#### **Exhibit B to Lion Oil Petition**

## **Legislative Questionnaire**

# QUESTIONNAIRE FOR FILING PROPOSED RULES AND REGULATIONS WITH THE ARKANSAS LEGISLATIVE COUNCIL AND JOINT INTERIM COMMITTEE

**DEPARTMENT/AGENCY** Arkansas Department of Environmental Quality

**DIVISION** Water Division

**DIVISION DIRECTOR** Steve Drown (Division Chief)

**CONTACT PERSON** Sarah Clem

ADDRESS 5301 Northshore Drive, North Little Rock, AR 72118-5317

**PHONE NO.** (501) 682-0660 **FAX NO.** (501) 682-0880 **E-MAIL** clem@adeq.state.ar.us

NAME OF PRESENTER AT COMMITTEE MEETING To be determined by ADEQ

**PRESENTER E-MAIL** To be determined by ADEQ

#### **INSTRUCTIONS**

A. Please make copies of this form for future use.

- B. Please answer each question <u>completely</u> using layman terms. You may use additional sheets, if necessary.
- C. If you have a method of indexing your rules, please give the proposed citation after "Short Title of this Rule" below.
- D. Submit two (2) copies of this questionnaire and financial impact statement attached to the front of two (2) copies of the proposed rule and required documents. Mail or deliver to:

Donna K. Davis Administrative Rules Review Section Arkansas Legislative Council Bureau of Legislative Research Room 315, State Capitol Little Rock, AR 72201

1. What is the short title of this rule?

Revisions to Arkansas Pollution Control & Ecology Commission Regulation No. 2 (Establishing Water Quality Standards for Surface Waters of the State of Arkansas)

2. What is the subject of the proposed rule?

The proposed rule will revise the chloride, sulfate, total dissolved solids ("TDS"), and selenium water quality criteria in Loutre Creek (a small waterbody in Union County), and change the fishery use designation for Loutre Creek to a new sub-category of fishery referred to as a Limited Gulf Coastal Fishery. The proposed rule will also revise the chloride, sulfate, and TDS criteria for one downstream segment in Bayou de Loutre, the sulfate and TDS criteria for the next downstream segment in Bayou de Loutre, and the sulfate criteria for the remaining downstream segments of Bayou de Loutre to the Louisiana State line.

3.	Is this rule required to comply with a federal statute, rule, or regulation? YesNo_X
	If yes, please provide the federal rule, regulation, and/or statute citation.
4.	Was this rule filed under the emergency provisions of the Administrative Procedure Act? Yes No_ $X$ _
	If yes, what is the effective date of the emergency rule?
	When does the emergency rule expire?
	Will this emergency rule be promulgated under the permanent provisions of the Administrative Procedure Act? Yes No
5.	Is this a new rule? Yes No_X*_ If yes, please provide a brief summary explaining the regulation.
categ revise the su	*The proposed rule will revise the chloride, sulfate, TDS, and selenium water quality ria in Loutre Creek, and change the fishery use designation for Loutre Creek to a new subory of fishery referred to as a Limited Gulf Coastal Fishery. The proposed rule will also the chloride, sulfate, and TDS criteria for one downstream segment in Bayou de Loutre, alfate and TDS criteria for the next downstream segment in Bayou de Loutre, and the sulfate in for the remaining downstream segments of Bayou de Loutre to the Louisiana State line.
	Does this repeal an existing rule? Yes No_X*_ If yes, a copy of the repealed rule is to be included with your completed questionnaire. If it is being replaced with a new rule, please provide a summary of the rule giving an explanation of what the rule does.
	Is this an amendment to an existing rule? Yes X* No_ If yes, please attach a mark-up showing the changes in the existing rule and a summary of the substantive changes. Note: The summary should explain what the amendment does, and the mark-up copy should be clearly labeled "mark-up."
Comr disap addre	* The proposed rule replaces the chloride, sulfate, and TDS water quality criteria for the Creek and Bayou de Loutre approved by the Commission in 2007. The 2007 mission-approved criteria remain codified in Regulation No. 2, but were subsequently proved by EPA. The rule also makes two changes to Regulation No. 2 that were not essed in the 2007 rulemaking: it designates a new sub-category of fishery for Loutre Creek associated selenium criterion to protect that fishery.
reque	See Attachment 1 for a marked-up copy of the pages in Regulation No. 2 affected by the ested regulatory changes. See Attachment 2 for a summary of the proposed rule.

