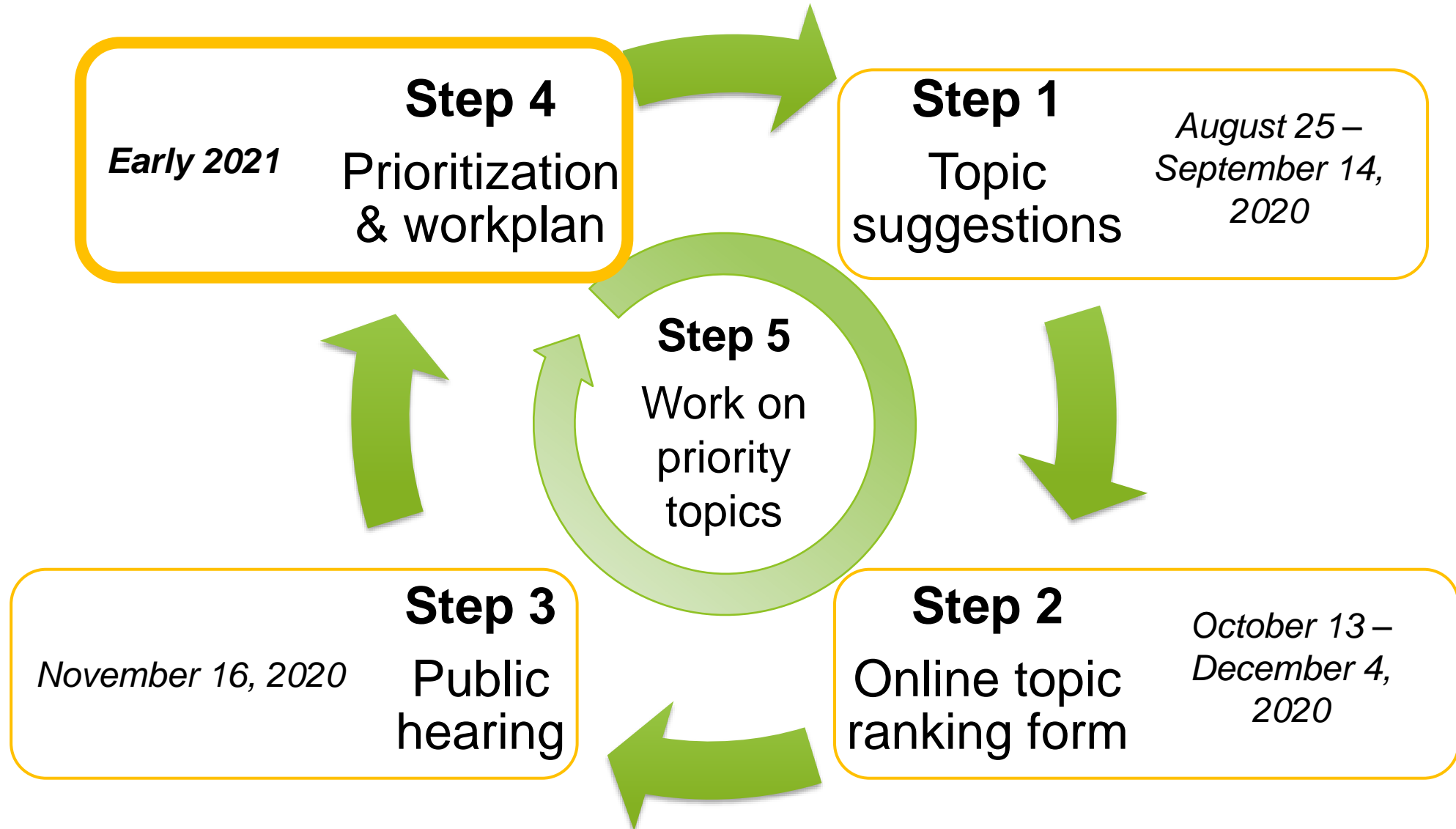
Goals: Evaluate whether to revise current or develop new water quality standards, variances or guidance

Purpose:

1. Protect WI waters
2. Gain valuable input from stakeholders
3. Work-plan for projects
4. Meet federal requirements set by CWA

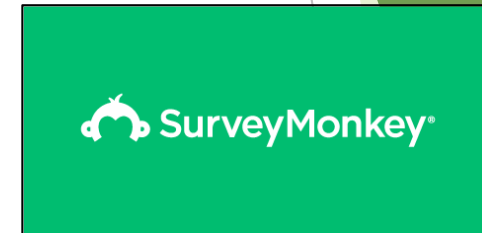


The Triennial Review Process



Online Ranking Form

- ▶ Presented 14 topics, asked for top 5 the DNR should focus on in the next 3 years
 - ▶ Open October 13 – December 4, 2020
 - ▶ Anyone interested could rank topics and provide comments
- ▶ Combine input from public and partners with staff technical knowledge to determine what is feasible
- ▶ Categorize topics



