IOWA DEPARTMENT OF NATURAL RESOURCES

Leading Iowans in Caring For Our Natural Resources

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Today's Agenda

- Welcome
- Presentation (20-25 minutes)
- Q&A (10 minutes)
- Listening session for verbal comments (20-25 minutes)

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Triennial Review

Water Quality Monitoring & Assessment Section

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Today's Presentation

- Water quality standards (WQS) background/process
- Triennial review (TR) background/process
- WQS topics/feedback

Water Quality Standards

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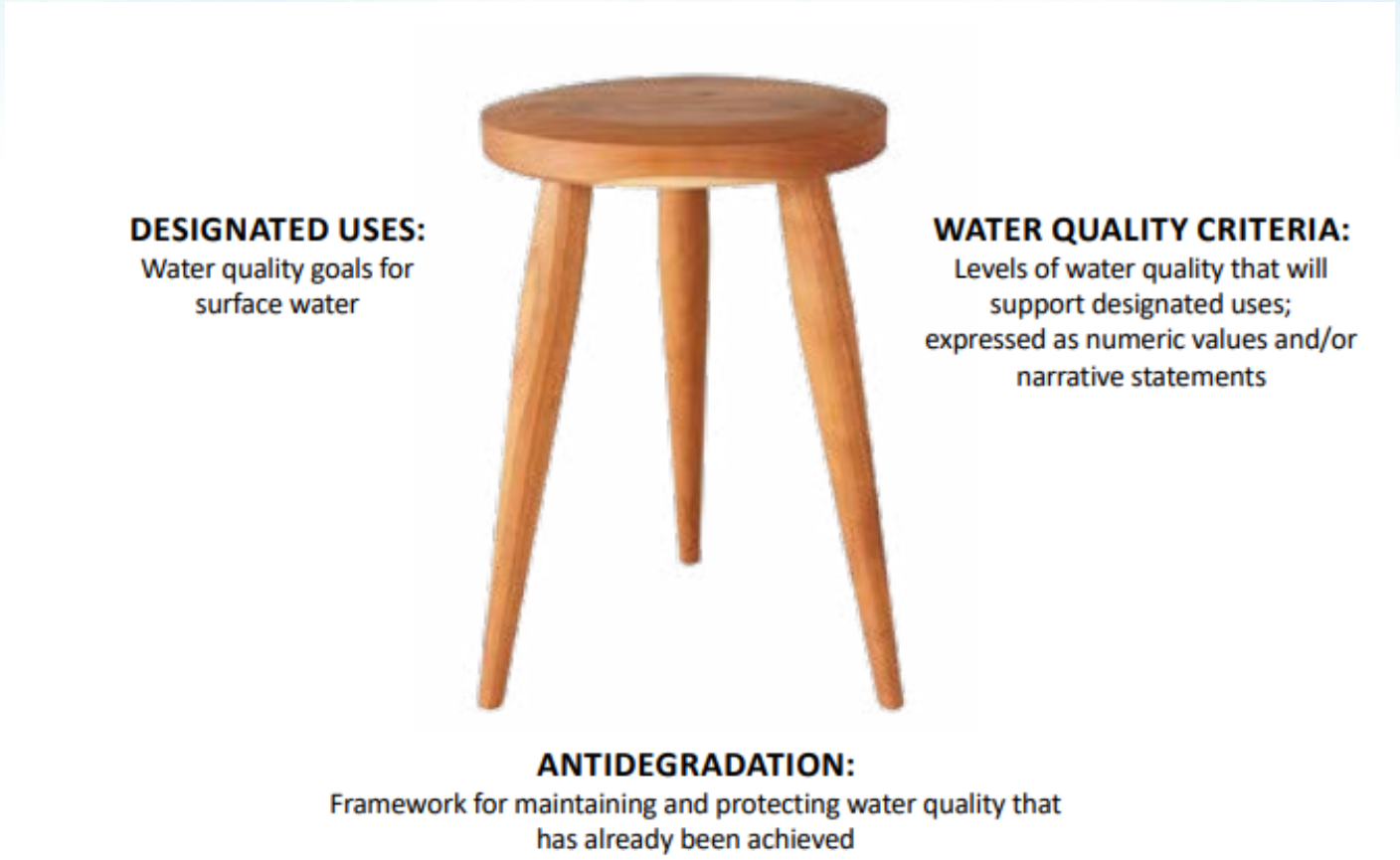
Water Quality Standards (WQS)

“Fishable”

“Swimmable”



