

WQS Past

Revisions to the WQS rule are published in Missouri's CSR in April 2018

2018

2019

2020

2021

2022

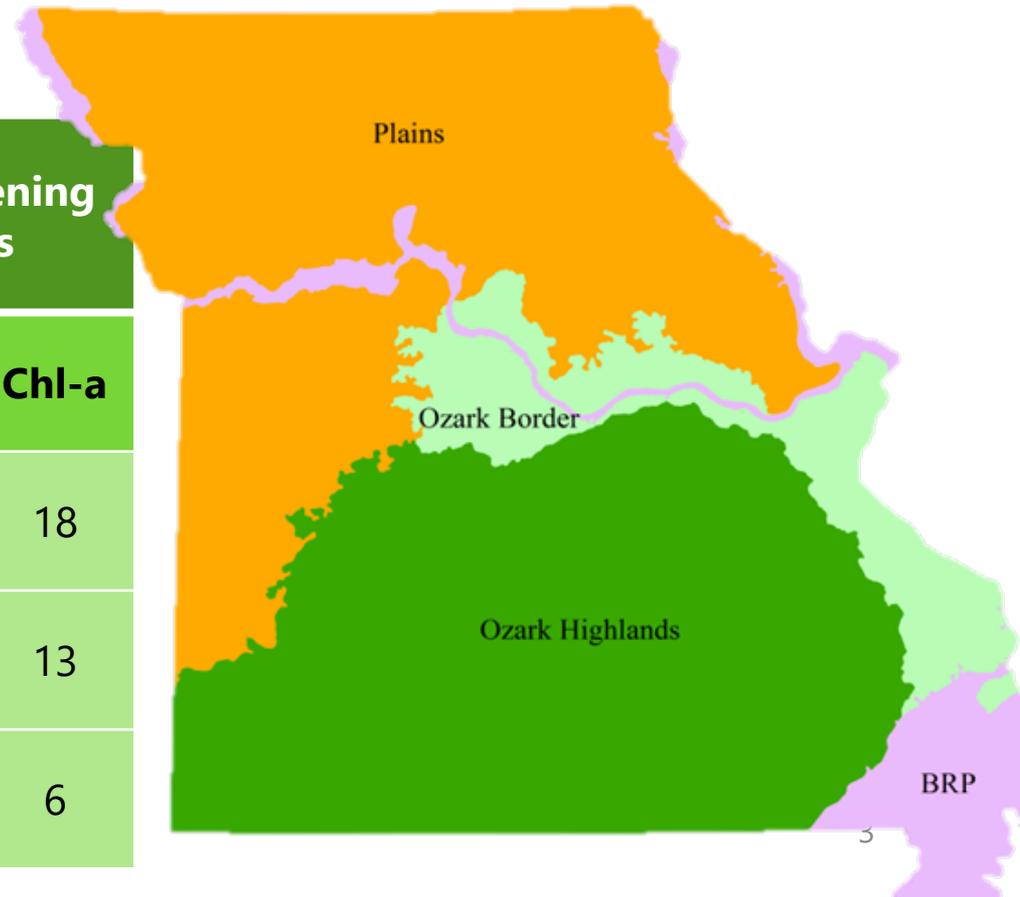
2018 WQS Approval (1 of 3)

December 14, 2018

1 Item: Numeric Nutrient Criteria for Lakes

Lake Ecoregion Values ($\mu\text{g/L}$)

Lake Ecoregion	Chl-a Response Impairment Thresholds	Nutrient Screening Thresholds		
		TP	TN	Chl-a
Plains	30	49	843	18
Ozark Border	22	40	733	13
Ozark Highlands	15	16	401	6



Nutrient Criteria Lawsuit

- Missouri Coalition for the Environment sued EPA on December 3, 2019 for their approval of Missouri's numeric nutrient criteria for lakes.
- The Department has filed a motion to intervene.
- We are proceeding with implementation of the criteria as planned prior to the lawsuit.



2018 WQS Approval (2 of 3)

July 30, 2019

- Mixing Zones and ZIDs
- Water Hardness
- General Criteria Revisions
- Chronic Cadmium Criteria
- MUDD Update
- Antidegradation Implementation Procedure
- Losing Stream Reference and Table J
- Modify Site-Specific Criteria Table



2018 WQS Approval (3 of 3)

December 26, 2019

- MDV Framework
- Waters of the State Definition
- Section 304(a) Water Quality Criteria

