

# WATER QUALITY STANDARDS

## 8 CAR Part 21

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Mary Barnett

April 23, 2026

Water Quality Standards Workshop – ACWA



**ARKANSAS**  
ENERGY & ENVIRONMENT

# 8 CAR Part 21 (formerly Rule 2)

- March 28, 2024 Arkansas Code § 25-15-218
  - Required the Bureau of Legislative Research to
    - Compile, format, & index a codification of rules into the “Code of Arkansas Rules”
    - Effective January 1, 2025

**Code of Arkansas Rules:** A codification of the general and permanent rules of agencies with a uniform style, format, and numbering system

# 2023 Triennial Review Process

Task	Timeline
Stakeholder Workgroup	March – May 2022
Governor’s Office	November 2024
Petition the APC&E Commission	December 2024
Public Notice	December 2024
Public Hearing	January & February 2025
45-day Comment Period	December 2024 – Feb. 2025
Responsive Summary	April 2025
Adoption by APC&E Commission	April 25, 2025
Legislative Review	June 2025
Submit to EPA	July 2025
EPA response	October 2025

# Draft

# 2026 Triennial Review Process

Task	Timeline
Informal Input Survey	July 15-August 14, 2025
Stakeholder Workgroup	Summer 2026
Governor's Office	Summer 2026
Petition the APC&E Commission	Winter/Spring 2027
Public Notice	Winter/Spring 2027
Public Hearing	Winter/Spring 2027
45-day Comment Period	Winter/Spring 2027
Responsive Summary	Spring 2027
Adoption by APC&E Commission	Summer 2027
Legislative Review	Summer 2027
Submit to EPA	Fall 2027

# Informal Input Survey

Questions 1 - 10

- Prioritizing criteria revisions

1 = Short term goal

5 = Long term goal

Question 11

- Are there additional criteria you would like to see the Division investigate?

# Informal Input Survey Summary

- Survey Reach
  - E-mailed to ~500 people
  - Noted in Mitchell Williams Law Blog
  - Distributed to AEF and AWWMA members
- Response
  - 12 individuals
  - Primarily neutral

# Questions to Consider for Triennial Proposals



- What do Region 6 states & border states do?
- Does proposed criteria align with impairments and waterbody condition?
- How will proposed criteria affect NPDES permits?

# Proposals for the 2026 Triennial Review

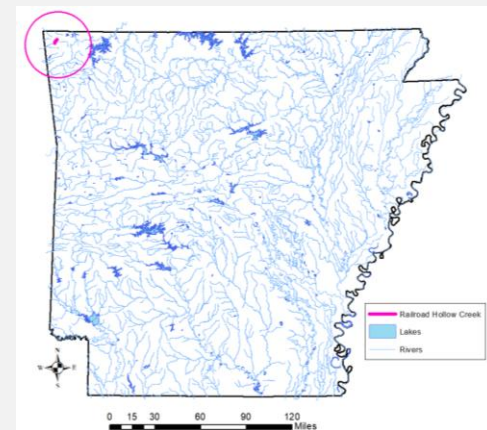


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# Reinstate Fishable/Swimmable Uses & DO Criteria Revision