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WQS: Designated Uses

Aquatic Life Uses

- Warm water
  - BWW1
  - BWW2
  - BWW3
- Cold water
  - BCW1
  - BCW2
- Lakes & Wetlands
  - BLW

Recreational Uses

- A1: Primary Contact
- A2: Secondary Contact
- A3: Children's Recreation

Drinking Water Use

- Class C

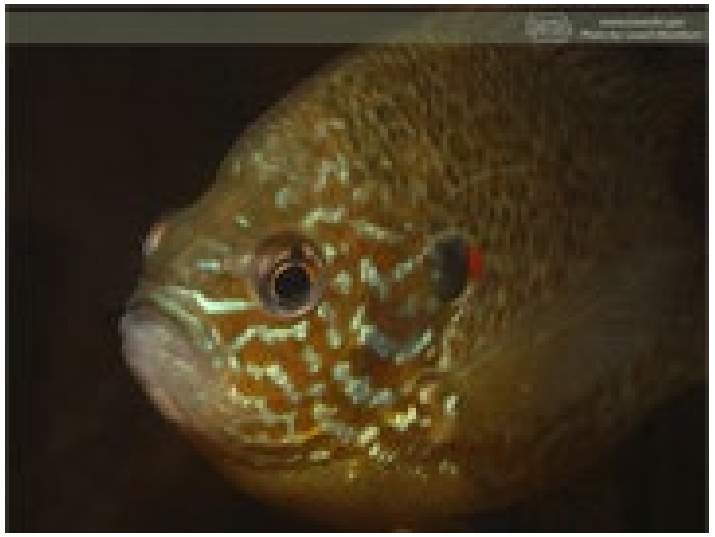
Human Health

- HH

WQS: Water Quality Criteria

Three types of water quality criteria:

- Aquatic life criteria
- Recreational criteria
- Human health criteria



WQS: Antidegradation

- "A regulatory policy and implementation procedure to protect existing uses of surface waters and to specify how DNR will determine, on a case-by-case basis, whether and to what extent, existing water quality may be lowered in a surface water."
- Iowa has:
  - Tier 1
  - Tier 2
  - Tier 2.5 (Outstanding Iowa Waters)
  - Tier 3 (Outstanding National Resource Waters)
- "Keep clean waters clean"
- Iowa's Antidegradation Implementation Procedure is available here: https://www.iowadnr.gov/environmental-protection/water-quality/water-quality-standards/antidegradation.

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Water Quality Standards Adoption Process

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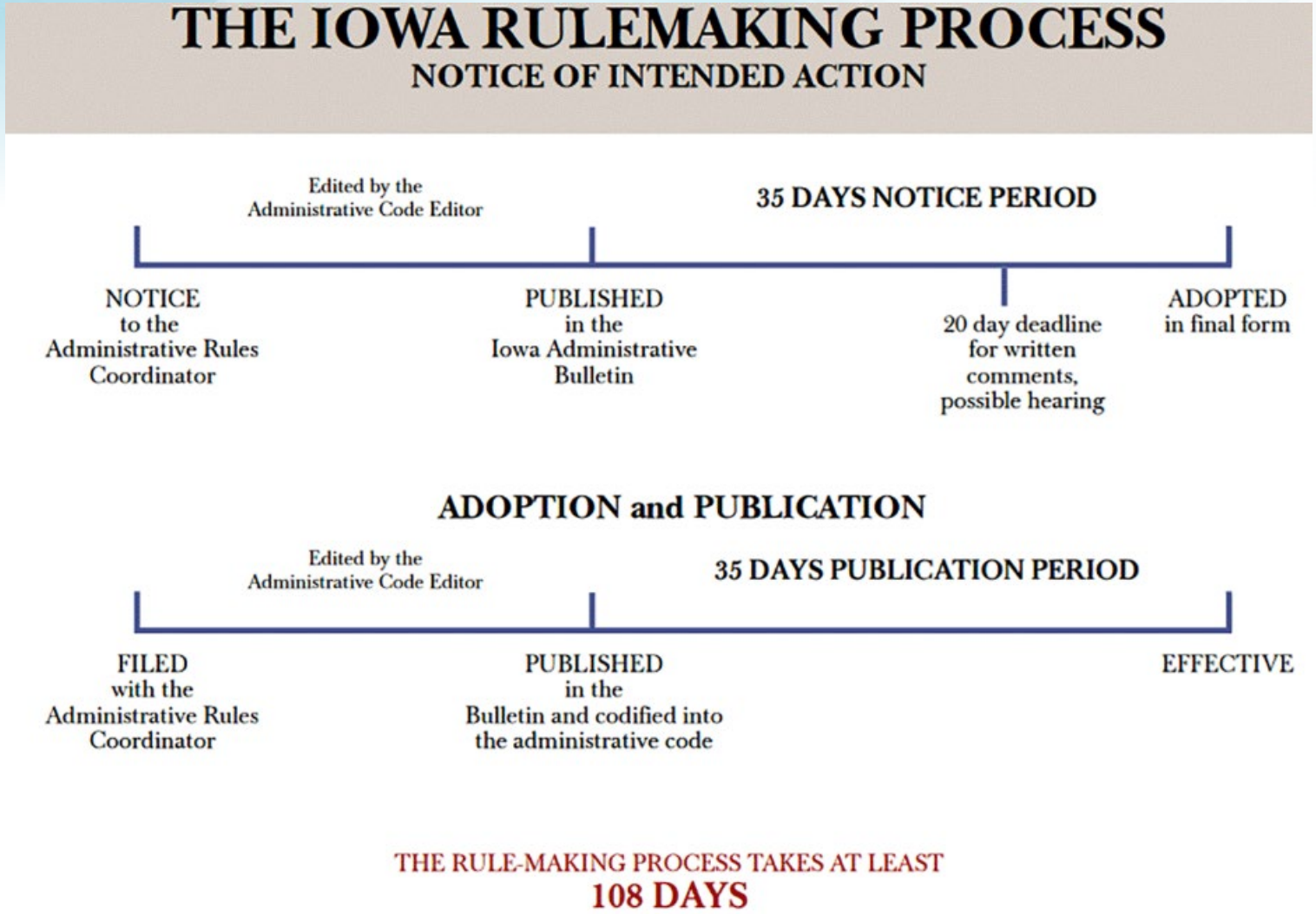
WQS Adoption Process



