

ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION



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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: May 20, 2019

<u>Stream</u>	<u>Concentration-mg/L</u>		
	<u>Chlorides</u> (Cl ⁻)	<u>Sulfates</u> (SO ₄ ²⁻)	<u>TDS</u>
Unnamed trib)			
Unnamed trib to Big Creek	71	60	453
Lost Creek Ditch	20	30	270
Little Red River (including Greers Ferry Reservoir)	20	30	100
Black River	20	30	270
Strawberry River	20	30	270
Spring River	20	30	290
Eleven Point River	20	30	270
Stennitt Creek from Brushy Creek to Spring River	ER	ER	456*
<u>Brushy Creek from Unnamed Tributary to Stennitt Creek</u>	ER	<u>43.3†</u> <u>126†</u>	<u>549†</u>
<u>Unnamed Tributary from Vulcan Outfall 001 to Brushy Creek</u>	ER	<u>260†</u>	<u>725†</u>
South Fork Spring River	20	30	270
Myatt Creek	20	30	270
Current River	20	30	270
White River (Dam #3 to Missouri state line, including Bull Shoals Reservoir)	20	20	180
Buffalo River	20	20	200
Crooked Creek (Harrison WWTP outfall to Monitoring Station WHI0193)	22.6†	24.4†	269†
Crooked Creek (Monitoring Station WHI0193 to the mouth)	20	20	238†
White River (Missouri state line, including Beaver Reservoir)	20	20	160
White River from Noland WWTP to 0.4 miles downstream (WR-02)	44†	79†	362†
White River from WR-02 to WHI0052	30†	40†	237†
Kings River	20	20	150
West Fork White River	20	20	150
St. Francis River Basin			
St. Francis River (Mouth to 36° N. Lat.)	10	30	330
L'Anguille River	20	30	235
Tyronza River (headwaters to Ditch No. 6 confluence)	20	30	350
Ditch No. 27	ER	480	1200
Ditch No. 6 (mouth to Ditch No. 27 confluence)	ER	210	630
Tyronza River (mouth to Ditch No. 6 confluence)	20	60	350
Little River	20	30	365
Pemiscot Bayou	20	30	380
St. Francis River (36° N. Lat. to 36° 30' N. Lat.)	10	20	180
Ouachita River Basin			

Seasonal Ozark Highlands aquatic life use - all streams with watersheds of less than 10 mi² except as otherwise provided in Reg. 2.505

Perennial Ozark Highlands aquatic life use - all streams with watersheds of 10 mi² and larger and those waters where discharges equal or exceed 1-cfs

*As designated in the National Wild and Scenic Rivers System

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

Site Specific Designated Use Variations Supported by Use Attainability Analysis or Other Investigations

Railroad Hollow Creek - no fishable/swimmable uses (OH-1, #1)

Columbia Hollow Creek - seasonal aquatic life use March-June (OH-1, #2)

Curia Creek - below first waterfall, perennial aquatic life use (OH-4, #3)

Moccasin Creek - below Arkansas Highway 177, perennial aquatic life use (OH-3, #4)

Stennitt Creek- from Brushy Creek to Spring River, no domestic water supply use (OH-4, #6)

Brushy Creek - from Unnamed Tributary to Stennitt Creek, no domestic water supply use (OH-4, #11) †

Unnamed Tributary - from Vulcan Outfall 001 to Brushy Creek, no domestic water supply use (OH-4, #12) †

SPECIFIC STANDARDS: OZARK HIGHLANDS ECOREGION
(Plates OH-1, OH-2, OH-3, OH-4)

	<u>Streams</u>	<u>Lakes and Reservoirs</u>
Temperature °C (°F)*	29 (84.2)	32 (89.6)
Trout waters	20 (68)	
Turbidity (NTU) (base/all)	10/17	25/45
Minerals	see Reg. 2.511	see Reg. 2.511
Dissolved Oxygen**	<u>Pri.</u> <u>Crit</u>	see Reg. 2.505
<10 mi ² watershed	6 2	
10 to 100 mi ²	6 5	
>100 mi ² watershed	6 6	
Trout waters	6 6	

All other standards (same as statewide)

Site Specific Standards Variations Supported by Use Attainability Analysis

Railroad Hollow Creek: from headwaters to Spavinaw Creek - year-round dissolved oxygen - 2 mg/L (OH-1, #1)

Curia Creek - below first waterfall, critical season dissolved oxygen 6 mg/L (OH-4, #3)

Moccasin Creek - below Highway 177, critical season D.O. 5mg/L (OH-3, #4)

SWEPCO Reservoir - maximum temperature 54°C (limitation of 2.8°C above natural temperature does not apply) (OH-1, #5)

Stennitt Creek - from Brushy Creek to Spring River, total dissolved solids = 456 mg/L, sulfate = 43.3 mg/L (OH-4, #6) †

Brushy Creek from Unnamed Tributary to Stennitt Creek, sulfate = 126 mg/L, total dissolved solids = 549 mg/L (OH-4, #11) †

Unnamed Tributary from Vulcan Outfall 001 to Brushy Creek, sulfate = 260 mg/L, total dissolved solids = 725 mg/L (OH-4, #12) †

Crooked Creek – from Harrison WWTP outfall to ADEQ Monitoring Station WHI0193; chloride 22.6 mg/L, sulfate 24.4 mg/L; TDS 269 mg/L (OH-2, #7) †

Crooked Creek – from ADEQ Monitoring Station WHI0193 to mouth: TDS 238 mg/L (OH-3, #8) †

White River – from Noland WWTP to 0.4 miles downstream (WR-02), chloride = 44 mg/L, sulfate = 79 mg/L, TDS = 362 mg/L (OH-1, #7) †

White River – from WR-02 to WHI0052, chloride = 30 mg/L, sulfate = 40 mg/L, TDS = 237 mg/L (OH-1, #8) †

† Not applicable for clean water act purposes until approved by EPA.

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

**At water temperatures $\leq 10^{\circ}\text{C}$ 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.

Plate OH-4 (Ozark Highlands)



LEGEND

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