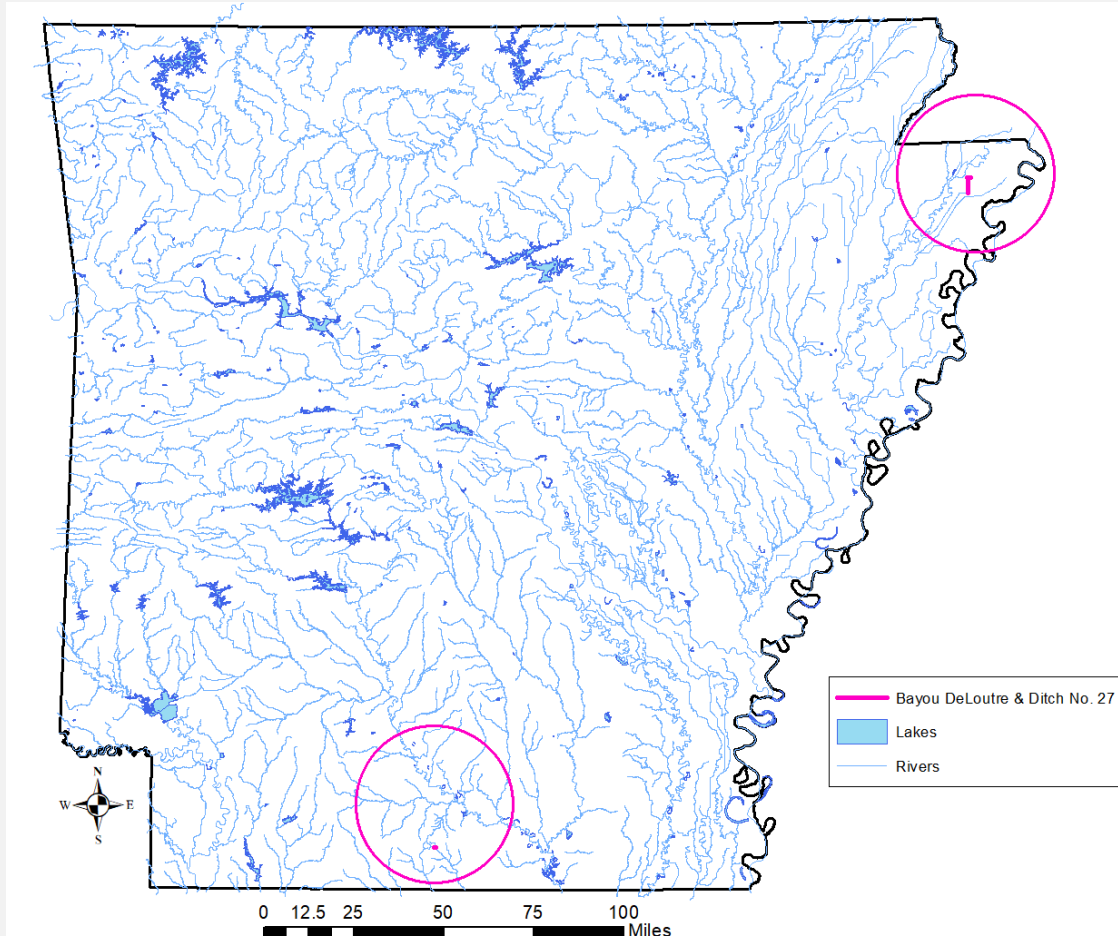
Current DO Criteria	Proposed DO Criteria
Year round 2 mg/L	Noncritical season 6 mg/L Critical season 2 mg/L

- UAA Date: February 1981
- No fish or macroinvertebrate data collected during the study
- Watershed size: 2.127 mi<sup>2</sup>
- NPDES status: 1 permittee
  - Notified by letter on September 1, 2023
- Proposed revisions: remove current language “Railroad Hollow Creek - no fishable/swimmable uses (OH-1, 1)”. This will then add seasonal aquatic life and secondary contact recreation. Remove site specific criteria “Year-round DO 2 mg/L”.



# Site Specific Temperature Criteria Removal

- Bayou De Loutre from AR0001171 Outfall 001 to Loutre Creek
  - Permittee requested Outfall 001 be removed
- Ditch No. 27
  - Last temp. failure: None
  - Max temp: 92.0°F – June 2010



# TURBIDITY

## 2008 EPA Took No Action – Not Approved for CWA Purposes

There shall be no distinctly visible increase in turbidity of receiving waters attributable to discharges or instream activities.

The values below should not be exceeded during base flow (June 1 through October 31) in more than 20% of samples. The values below should not be exceeded during storm flows in more than 25% of samples taken in no less than 24 monthly samples.

**This previously EPA approved 2004 language is in place for Clean Water Act purposes.**

There shall be no distinctly visible increase in turbidity of receiving waters attributable to municipal, industrial, agricultural, other waste discharges or instream activities. Specifically, in no case shall any such waste discharge or instream activity cause turbidity values to exceed the primary values listed below. Additionally, the non-point source runoff shall not result in the exceedance of the in stream storm-flow values in more than 20% of the ADEQ ambient monitoring network samples taken in not less than 24 monthly samples.