6. Cite the state law that grants the authority for this proposed rule? <u>If codified, please give Arkansas Code citation.</u>

Statute: Arkansas Water and Air Pollution Control Act, A.C.A. § 8-4-201(b)(1)(A)

Regulation: Commission Regulations 2.303, 2.306, and 8.809

7. What is the purpose of this proposed rule? Why is it necessary?

These regulatory changes are critically important to Lion Oil. In 2004, ADEQ issued a wastewater discharge permit to Lion Oil that contained new sulfate, TDS, and selenium effluent limits based on state water quality criteria designed to protect a fishery that is neither a present nor an attainable use in Loutre Creek, and set at levels that are not necessary to protect designated uses further downstream in Bayou de Loutre. Lion Oil has undertaken significant efforts to investigate technologies and alternatives to meet these limits. Reasonably available control technology does not exist that would allow Lion Oil to consistently meet these limits. Without the revised criteria in the proposed rule, Lion Oil will not be able to consistently meet its sulfate, TDS, or selenium limits that apply to its discharges to Loutre Creek.

8. Please provide the address where this rule is publicly accessible in electronic form via the Internet as required by Arkansas Code § 25-19-108(b).

A copy of the draft regulation showing the proposed changes, along with related support documents, will be available for viewing or downloading on the draft regulations page of the ADEQ's Internet web site at <a href="https://www.adeq.state.ar.us">www.adeq.state.ar.us</a>.

9.	Will a public hearing be held on this proposed rule? Yes X No
	If yes, please complete the following:
	Date: During the week of March 18, 2013
	Time: To be determined by ADEQ
	Place: El Dorado, Arkansas at a location to be determined by ADEQ

10. When does the public comment period expire for permanent promulgation? (Must provide a date.)

Under Commission Regulation No. 8.806(B), the period for receiving written comments shall extend ten (10) business days beyond the date of the public hearing. Thus, the public comment period will end on April 1, 2013.

11.	What is the proposed effective date of this proposed rule? (Must provide a date.)			
Librar	This Regulation is effective ten (10) days after filing with the Secretary of State, the State y and the Bureau of Legislative Research.			

- 12. Do you expect this rule to be controversial? Yes\_\_\_\_ No\_ X\_ If yes, please explain.
- 13. Please give the names of persons, groups, or organizations that you expect to comment on these rules? Please provide their position (for or against) if known.