Following rule effective date:

- AG certification
- Submission to EPA

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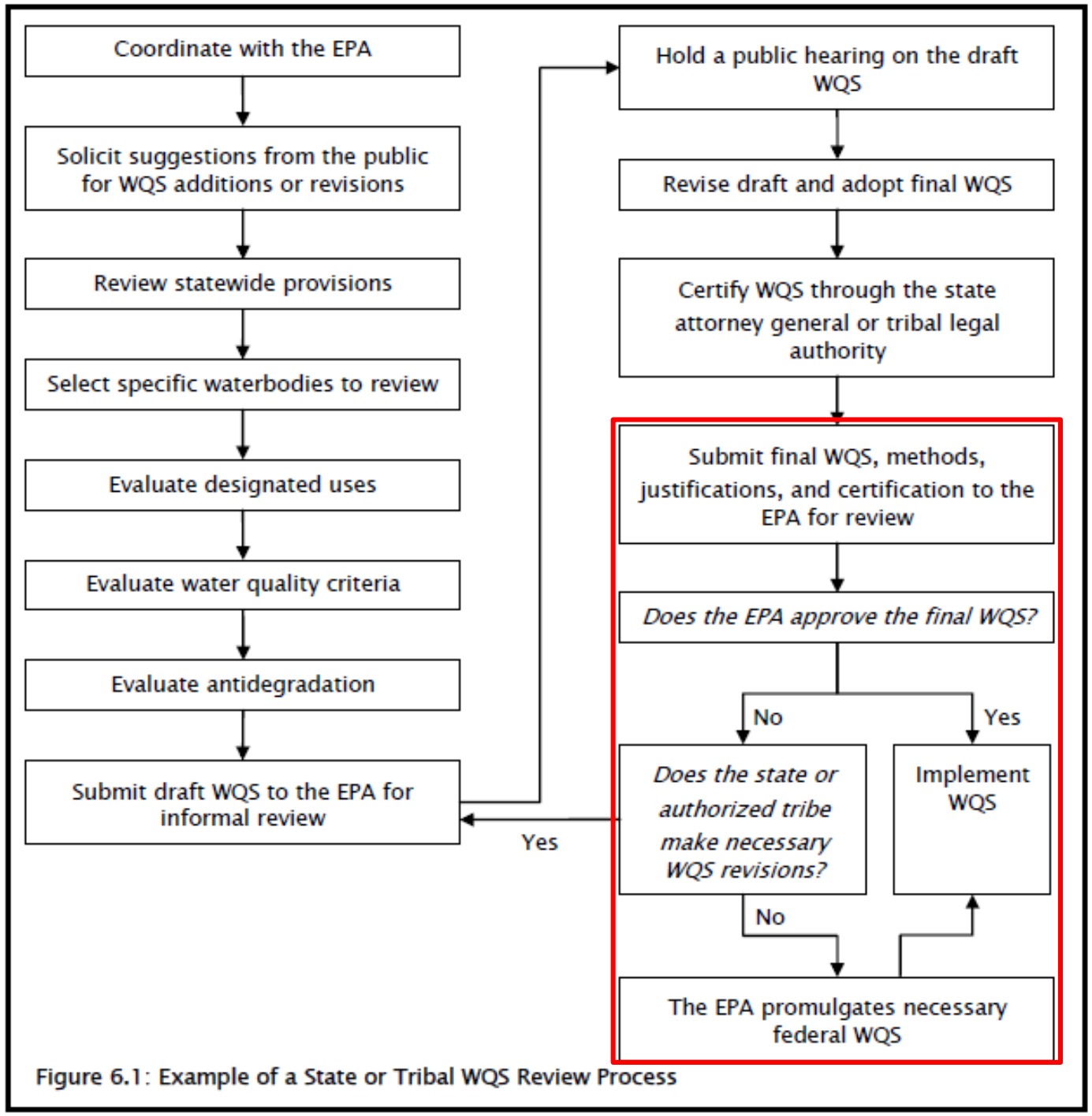