# TURBIDITY - Base Flows vs Storm/All flows

## 2008 EPA Took No Action – Not Approved for CWA Purposes

“Storm flows” takes into account all flows and data collected throughout the year, including elevated flows due to rainfall events;

“Base Flows” means that portion of the stream discharge that is derived from natural storage, or sources other than recent rainfall that creates surface runoff. Also called sustaining, normal, dry weather, ordinary or groundwater flow

**On going discussion with EPA regarding how the base flow and storm flow criteria were developed.**

EPA 2015  
Update

Body Weight:  
70kg → 80 kg

Fish  
Consumption:  
17 g/day → 22  
g/day

Drinking Water:  
2 L/day → 2.4  
L/day

# Updates to Human Health Criteria Currently in WQS

Pollutant	Previous Criteria (ug/L)	Proposed Criteria (ug/L)
alpha-Hexachlorobenzene	0.0373	0.0036
Chlordane	0.005	0.0031
Dieldrin	0.0012	0.000012
Dioxin (2,3,7,8 TCDD)	0.000001	0.00000005
PCBs (polychlorinated biphenyls)	0.0004	0.00064
Toxaphene ( <u>MCL</u> )	0.0063	0.007

# 2026 304(a) Proposed Additions

- 14 out of the 94 pollutants were determined to be discharged into Arkansas waters and had a medium or high IRIS confidence

## Proposed Human Health Toxic Additions

1,1,2-trichloroethane	2,4-dinitrotoluene	Chlorobenzene	Nitrobenzene	Trichloroethylene
1,1-dichloroethylene	Benzo(a)pyrene*	Dichloromethane	Pentachlorophenol	Vinyl chloride*
1,2,4-trichlorobenzene*	Carbon tetrachloride	Hexachlorobenzene*	Tetrachloroethylene	

# CRITERIA ADJACENT WORK



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# Primary Contact Recreation Use Bacteria Criteria

- All streams with watersheds <10 mi<sup>2</sup> shall not be designated for primary contact – UNLESS verified

Contact Recreation Seasons	Criteria (col/100mL)	
<b><u>Primary Contact</u></b>	<i>E. coli</i>	
	<b><u>IS</u></b>	<b><u>GM</u></b>
ERW, ESW, NSW, Reservoirs, Lakes	298	126
All Other Waters	410	126
<b><u>Secondary Contact</u></b>		
ERW, ESW, NSW, Reservoirs, Lakes	1490	630
All Other Waters	2050	630

# Verification Process

<b>GPS Coordinates:</b>		<b>Date of Observations:</b>	
<b>Site Address:</b>			
<b>Stream Name:</b>			
<b>County/Municipality:</b>	<b>Surveyor Name:</b>		
<i>Frequency of personal visits to the site:</i>	<input type="checkbox"/> daily or weekly	<input type="checkbox"/> monthly	<input type="checkbox"/> quarterly <input type="checkbox"/> yearly or less
<b>Potential Signs of Use:</b>	<i>Which of the following activities were noted and which items are present?</i> <input type="checkbox"/> swimmers <input type="checkbox"/> wet wading <input type="checkbox"/> snorkeling <input type="checkbox"/> rope swing <input type="checkbox"/> hand fishing <input type="checkbox"/> tubing <input type="checkbox"/> stand up paddle board <input type="checkbox"/> discarded swimwear or floats <input type="checkbox"/> Other _____		
<i>Number of people observed at the site:</i>	<input type="checkbox"/> 0 - 5	<input type="checkbox"/> 6 - 20	<input type="checkbox"/> greater than 20
<i>Age of people observed at the site:</i>	<input type="checkbox"/> infants or toddlers	<input type="checkbox"/> children (<16 years old)	<input type="checkbox"/> adults
<i>Recreation frequency observed, if known:</i>	<input type="checkbox"/> rarely (less than once a month)	<input type="checkbox"/> sometimes (1 to 4 times a month)	<input type="checkbox"/> often (more than 4 times a month)
<b>Depth:</b> <i>Deepest point of the recreated area of stream. Indicate if this is an exact measurement or an estimate.</i>	Depth: _____ ft <input type="checkbox"/> Estimate <input type="checkbox"/> Exact	<b>Width:</b> <i>The widest and narrowest point of recreated area of stream.</i>	Widest: _____ ft Narrowest: _____ ft <input type="checkbox"/> Estimate <input type="checkbox"/> Exact
<b>Surrounding Area:</b> <i>In what type of area was recreation observed?</i>	<input type="checkbox"/> campground <input type="checkbox"/> playground <input type="checkbox"/> park <input type="checkbox"/> national forest <input type="checkbox"/> walking path <input type="checkbox"/> residential yard <input type="checkbox"/> Other _____		
<b>Additional Comments:</b>			
<b>Photos:</b>	Include photos of the site, capturing the stream and any signs of recreational use. Attach these photos alongside a PDF scan of this completed form. This information can then be sent to Office of Water Quality, Planning Branch at <a href="mailto:EE.Rule.2.Comments@arkansas.gov">EE.Rule.2.Comments@arkansas.gov</a> or 5301 Northshore Drive, North Little Rock, AR. 72118		