Arkansas Department of Environmental Quality

#### **Attachment 1**

### Marked-up Copy of Pages in Regulation No. 2 Affected by Requested Regulatory Changes

# ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION



#### **REGULATION NO. 2**

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

#### **INITIAL DRAFT**

Submitted to the PC & E Commission in January, 2013

#### Arkansas Pollution Control and Ecology Commission Regulation No. 2, As Amended

# Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas

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Little Red River (including Greers Ferry Reservoir)	<u>Stream</u>	Concer	ntration-n	ıg/L
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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         Bayou Bartholomew       50       20       500         Chemin-A-Haut Creek       50       20       500         Overflow Creek       20       30       170         Bayou Macon       30       40       330         Boeuf River       90       30       460         Big Cornie Creek       230       30       500         Little Cornie Creek       200       10       400         Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek <td></td> <td></td> <td></td> <td></td>				
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Pemiscot Bayou       20       30       380         St. Francis River (36° N. Lat. to 36° 30' N. Lat.)       10       20       180         Ouachita River Basin         Bayou Bartholomew       50       20       500         Chemin-A-Haut Creek       50       20       500         Overflow Creek       20       30       170         Bayou Macon       30       40       330         Boeuf River       90       30       460         Big Cornie Creek       230       30       500         Little Cornie Creek       200       10       400         Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek       104*       ER       311*				
St. Francis River (36° N. Lat. to 36° 30' N. Lat.)       10       20       180         Ouachita River Basin       50       20       500         Chemin-A-Haut Creek       50       20       500         Overflow Creek       20       30       170         Bayou Macon       30       40       330         Boeuf River       90       30       460         Big Cornie Creek       230       30       500         Little Cornie Creek       200       10       400         Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek       104*       ER       311*				
Ouachita River Basin         Bayou Bartholomew       50       20       500         Chemin-A-Haut Creek       50       20       500         Overflow Creek       20       30       170         Bayou Macon       30       40       330         Boeuf River       90       30       460         Big Cornie Creek       230       30       500         Little Cornie Creek       200       10       400         Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek       104*       ER       311*	· · · · · · · · · · · · · · · · · · ·			
Bayou Bartholomew       50       20       500         Chemin-A-Haut Creek       50       20       500         Overflow Creek       20       30       170         Bayou Macon       30       40       330         Boeuf River       90       30       460         Big Cornie Creek       230       30       500         Little Cornie Creek       200       10       400         Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek       104*       ER       311*	St. Prancis River (50 N. Lat. to 50 St N. Lat.)	10	20	160
Chemin-A-Haut Creek       50       20       500         Overflow Creek       20       30       170         Bayou Macon       30       40       330         Boeuf River       90       30       460         Big Cornie Creek       230       30       500         Little Cornie Creek       200       10       400         Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek       104*       ER       311*		<b>~</b> 0	•	<b>~</b> 00
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Bayou Macon       30       40       330         Boeuf River       90       30       460         Big Cornie Creek       230       30       500         Little Cornie Creek       200       10       400         Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek       104*       ER       311*				
Boeuf River       90       30       460         Big Cornie Creek       230       30       500         Little Cornie Creek       200       10       400         Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek       104*       ER       311*				
Big Cornie Creek       230       30       500         Little Cornie Creek       200       10       400         Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek       104*       ER       311*				
Little Cornie Creek       200       10       400         Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek       104*       ER       311*	Boeuf River	90	30	460
Three Creeks       250       10       500         Little Cornie Bayou       200       20       500         Unnamed trib from GLCC 003       538*       35*-       519*         Unnamed trib to Little Cornie Bayou       305*       ER       325*         Little Cornie Bayou from unnamed trib to State Line       215*       25*       500*         Walker Branch       180*       ER       970*         Gum Creek       104*       ER       311*	Big Cornie Creek	230	30	500
Little Cornie Bayou Unnamed trib from GLCC 003 Unnamed trib to Little Cornie Bayou Little Cornie Bayou from unnamed trib to State Line Walker Branch Gum Creek  200 20 500 251 538* 35* 519* 25* 25* 500* 180* ER 970* 180* ER 970*	Little Cornie Creek	200	10	400
Unnamed trib from GLCC 003 538* 35*- 519* Unnamed trib to Little Cornie Bayou 305* ER 325* Little Cornie Bayou from unnamed trib to State Line 215* 25* 500* Walker Branch 180* ER 970* Gum Creek 104* ER 311*	Three Creeks	250	10	500
Unnamed trib from GLCC 003 538* 35*- 519* Unnamed trib to Little Cornie Bayou 305* ER 325* Little Cornie Bayou from unnamed trib to State Line 215* 25* 500* Walker Branch 180* ER 970* Gum Creek 104* ER 311*	Little Cornie Bayou	200	20	500
Little Cornie Bayou from unnamed trib to State Line 215* 25* 500* Walker Branch 180* ER 970* Gum Creek 104* ER 311*		538*	35*-	519*
Little Cornie Bayou from unnamed trib to State Line 215* 25* 500* Walker Branch 180* ER 970* Gum Creek 104* ER 311*	Unnamed trib to Little Cornie Bayou	305*	ER	325*
Walker Branch Gum Creek  180* ER 970* 104* ER 311*	· · · · · · · · · · · · · · · · · · ·			
Gum Creek 104* ER 311*	· · · · · · · · · · · · · · · · · · ·			
	Bayou de L'Outre above Gum Creek Loutre Creek	250	90	500

