

**DESIGNATED USES: DELTA ECOREGION**  
(Plates D-1, D-2, D-3, D-4)

**Extraordinary Resource Waters**

Second Creek (D-4)

Cache River above Cache Bayou -adjacent to natural areas (D-3)

Arkansas River below Dam #2 (D-5)

Strawberry River (D-1)

Two Prairie Bayou adjacent to natural areas (D-3)

**Natural and Scenic Waterways**

None

**Ecologically Sensitive Waterbodies**

Lower St. Francis River and lower 10 miles of Straight Slough -location of fat pocketbook mussel (D-2, D-4)

Right Hand Chute at confluence with St. Francis River -location of fat pocketbook mussel (D-2)

Departee Creek -location of flat floater mussel (D-1)

Black River at mouth of Spring River -location of pink mucket mussel (D-1)

**Channel-altered Delta Ecoregion Streams** – These include the majority of the streams in this ecoregion and are characterized by substantial alteration of the morphology of their main-stream channel as well as their tributary streams. Such alteration of the tributaries of these streams significantly affects the water quality and hydrology of the streams and their watersheds. Most of the upper segments of these waters have been dredged and straightened into ditches. Additionally most of the tributaries of these streams have been straightened, ditched and, in some cases, rerouted to quickly move water off the agriculture fields and into the major streams. In the lower segments of these waters, channel realignment is less expansive but most of these channels have been "snagged" to remove any in-stream obstructions (brush, logs, and other debris) and the stream channel and banks have been dredged to uniform depths and cleared of any obstructions. These include Cache River, Bayou DeView, Village Creek, Blackfish Bayou and others to be determined by the Department on a case by case basis.

**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

**Fisheries**

Trout – none

Lakes and Reservoirs – all

**Streams**

Seasonal Delta fishery – all streams with watersheds of less than 10 mi<sup>2</sup> except as otherwise provided in Reg. 2.505

Perennial Delta fishery – all streams with watersheds 10 mi<sup>2</sup> or larger and those waters where discharges equal or exceed 1 CFS

**Use Variation Supported by UAA**

Unnamed ditch to Little Lagrue Bayou -perennial Delta fishery (D-3, #1)

Little Lake Bayou -seasonal Delta fishery; no primary contact (D-5, #2)

Coon Creek and unnamed tributary from Frit Ind. -no domestic water supply use (D-1, #3)

Rocky Branch Creek and Bayou Meto from Rocky Branch Creek to Bayou Two Prairie - no domestic water supply use (D-3 #4)

Ditch No. 27 – no domestic water supply use (D-2, #5)

Ditch No. 6 – no domestic water supply use (D-2, #6)



**SPECIFIC STANDARDS: DELTA ECOREGION**  
(Plates D-J, D-2, D-3, D-4)

	<u>Least-Altered Streams</u>	<u>Channel-Altered Streams</u>	<u>Lakes and Reservoirs</u>		
Temperature EC (EF)*	30 (86)	32 *(89.6)	32 (89.6)		
White River	32 (89.6)				
St. Francis River	32 (89.6)				
Mississippi River	32 (89.6)				
Turbidity (NTU)(primary/storm)	45/84	75/250	25/45		
Arkansas River(primary/storm)	50/52				
Mississippi River(primary/storm)	50/75				
St. Francis River(primary/storm)	75/100				
Minerals	see Reg. 2.511	see Reg. 2.511	see Reg. 2.511		
Dissolved Oxygen (mg/l)**	<u>Pri</u>	<u>Crit</u>	<u>Pri</u>	<u>Crit.</u>	see Reg. 2.505
<10 mi2 watershed	5	2	5	2	
10 mi2 to 100 mi2	5	3	5	3	
>100 mi2 watershed	5	5	5	5	
All other standards	(same as statewide)				

Variations Supported by UAA

Unnamed ditch to Little Lagrue Bayou -from headwaters to confluence with Little Lagrue Bayou,  
critical season D.O. standard – 3 mg/l (D-3, #1)

Little Lake Bayou – critical season D.O. standard – 2 mg/l (D-5, #2)

Unnamed tributary from Frit Ind. to Coon Creek -sulfates 48 mg/l (D-1, #3)

Rocky Branch Creek and Bayou Meto from Rocky Branch Creek to Bayou Two Prairie -chlorides 64 mg/l (D-3, #4)

Ditch No. 27 – sulfates 480 mg/L; TDS 1,200 mg/L; maximum water temperature 95EF (D-2, #5)

Ditch No. 6 from Ditch No. 27 confluence to its mouth – sulfates 210 mg/L; TDS 630 mg/L (D-2, #6)

Tyronza River from Ditch No. 6 confluence to its mouth – sulfates 60 mg/L – see Reg. 2.511 (D-2, #7)

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

\*\* When water temperatures exceed 22EC, the critical season D.O. standard may be depressed by 1 mg/l for no more than 8 hours during a 24-hour period.

<u>Stream</u>	<u>Concentration-mg/L</u>		
	<u>Cl<sup>-</sup></u>	<u>SO<sub>4</sub><sup>2-</sup></u>	<u>TDS</u>
<b>Arkansas River Basin</b>			
Arkansas River (Mouth to L&D #7)	250	100	500
Bayou Meto (Rocky Branch to Bayou Two Prairie)	64*	ER	ER
Rocky Branch Creek	64*	ER	ER
Arkansas River (L&D #7 to L&D #10)	250	100	500
Cadron Creek	20	20	100
Arkansas River (L&D #10 to Oklahoma line, including Dardanelle Reservoir)	250	120	500
James Fork	20	100	275
Illinois River	20	20	300
Poteau River from Business Hwy 71 to Stateline	120	60	500
Unnamed trib at Waldron	150	70	660
<b>White River Basin</b>			
White River (Mouth to Dam #3)	20	60	430
Big Creek	20	30	270
Unnamed trib from Frit Ind.	ER	48*	ER
Cache River	20	30	270
Bayou DeView	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	ER	ER	456*
South Fork Spring River	20	30	270
Myatt Creek	20	30	270
Current River	20	30	270
White River (Dam #3 to Missouri line, including Bull Shoals Reservoir)	20	20	180
Buffalo River	20	20	200
Crooked Creek	20	20	200
White River (Missouri line to headwaters, including Beaver Reservoir)	20	20	160
Kings River	20	20	150
West Fork White River	20	20	150
<b>St. Francis River Basin</b>			
St. Francis River (Mouth to 36E N. Lat.)	10	30	330
L'Anguille River	20	30	235
Tyronza River (headwaters to Ditch No. 6 confluence)	20	30	350
Tyronza River (Ditch No. 6 confluence to mouth)	20	60	350
Little River	20	30	365
Pemiscot Bayou	20	30	380
St. Francis River (36E N. Lat. To 36E 30' N. Lat.)	10	20	180
<b>Ouachita River Basin</b>			
Bayou Bartholomew	30	30	220