Figure 6.1: Example of a State or Tribal WQS Review Process

WQS Process: EPA's Role

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The Triennial Review Process

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Triennial Review: Background

- 40 CFR 131.20 “The State shall from time to time but at least once every 3 years, hold public hearings for the purpose of reviewing applicable water quality standards…”
- Provides an opportunity for the public to participate in the state’s water quality standards adoption process

Tribal Reserved Rights

- The new Tribal Reserved Rights rule (effective June 3, 2024) states that if a Tribe asserts a reserved right on a state water, the state must take that use into account when developing standards and protect the Tribe to the same level as the general population.
  - No Tribes have asserted a right yet in Iowa.
  - Unclear whether fish consumption rate and cancer risk level would be different than those currently used in Iowa's WQS.
- Lawsuit currently stayed.

Triennial Review Timeline

2024

- WQS prep work

Fall 2025

- Public hearing
- Responsiveness summary

Winter 2025/2026

- Work on chosen WQS revisions

2026

- Propose standards revisions
- Hold stakeholder meetings on revisions

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Water Quality Standards Topic Areas

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Antidegradation Update

- Iowa's AIP was adopted in 2010.
- EPA updated their antidegradation language/requirements in 2015.
- Updates to Iowa's AIP would include:
  - Replacing the rule-cited AIP with rule language in Chapter 60 (definitions) and 61 (WQS)
  - Adding the list of OIW waters to the SWC
  - Cleaning up redundancies, inconsistencies, unclear text
  - Adjusting what triggers antideg
  - Updating a few definitions
  - Returning to 2010 EPA-approved economic efficiency language

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Chapter 61 Cleanup

Parameter		Use Designations							
		B(CW1)	B(CW2)	B(WW-1)	B(WW-2)	B(WW-3)	B(LW)	C	HH
Alachlor	MCL	—	—	—	—	—	—	2	—
Aldrin	Acute	—	—	3	3	3	—	—	—
	Human Health — Fish	—	—	—	—	—	—	—	.00050(e)
	Human Health + — F & W	—	—	—	—	—	—	—	.00049(f)
Aluminum	Chronic(r)	890(o)	—	890(o)	890(o)	890(o)	890(o)	—	—
	Acute(r)	2,500(o)	—	2,500(o)	2,500(o)	2,500(o)	2,500(o)	—	—
Antimony	Human Health — Fish	—	—	—	—	—	—	—	640(e)
	Human Health + — F & W	—	—	—	—	—	—	—	5.6(f)
Arsenic (III)	Chronic(p)	150	—	150	150	150	150	—	—
	Acute(p)	340	—	340	340	340	340	—	—
	Human Health — Fish	—	—	—	—	—	—	—	50(e)(g)
	Human Health — F & W	—	—	—	—	—	—	—	.18(f)(g)
Asbestos	Human Health — F & W	—	—	—	—	—	—	—	7(a)(f)

- Tables in Chapter 61 would be placed in a rule-referenced document and cleaned up.
- General cleanup and clarification of Chapter 61 text.
  - No substantive changes suggested at this time.