Topic Categorization

Category A: Work is currently in progress

Category B: Priorities for upcoming cycle

Category C: Should be addressed but are not priorities for upcoming cycle

Category D: Barriers to work currently exist

Topic	Rank
Nitrogen Criteria Development	1
PFAS Compounds (other than PFOS and PFOA) Criteria Development	2
Neonicotinoid Insecticides Criteria Development	3
Aquatic Life Criteria Revision/Development	4
Outstanding/Exceptional Resource Waters Process Revision	5
Total Suspended Solids Criteria Development	5
Wild Rice Designated Use Development	7
Pharmaceuticals Criteria Development	8
Sulfate Criteria Development	9
Chlorantraniliprole Criteria Development	10
Bifenthrin Criteria Development	11
Ammonia Criteria Revision	12
Aluminum Criteria Development	13
Copper Criteria Revision	14

Ranking Results

117 responses

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Nitrogen Criteria Development	1
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Copper Criteria Revision	14

Ranking Results

Category B:
Priorities for
upcoming cycle*

*Proposed priorities,
not yet finalized

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Neonicotinoid Insecticides Criteria Development	3
Aquatic Life Criteria Revision/Development	4
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Aluminum Criteria Development	13
Copper Criteria Revision	14

Ranking Results

Category C:
Should be addressed but are not priorities for upcoming cycle

Nitrogen Criteria Development (Lakes)

- ▶ DNR currently only regulates nitrogen in surface water through ammonia criteria
- ▶ Nitrogen and nitrate can contribute to nuisance plant growth and harmful algal blooms
- ▶ Draft nutrient criteria models released by EPA in 2020
 - ▶ DNR plans to investigate if EPA tools are appropriate for WI waters

PFAS Compounds Criteria Development

- ▶ DNR is currently developing human health surface water quality criteria for PFOS & PFOA
- ▶ DHS released a list of recommended groundwater standards for 13 additional PFAS in 2020
 - ▶ Indicates that reliable toxicity data exists for these compounds
- ▶ DNR plans to review available bioaccumulation data to determine if it is feasible to calculate surface water criteria

Neonicotinoids Criteria Development

- ▶ Use of neonicotinoids as insecticides on agricultural crops is linked to global reductions in pollinators
 - ▶ Thought to be similarly toxic to aquatic invertebrates
- ▶ Neonicotinoids are used extensively in WI
 - ▶ Increasingly detected in groundwater and surface water, particularly in Central Sands region
- ▶ EPA has recently revised benchmarks for aquatic invertebrates for three common neonicotinoids
 - ▶ DNR plans to review EPA data to determine if criteria calculation is feasible



Aquatic Life Criteria Development/Revision

- ▶ DNR could revise existing criteria for substances for which EPA has new data or methods
 - ▶ Examples: ammonia, cadmium, copper, selenium
- ▶ DNR could develop new criteria for substances for which EPA has developed criteria, but there is currently no Wisconsin criteria
 - ▶ Examples: acrolein, aluminum, carbaryl, diazinon, nonylphenol, tributyltin

ORW/ERW Process Revision

- ▶ DNR's existing guidance on classifying waters as Outstanding or Exceptional Resource Waters is outdated, not standardized
- ▶ Classification methods could be updated so that the process is clear and based on current scientific understanding
- ▶ DNR was not able to begin this process during previous cycles due to workload and other priorities



Total Suspended Solids Criteria Development

- ▶ TSS is a common pollutant that blocks light and negatively affects plant growth, fish feeding behavior, and habitat
 - ▶ Several TMDLs include TSS but WI does not have statewide criteria
- ▶ Numeric water quality criteria for TSS would provide clear targets for assessing waterbodies
- ▶ DNR may investigate large river TSS thresholds before exploring development of statewide criteria

Next Steps

- ▶ Finalize workplan internally (Feb 2021)
- ▶ Submit to EPA (Feb-March 2021)
- ▶ Share with public and partners (March 2021)
- ▶ Begin work on priority topics as resources allow

Thanks for listening

- ▶ Kristi Minahan, Water Quality Standards Specialist
Kristi.Minahan@Wisconsin.gov

- ▶ Meghan Williams, Environmental Toxicologist
MeghanC3.Williams@Wisconsin.gov