## Less than 10 mi<sup>2</sup> Scoring Datasheet

Site Code	Site Name	Latitude	Longitude	Submission Date	Photos Included	Watershed Size	Surrounding Area

### Description of photo content

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Depth score	Width score	Signs of Use score	Frequency of Visits score	Frequency of Recreation score	Age of Recreators score	Number of Recreators score	Total Score

### Conclusions

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### Primary Contact Recreation Status

≥ 20	<16	16-20
<input type="checkbox"/> Verified	<input type="checkbox"/> Insufficient evidence to support	<input type="checkbox"/> Further investigation needed

### Follow-up Investigation Information

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# Lake Archetypes

LIMNOLOGY  
and  
OCEANOGRAPHY

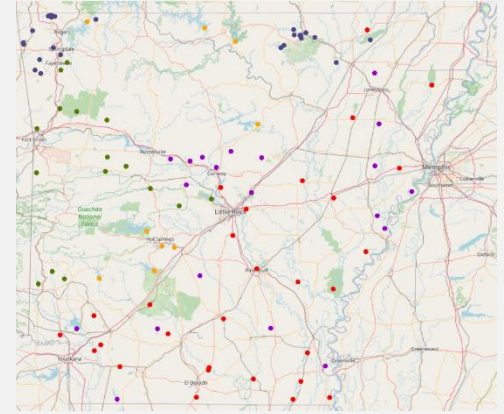
ASLO

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**A continuous classification of the 476,697 lakes of the conterminous US based on geographic archetypes**

Jean-Francois Lapierre,<sup>1,2\*</sup> Katherine E. Webster,<sup>3,4</sup> Ephraim M. Hanks,<sup>5</sup> Tyler Wagner<sup>5,6</sup>  
Patricia A. Soranno<sup>3</sup>, Ian M. McCullough,<sup>3</sup> Kaitlin L. Reinl,<sup>7</sup> Marcella Domka,<sup>3</sup> Noah R. Lotting<sup>8</sup>



Archetype	Rank	Top Positive	Value	Top Negative	Value
1	1			Elevation	-1.20
1	2			Max Depth	-0.77
1	3			Watershed Area	-0.49
2	1	Base Flow Index	1.80	Watershed Area	-0.38
2	2	Elevation	0.35	Surface Area	-0.34
2	3			Volume	-0.24
3	1	Elevation	1.65	Base Flow Index	-0.91
3	2	Max Depth	0.54	Surface Area	-0.29
3	3	Watershed Area	0.11	Volume	-0.22
4	1	Surface Area	4.63	Base Flow Index	-0.13
4	2	Volume	4.04		
4	3	Watershed Area	3.22		

# Water Quality Standards Listserve

- [https://www.adeq.state.ar.us/poa/pi/emaillist\\_subscribe.aspx?ml=reg2triennialreview-emaillist&t=s](https://www.adeq.state.ar.us/poa/pi/emaillist_subscribe.aspx?ml=reg2triennialreview-emaillist&t=s)

The screenshot shows a web browser window displaying the Arkansas Department of Energy & Environment website. The page is titled "Email List Subscription" and is part of the "Water Quality Standards (Reg. 2) Triennial Review" email list. The page features a navigation menu with options like Home, Online Services, Offices, Inspectors, Licensing, Permits, Rules, and Contact Us. A sidebar on the left contains links to various resources, with "Email List Information" highlighted. The main content area includes a "FAQs" section, a "Webmaster" contact information for Zach Witherow, and a "subscribe" button next to an "Email Address" input field. The page also includes a search bar and a "Verify it's you" link in the top right corner.

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# Keep in Touch



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