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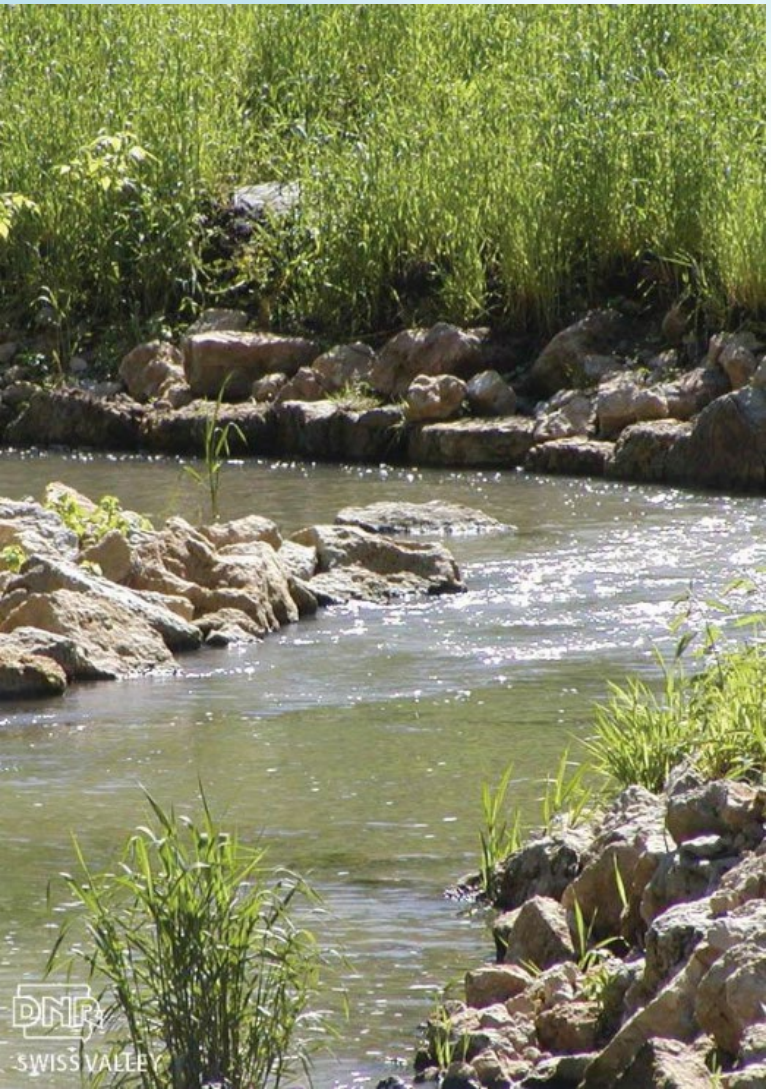
Surface Water Classification (SWC) Cleanup

- Lists all designated stream segments in Iowa.
- Rule-referenced document. Requires rulemaking to change.
- Clerical overhaul:
  - **Changing STR to decimal degrees**
  - Fixing clerical errors
  - Checking/updating water body names
- Substantive analysis:
  - Systemic review

Western Iowa River Basin - Designations

#	Name	Description	A1	A2	A3	B (WW-1)	B (WW-2)	B (WW-3)	B (LW)	B (CW1)	B (CW2)	HH	C	IDNR Submittal	EPA Action
1	MAJOR RIVER - MISSOURI R. AND ITS TRIBUTARIES Missouri R.	Iowa-Missouri state line to confluence with the Big Sioux R.	X			X						X			
2	Missouri R.	City of Council Bluffs Water Works Intakes											X		
3	PLUM CR. AND ITS TRIBUTARIES Plum Cr.	Mouth (S6, T69N, R43W, Fremont Co.) to confluence with an unnamed tributary (S29, T70N, R42W, Fremont Co.)	X				X								
4	WAUBONSIE CR. AND ITS TRIBUTARIES Waubonsie Cr.	Mouth (S8, T70N, R43W, Fremont Co.) to confluence with an unnamed tributary (S25, T71N, R43W, Mills Co.)	X				X								

Use Attainability Analyses



- 455B.176A requires that, before an NPDES permit can be renewed, a use attainability analysis has to be completed.
- ~250 NPDES permits delayed because of UAAs (Some permits have been expired since 2007.)
- ~100 UAAs in progress
- Rulemaking is required to adopt proposed designations from UAAs into the SWC before permits can be reissued.