<u>Stream</u>		entration-r	
	<u>C1</u>	$\underline{SO_4}$	<u>TDS</u>
Bayou de L'Outre below Gum Creek	250	90	750
Ouachita River (Louisiana line to Camden)	160	40	350
Saline River	20	40	120
Saline River east bifurcation at Holly Creek	ER	250	500
Hurricane Cr above Hurricane Lake Dam	20	250	500
Hurricane Cr from Hurricane Lk. Dam to Ben Ball	125	730	1210
Brdg Hurricane Cr from Ben Ball Bridge to Hwy. 270	125	700	1200
Hurricane CR from Hwy 270 to Saline River	100	500	1000
Alcoa unnamed tribs to Hurricane Cr.	125	700	1100
Alcoa unhamed thos to Humcane Cr.	123	700	1100
Dry Lost Creek and tribs	ER	560	880
Lost Creek to Little Lost Creek	ER	510	820
Lost Creek below Little Lost Creek	ER	300	550
Holly Creek	30	860	1600
Moro Creek	30	20	260
Smackover Creek	250	30	500
Unnamed trib A to Flat Creek from mouth	16*	80*	315*
of EDCC 001 ditch to confluence with Flat Creek			
Confluence with unnamed trib A to Flat Creek	23*	125*	475*
Bayou de L'Outre Creek above Loutre Creek	180	ER	970
Unnamed trib UT004 from GLCC	014*	ER	311*
Unnamed trib UT002 from GLCC	278*	90*	500*
Loutre Creek - from Hwy 15 South to the confluence	256 <u>241</u> *	997 <u>645</u> *	1756
of Bayou de Loutre	230 <u>2+1</u>	)) ( <u>043</u>	1354*
Bayou de Loutre - from Loutre Creek to the discharge	264255*	635410*	1236
for the City of El Dorado - South facility	207 <u>233</u>	033 <u>410</u>	976*
Bayou de Loutre - from the discharge for the City of	250*	/31 <mark>287</mark> *	966 <del>79</del> 9*
El Dorado-South downstream to the mouth of Gum	230	731 <u>207</u>	700 <u>177</u>
Creek			
Bayou de Loutre - from the mouth of Gum Creek	250*	2/5220*	780 <mark>750</mark> *
downstream to the mouth of Boggy Creek	230	343 <u>229</u>	780 <u>730</u>
Boggy Creek - from the discharge for Clean Harbors	631*	63*	1360*
El Dorado LLC to the confluence of Bayou de Loutre	051	0.5	1500
Bayou de Loutre- from the mouth of Boggy Creek	250*	296 <u>197</u> *	750*
downstream to the mouth of Hibank Creek	230	270 <u>177</u>	750
Bayou de Loutre - from the mouth of Hibank Creek	250*	263 <u>176</u> *	750*
downstream to the mouth of Mill Creek	250	203 <u>170</u>	750
Bayou de Loutre - from the mouth of Mill Creek	250*	237 <u>158</u> *	750*
downstream to the mouth of Buckaloo Branch	250	231 <u>130</u>	750
Bayou de Loutre- from the mouth of Buckaloo Branch	250*	216 <u>144</u> *	750*
downstream to the mouth of Bear Creek	230	210 <u>177</u>	130
Bayou de Loutre — <u>unnamed tributaries of Bayou de</u>	250*	198 <u>133</u> *	750*
Loutre from the mouth of Bear Creek	230	170 <u>133</u>	130
Louis nom the mount of Dear Cleek			