304(a) AQL Criteria

- Arsenic
- Chromium VI
- Mercury
- Methylmercury
- Nickel
- Polychlorinated Biphenyls (PCBs)
- Tributyltin (TBT)
- Alkalinity
- Chlorine, Total Residual
- Cyanide
- DDT
- Acrolein
- Aldrin
- Endosulfan
- Carbaryl
- Chlordane
- Chlorpyrifos
- Diazinon
- Dieldrin
- Endrin
- Lindane
- Heptachlor
- Heptachlor Epoxide
- Parathion
- Toxaphene
- Nonylphenol
- Phenol
- Pentachlorophenol

Multiple Discharger Variance

<https://dnr.mo.gov/env/wpp/wqstandards/multi-discharger-water-quality-standards-variances.htm>

Next Steps:

- Identify Candidates
- Finalize Resources
- Train Staff

Multi-Discharger Water Quality Standards Variances

The Multiple Discharger Variance (MDV) is a variance from the total ammonia nitrogen water quality standard. It allows multiple communities to be covered under one variance. In a permit incorporating the MDV, typical ammonia effluent limits that are based on the water quality standard would be replaced with the highest attainable conditions of the current treatment facility during the term of the variance. This provides communities with the time and flexibility to make water quality improvements in a cost-effective manner.

The **Multiple Discharger Variance Framework: Total Ammonia Nitrogen CWC-MDV-1-17**  has been incorporated into Missouri's Water Quality Standards at **10 CSR 20-7.031(12)** . It was approved by EPA on Dec. 26, 2019 making the 20-year term of the MDV from Dec. 26, 2019 through Dec. 25, 2039.

MDV Resources

- MDV Fact Sheet (*coming soon*)
- MDV Application Form (*coming soon*)
- Alternatives Analysis Fact Sheet with Template (*coming soon*)
- **WESI: Uses and Variances – Evaluating Substantial and Widespread Economic and Social Impacts** 
- **Missouri Department of Conservation Natural Heritage Review**
- Missouri Department of Conservation National Heritage Review Fact Sheet with Letter Template (*coming soon*)
- Engineering Field Evaluation Form (*coming soon*)
- Pollution Minimization Program Fact Sheet (*coming soon*)
- Pollution Minimization Program Annual Report Form (*coming soon*)

2018 WQS

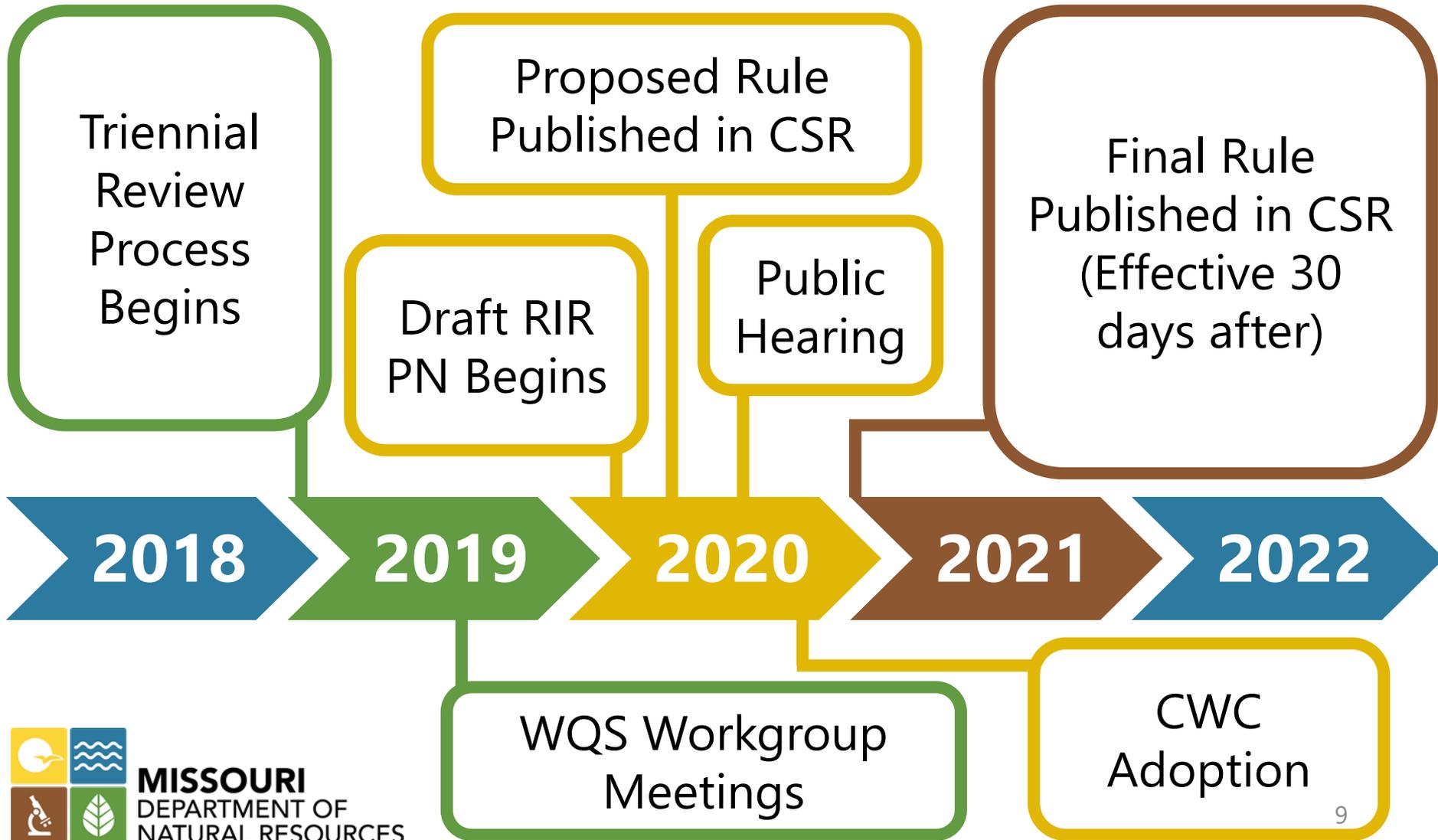
Still waiting...