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Human Health Criteria

- Many of Iowa's current human health criteria are based on EPA's 2002 recommendations
- EPA's 2015 human health criteria is meant to use the latest scientific data to protect humans due to consuming fish and drinking water.
- Started a comparison of Iowa's criteria to EPA's recommended criteria.
  - Inputs that could affect new criteria values include drinking water rate, fish consumption rate, body weight, and cancer risk level.

	Cancer Risk Level = 1 in 100,000			
	Water + Organism	Water + Organism	Organism Only	Organism Only
New	54	57%	56	60%
More Stringent	26	28%	24	26%
Less Stringent	14	15%	14	15%
Same	0	0%	0	0%
Total	94	100%	94	100%

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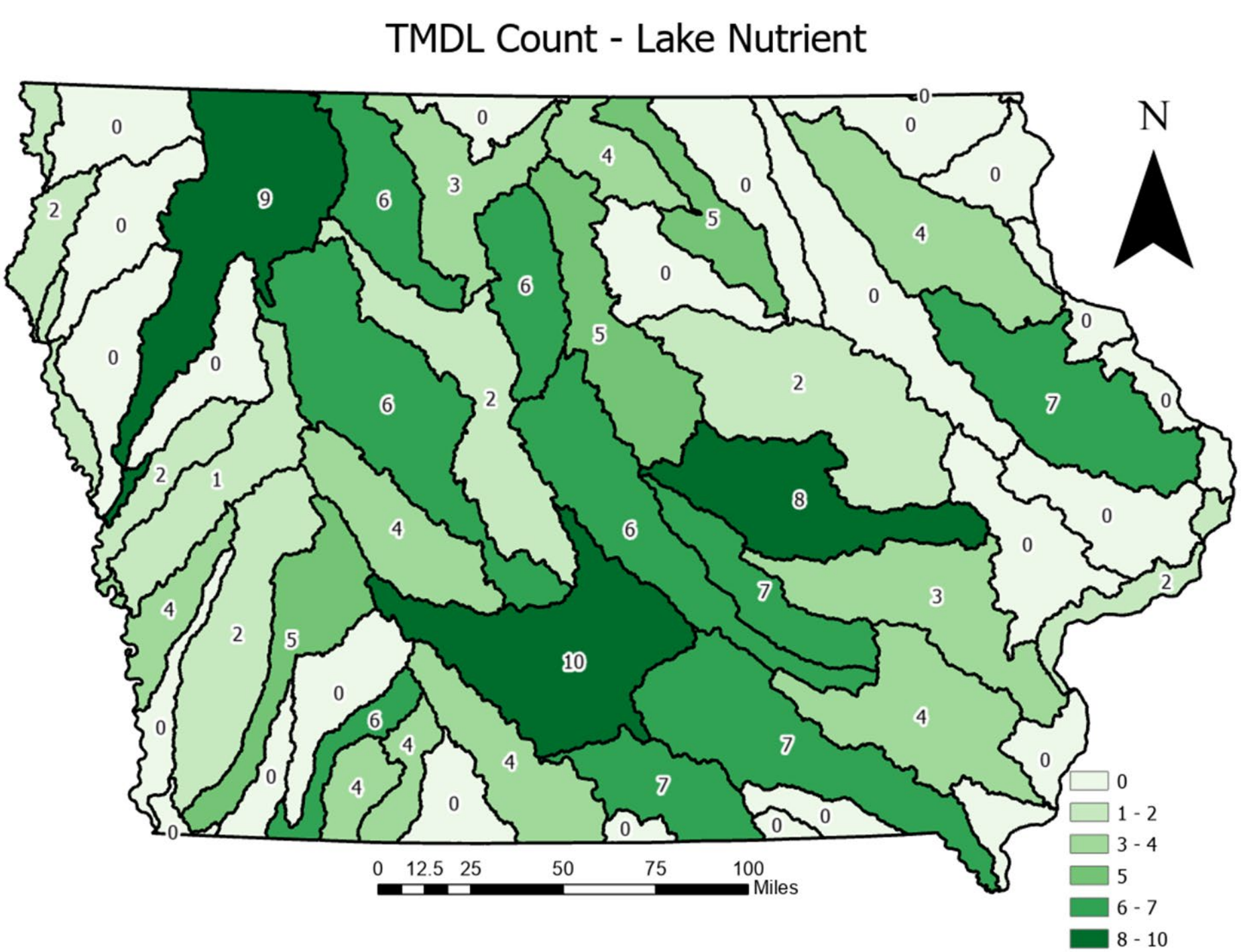
PFAS

- In 2024, EPA released recommended aquatic life criteria for PFOA and PFOS as well as aquatic life benchmarks for eight other PFAS.
- In 2024, EPA released draft human health criteria for PFOA, PFOS, and PFBS.
- In 2025, EPA announced that it will keep the National Primary Drinking Water Regulations (MCLs) for PFOA and PFOS.
- The Iowa DNR PFAS steering committee has been reviewing EPA's PFAS actions and will continue to analyze appropriate next steps.