<b>Stream</b>		Conce	ntration-m	<u>g/L</u>
I	downstream to the final segment of Bayou de Loutre Bayou de Loutre (Final segment) – from the mouth of	250*	171 <mark>115</mark> *	750*
	Bear Creek to the Arkansas/Louisiana State Line	230.	1/1 <u>113</u> .	730
Quachita	a River (Camden to Carpenter Dam)	50	40	150
Guacina	Town Creek below Acme tributary	ER	200	700
	Unnamed trib from Acme	ER	330	830
	Little Missouri River	10	90	180
	Muddy Fork Little Missouri	ER	250	500
	Bluff Creek and unnamed trib.	ER	651*	1033*
	Garland Creek	250	250	500
	South Fork Caddo	ER	60	128
	Back Valley Creek	ER	250	500
	Wilson Creek from its mouth upstream approx.  1.7 miles at the UMETCO property line	56	250	500
Quachit	a River (Carpenter Dam to Headwaters,	10	10	100
	ing Lake Ouachita tributaries)	10	10	100
Red River Basin				
Bayou D	Porcheat	100	16*	250
	Albemarle unnamed trib (AUT) to Horsehead Creek	137*	ER	383*
	Horsehead Creek from AUT to mouth	85*	ER	260*
	Cypress Creek	250	70	500
	Crooked Creek	250	10	500
	Dismukes Creek	26	ER	157
	Big Creek from Dismukes to Bayou Dorcheat	20	ER	200
	rc Creek from Caney Creek to Red River	113*	283*	420*
Caney (		113*	283*	420*
Bodcau		250	70	500
Poston 1		120	40	500
Kelley 1	•	90	40	500
	ver from Oklahoma to confluence with Little River ver from Little River to Louisiana	250	200	850 500
Red KIV		250 120	200 100	500 500
	Sulphur River Days Creek	250	250	500
	McKinney Bayou	180	60	480
	Little River	20	20	100
	Saline River	20	10	90
	Mine Creek from Hwy 27 to Millwood	90	65	700
	Lake Cossatot River	10	15	70
	Upper Rolling Fork	20	20	100
	Rolling Fork from unnamed trib A to	130	70	670
	DeQueen Lake	130	70	070
	Unnamed tribs A and Al at Grannis	135	70	700
	Mountain Fork	20	20	110

<u>Stream</u>	<u>Concentration-mg/L</u>		
	<u>Cl</u>	$\underline{SO}_4$	<b>TDS</b>
Mississippi River (Louisiana line to Arkansas River)	60	150	425
Mississippi River (Arkansas River to Missouri line)	60	175	450

ER - ecoregion standard

#### (B) Ecoregion Reference Stream Minerals Values

The following values determined from Arkansas' least-disturbed ecoregion reference streams are considered to be the maximum naturally occurring levels. For waterbodies not listed above, any discharge which results in instream concentrations more than 1/3 higher than these values for CI and S04= or more than 15 mg/1, whichever is greater, is considered to be a significant modification of the water quality. Similarly, such modification exists if the following TDS values are exceeded after being increased by the sum of the increases to CI and S04. Such modifications may be made only in accordance with Reg. 2.306.

#### CALCULATED ECOREGION REFERENCE STREAM VALUES (mg/1)

Ecoregion	Chlorides	Sulfates	TDS
Ozark Highlands	17.3	22.7	250
<b>Boston Mountains</b>	17.3	15	95.3
Arkansas River Valley	15	17.3	112.3
Ouachita Mountains	15	20	142
Gulf Coastal Plains	18.7	41.3	138
Delta	48	37.3	411.3

#### (C) Domestic Water Supply Criteria

In no case shall discharges cause concentrations in any waterbody to exceed 250, 250 and 500 mg/1 of chlorides, sulfates and total dissolved solids, respectively, or cause concentrations to exceed the applicable limits in the streams to which they are a tributary, except in accordance with Reg. 2.306.

#### Reg. 2.512 Ammonia

Total ammonia nitrogen (N) shall not exceed those values and frequency of occurrence established in the following tables:

<sup>\* -</sup> based on critical background flow of 4 cfs

<sup>\*\* -</sup> These limits shall apply to all tributaries of Bayou Meto and Bayou Two Prairie listed in Appendix A Any modification of these values must be made in accordance with Reg. 2.306.