- WQS Variance – Kirksville
- pH (4-day average)
- Errors:
 - ❖ 2,4-dichlorophenol
 - ❖ Hexachlorocyclopentadiene
 - ❖ Table I truncated

We are actively working with EPA on the remaining items.

Errors will be corrected in the current rulemaking.

WQS Present



WQS Present - Scope

- Aluminum
- Cadmium (acute)
- Chloride plus sulfate
- DWS and IND use review
- MUDD WBID revision by watershed
- Variances – Joplin, Salem, Bolivar
- Site-specific DO criteria (Blue Springs)
- Losing stream language moved to 7.015
- MDV Framework revisions
- Update MUDD with UAA and presumed use review results
- Rule text and table corrections

WQS Future

WQS Project
Prioritization and
Planning

Work on prioritized
WQS Projects Begins

Next Triennial Review
Process Begins

2018

2019

2020

2021

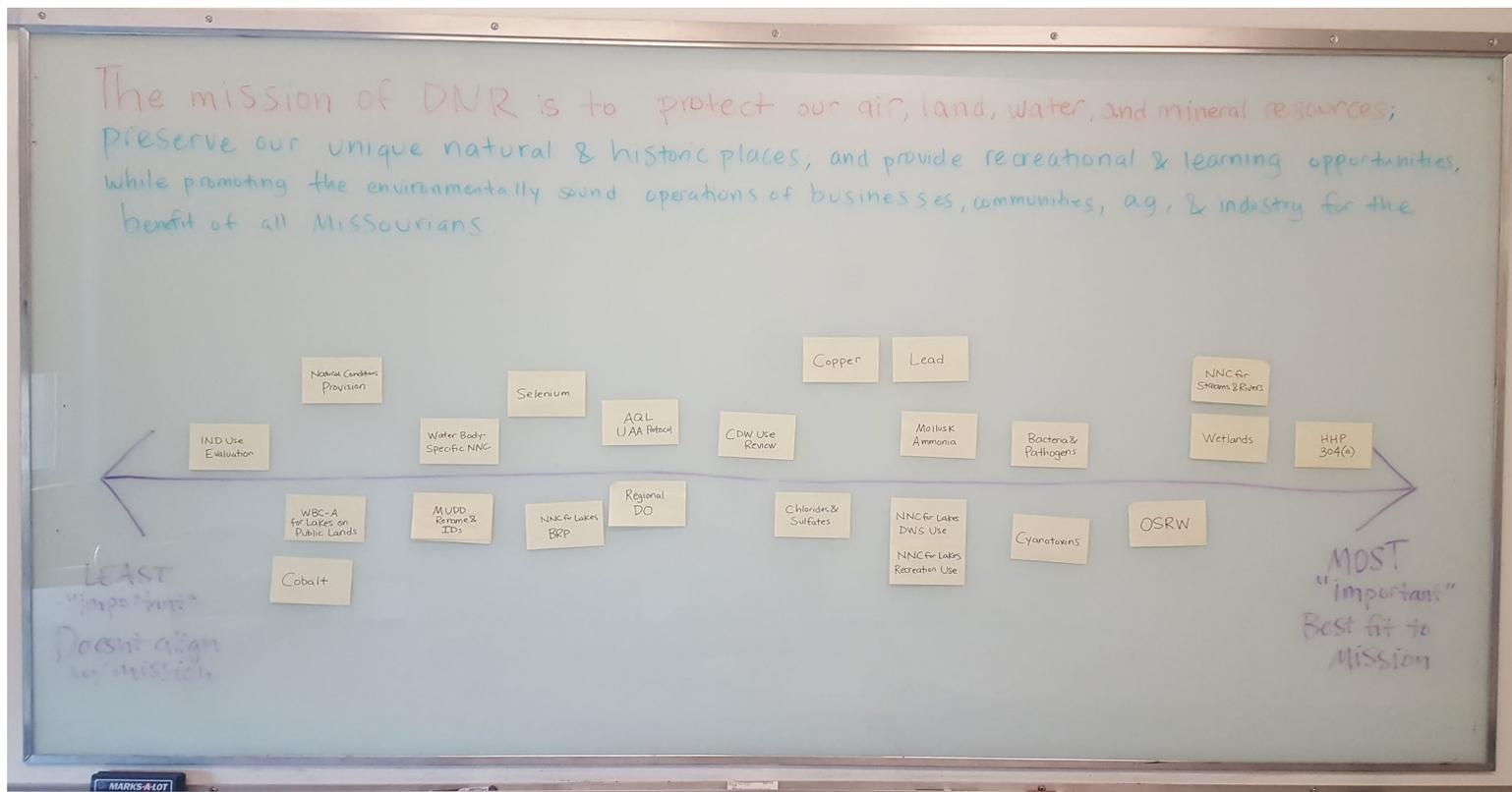
2022

WQS Project Inventory