Lake Nutrients & TMDLs

- Iowa currently addresses nutrient impairments in Iowa's lakes through total maximum daily loads (TMDLs).
- A TMDL is the calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the water will still meet WQS.
- The following three slides show the status of Iowa's TMDLs for nutrients in lakes.



There are 83 lakes, shallow lakes, wetlands, and reservoirs with nutrient-related TMDLs.

151 impairments are addressed.

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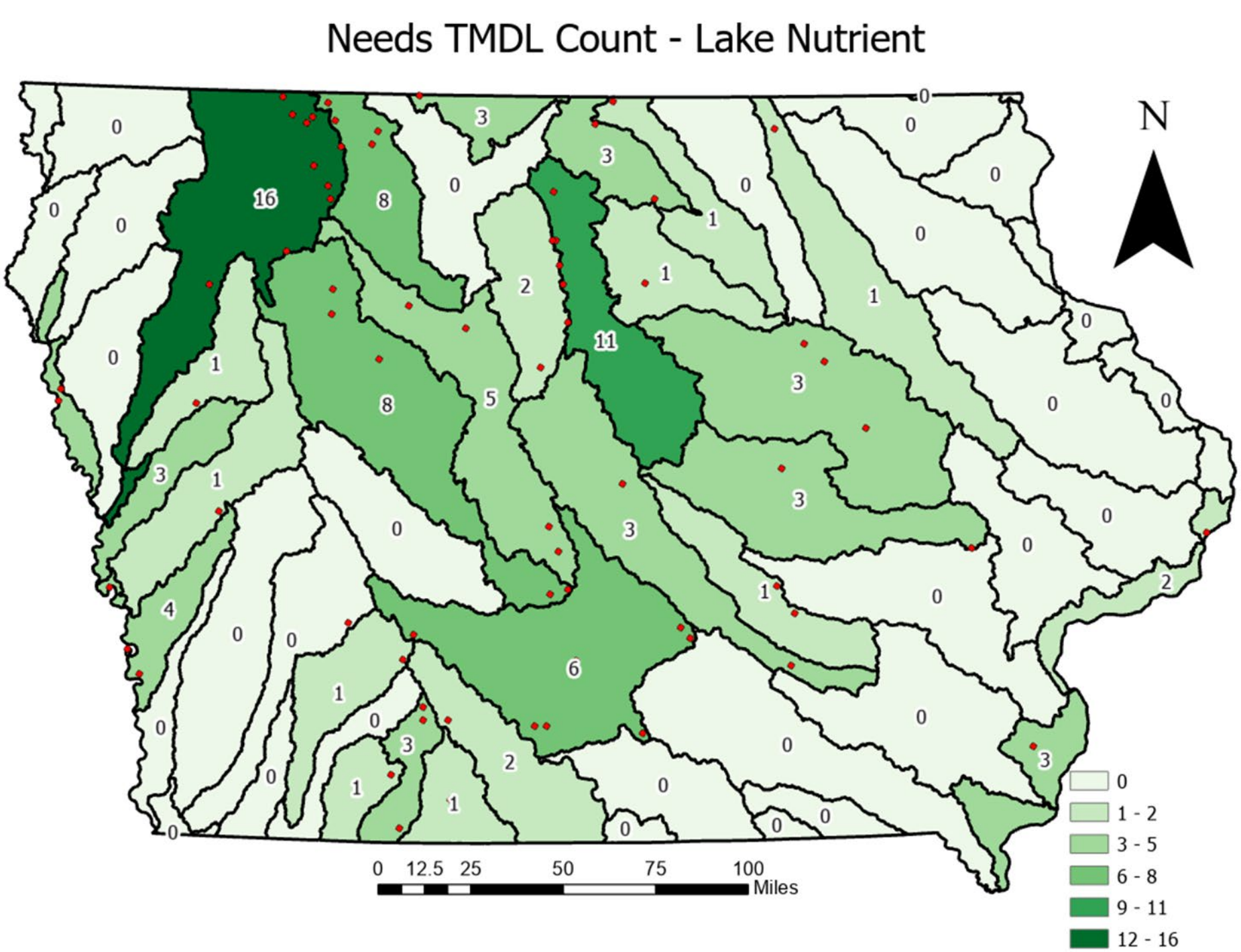

66 lakes, shallow lakes, wetlands, and reservoirs need nutrient-related TMDLs.

