

# ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION



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LEGISLATIVE RESEARCH

## REGULATION NO. 2

### REGULATION ESTABLISHING WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE STATE OF ARKANSAS

MARK-UP DRAFT

Submitted to the Arkansas Pollution Control and Ecology Commission: January 25, 2019

grease shall be an average of no more than 10 mg/L or a maximum of no more than 15 mg/L. No mixing zones are allowed for discharges of oil and grease.

**Reg. 2.511 Mineral Quality**

(A) Site Specific Mineral Quality Criteria

Mineral quality shall not be altered by municipal, industrial, other waste discharges or instream activities so as to interfere with designated uses. The following criteria apply to the streams indicated.

<u>Stream</u>	<u>Concentration-mg/L</u>		
	<u>Chlorides</u> (Cl <sup>-</sup> )	<u>Sulfates</u> (SO <sub>4</sub> <sup>-</sup> )	<u>TDS</u>
Arkansas River Basin			
Arkansas River (Mouth to Murray Lock and Dam [L&D #7])	250	100	500
Bayou Meto (Rocky Branch to Bayou Two Prairie)	64*	ER	ER
Bayou Meto (mouth to Pulaski/Lonoke county line)	95**	45**	ER
Bayou Two Prairie (Pulaski/Lonoke county line to Northern boundary of Smoke Hole Natural Area)	95**	45**	ER
Bayou Two Prairie (Southern boundary of Smoke Hole Natural Area to Mouth)	95**	45**	ER
Rocky Branch Creek	64*	ER	ER
Little Fourche Creek (Willow Springs Branch to Fourche Creek)	ER	ER	179
Willow Springs Branch (McGeorge Creek to Little Fourche Creek)	ER	112	247
McGeorge Creek (headwaters to Willow Springs Branch)	ER	250	432
Arkansas River (Murray Lock and Dam [L&D #7] to Dardanelle Lock and Dam [L&D #10])	250	100	500
Cadron Creek	20	20	100
Arkansas River (Dardanelle Lock and Dam [L&D #10] to Oklahoma state line, including Dardanelle Reservoir)	250	120	500
James Fork	20	100	275
Illinois River	20	20	300
Poteau River from <u>Scott County Road 59-Business-US Hwy 71</u> to Oklahoma state line	120	60	500
<u>Poteau River from confluence of Unnamed trib to Scott County Road 59</u>	<u>185†</u>	<u>200†</u>	<u>786†</u>
<u>Unnamed trib from Tyson-Waldron Outfall 001 to confluence with the Poteau River at Waldron</u>	<u>150</u> <u>180†</u>	<u>70</u> <u>200†</u>	<u>660</u> <u>870†</u>
White River Basin			
White River (Mouth to Dam #3)	20	60	430
Big Creek	20	30	270
Unnamed trib from Frit Ind.	ER	48*	ER

## DESIGNATED USES: ARKANSAS RIVER VALLEY ECOREGION

(Plates ARV-1, ARV-2, ARV-3)

### Extraordinary Resource Waters

Cadron Creek including North Fork and East Fork (ARV-2, ARV-3)

Mulberry River (ARV-1)

Big Creek adjacent to natural areas (ARV-3)

### Natural and Scenic Waterway

Mulberry River (ARV-1)

### Ecologically Sensitive Waterbodies

None

Primary Contact Recreation - all streams with watersheds of greater than 10 mi<sup>2</sup> and all lakes/reservoirs\*\*

Secondary Contact Recreation - all waters\*\*

Domestic, Industrial and Agricultural Water Supply - all waters\*\*

### Aquatic Life\*\*

#### Trout

Little Red River below Greers Ferry Dam to Searcy (ARV-3)

#### Lakes and Reservoirs - all

#### Streams

Seasonal Arkansas River Valley aquatic life use - all streams with watersheds of less than 10 mi<sup>2</sup> except as otherwise provided in Reg. 2.505

Perennial Arkansas River Valley aquatic life - all streams with watersheds of 10 mi<sup>2</sup> or larger and those waters where discharges equal or exceed 1 cfs

### Site Specific Designated Use Variations Supported by Use Attainability Analysis

Poteau River from U.S. Business Highway 71 to Oklahoma state line - no domestic water supply use (ARV-1.#2 and #4)

Unnamed tributary to Poteau River at Waldron - no domestic water supply use (ARV-1,#3)

\*\*Except for those waters with designated use variations supported by Use Attainability Analysis or other investigations.

## SPECIFIC STANDARDS: ARKANSAS RIVER VALLEY ECOREGION

(Plates ARV-1, ARV-2, ARV-3)

	<u>Streams</u>	<u>Lakes and Reservoirs</u>
Temperature °C (°F)*	31 (87.8)	32 (89.6)
Trout waters	20 (68)	
Arkansas River	32 (89.6)	
Turbidity(NTU) (base/all)	21/40	25/45
Arkansas River(base/all)	50/52	
Minerals	see Reg. 2.511	see Reg. 2.511
Dissolved Oxygen (mg/L)**	<u>Pri.</u> <u>Crit.</u>	see Reg. 2.505
<10 mi <sup>2</sup> watershed	5      2	
10 to 150 mi <sup>2</sup>	5      3	
151 mi <sup>2</sup> to 400 mi <sup>2</sup>	5      4	
>400 mi <sup>2</sup> watershed	5      5	
Trout waters	6      6	
All other standards	(same as statewide)	

### Site Specific Standards Variations Supported by Use Attainability Analysis

Dardanelle Reservoir - maximum temperature 35 C (95 F) (limitation of 2.8 C above natural temperature does not apply) (ARV-2, #1)

Poteau River from ~~Scott County Road 59 Business Highway 71~~ to Oklahoma state line - chlorides – 120 mg/L; sulfates – 60 mg/L; TDS – 500 mg/L (ARV-1, #2)

~~Poteau River from confluence with Unnamed tributary to Scott County Road 59 – chlorides 185 mg/L, sulfates 200 mg/L, TDS 786 mg/L (ARV-1, #4) †~~

~~Unnamed tributary from Tyson-Waldron Outfall 001 to confluence with the Poteau River to Poteau River at Waldron - chlorides 150 180 mg/L; sulfates – 70-200 mg/L; TDS - 660-870 mg/L (ARV-1, #3) †~~

\* Increase over natural temperatures may not be more than 2.8°C (5°F).

\*\* At water temperatures ≤10°C or during March, April and May when stream flows are 15 cfs and greater, the primary season dissolved oxygen standard will be 6.5 mg/L. When water temperatures exceed 22°C, the critical season dissolved oxygen standard may be depressed by 1 mg/L for no more than 8 hours during a 24-hour period.

† Not applicable for Clean Water Act purposes until approved by EPA.

# Plate ARV-1 (Arkansas River Valley)



**LEGEND**

- • Extraordinary Resource Waters
- • Natural and Scenic Waterways
- 2019 Variation by UAA
- Variation by UAA
- Ecologically Sensitive Waterbodies
- ESW Caves, Springs, and Seeps
- Trout Waters