Open for Public Comment

WQS Project Prioritization and Planning

Brainstorming Sessions with WQS Staff

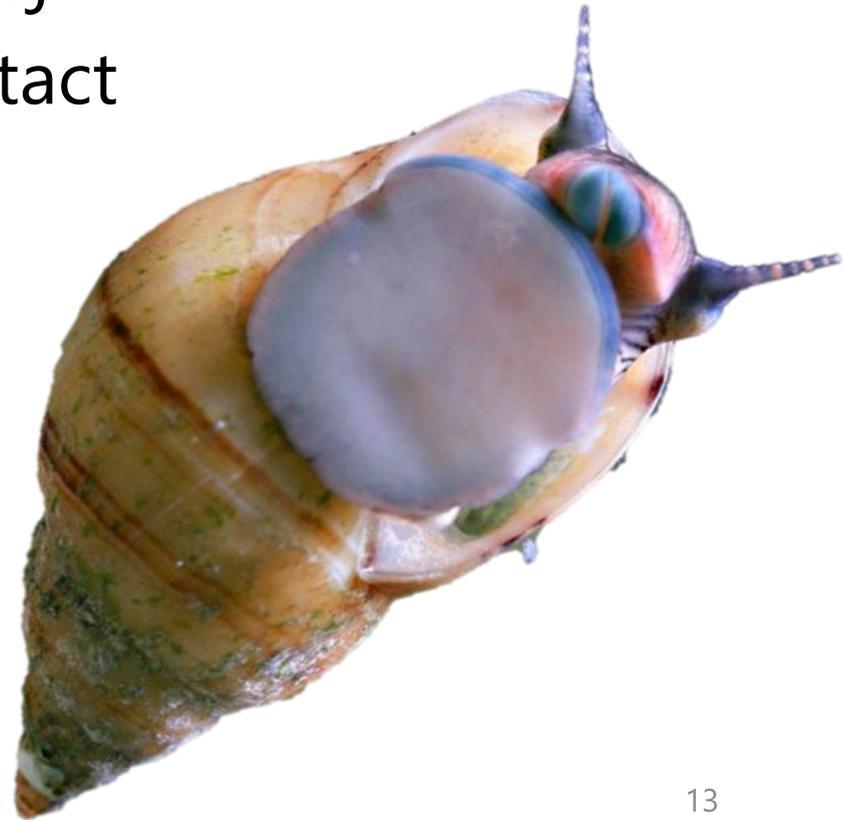
- How well does an item "fit" our DNR mission?
- How much "work" will an item take?



WQS Project Inventory

- Listing of WQS Projects categorized by priority
- Identifies the stage the project is in
- Identifies the point of contact
- Allows for transparency

**Will be available for
public comment soon!**



Stay in the Loop!

Contact Me

- Water Quality Standards: wqs@dnr.mo.gov
- Angela Falls: angela.falls@dnr.mo.gov

Get Updates

- WQS web: <https://dnr.mo.gov/env/wpp/wqstandards/index.html>
- Rulemaking web: <https://dnr.mo.gov/env/wpp/rules/wpp-rule-dev.htm>
- WQS Workgroup: <https://dnr.mo.gov/env/wpp/cwforum/adv-uncl-waters-wetlands.htm>



NOTE: DNR's website will be updated later this year