97 impairments left to address.

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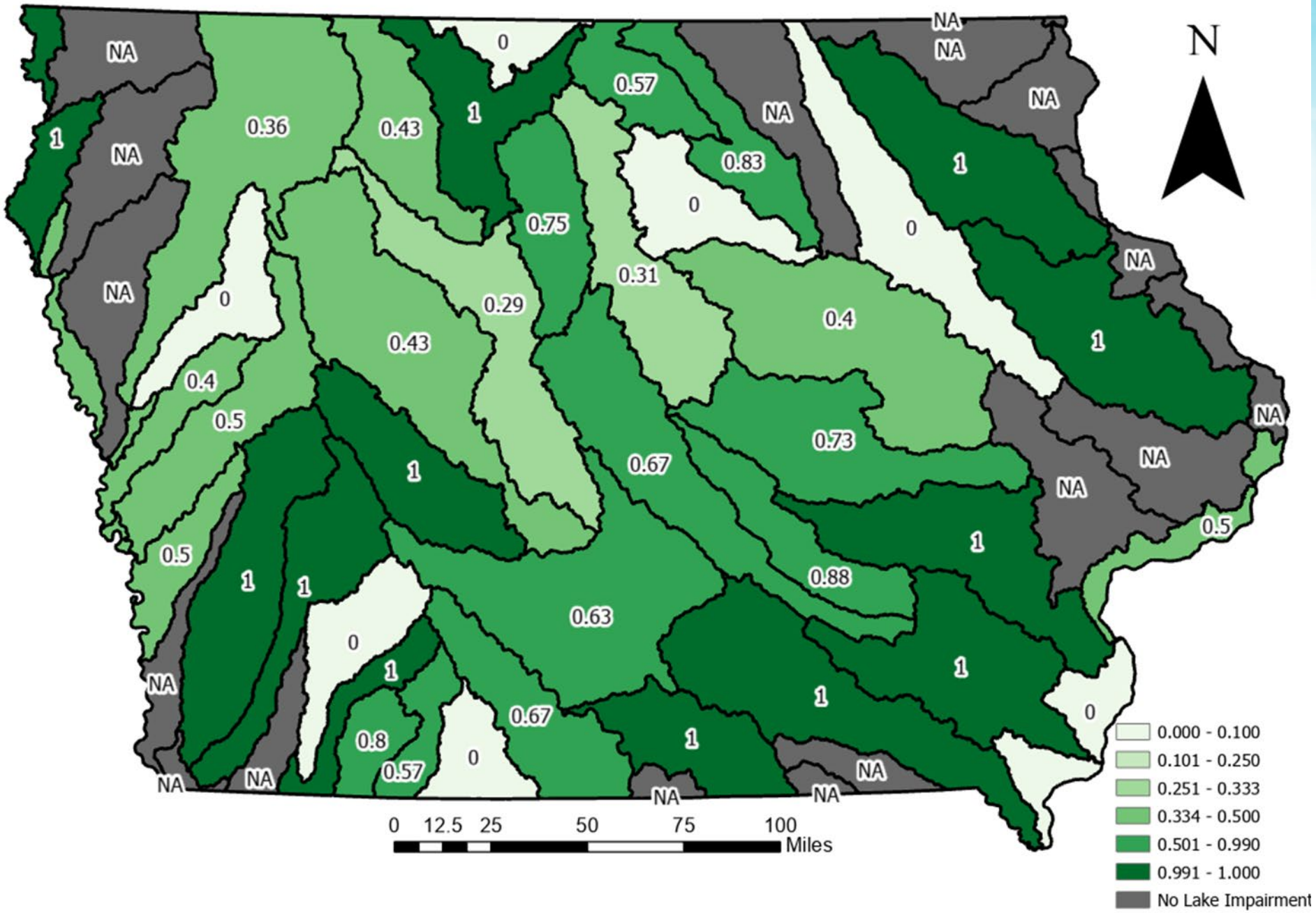
Percent of TMDLs Done - Lake Nutrient



~60% of the nutrient-related TMDLs that are needed are done.

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Triennial Review - WQS Input

- Next steps
- Questions?

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Thank you!

Public comments can be submitted until Monday, October 20 to:
wqs@dnr.iowa.gov

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