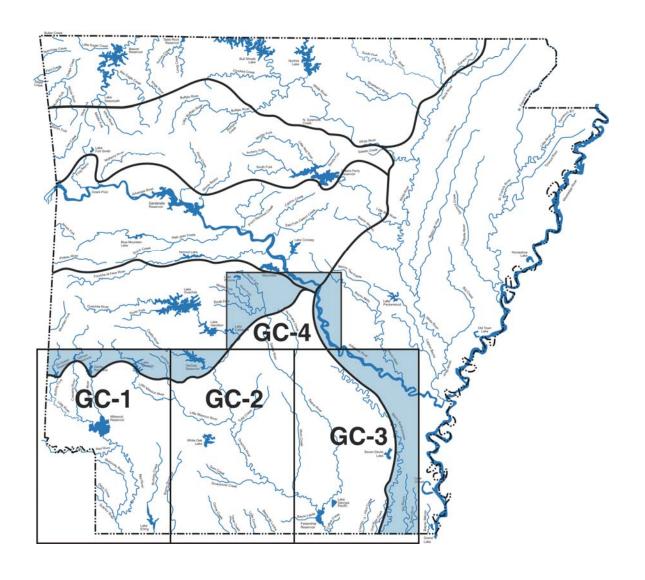


# REGULATION NO. 2 APPENDIX A

Designated Uses, Specific Standards and Maps of Waters of the State by Ecoregions

(September 24, 2010)

## **Index to Plates of the Gulf Coastal Plain**



#### **DESIGNATED USES: GULF COASTAL ECOREGION**

(Plates GC-1, GC-2, GC-3, GC-4)

#### **Extraordinary Resource Waters**

Saline River (GC-3, GC-4)

Moro Creek - adjacent to natural area (GC-3)

#### **Natural and Scenic Waterways**

Saline River from the Grant-Saline County line to mouth (GC-3)

#### **Ecologically Sensitive Waterbodies**

Little River above Millwood Reservoir - location of Ouachita rock pocketbook and pink mucket mussels (GC-1)

Grassy Lake and Yellow Creek below Millwood Reservoir - unique ecosystem and biota (GC-1)

Lower Little Missouri River - location of peppered shiner and longnose darter (GC-2)

Lower Saline River - location of peppered shiner, crystal darter and goldstripe darter (GC-3)

Ouachita River near Arkadelphia - location of flat floater, Ouachita rock pocketbook and pink mucket mussels (GC-2)

#### **Streams with Substantial Springwater Influence**

L'Eau Frais (GC-4)

Cypress Creek (GC-4)

East and West Fork Tulip Creeks (GC-4)

Others to be determined

**Primary Contact Recreation** - all streams with watersheds 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

Little Missouri River from Narrows Dam to confluence with Muddy Fork (GC-1)

**Lakes and Reservoirs** - all

**Streams** 

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

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

#### **Use Variations Supported by UAA**

Loutre Creek - perennial fishery, except seasonal from railroad bridge to mouth (GC-2,#1)

Unnamed tributary to Smackover Creek - no fishable/swimmable uses (GC-2,#2)

Unnamed tributary to Flat Creek - no fishable/swimmable uses (GC-2,#4)

Dodson Creek - perennial fishery (GC-4,#5)

Jug Creek - perennial fishery (GC-2,#6)

Lick Creek - seasonal fishery; no primary contact (GC-1,#7)

Coffee Creek and Mossy Lake - no fishable/swimmable or domestic water supply uses (GC-3,#8)

Red River from Oklahoma to confluence with Little River - No domestic water supply use (GC-1,#9)

Bluff Creek and unnamed tributary - no domestic water supply use(GC-1,#10)

Mine Creek from Highway 27 to Millwood Lake - no domestic water supply use (GC-1,#11)

Caney Creek - no domestic or industrial water supply use(GC-1,#12)

#### **Use Variations Supported by UAA**

Bois d'Arc Creek from Caney Creek to Red River - no domestic or industrial water supply use(GC-l,#13)

Town Creek below Acme tributary - no domestic water supply(GC-4,#14)

Unnamed trib. from Acme - no domestic water supply(GC-4,#14)

Gum Creek - no domestic water supply use(GC-2,#15)

Bayou de Loutre from Gum Creek to State line - no domestic water supply use(GC-2,#16)

Walker Branch - no domestic water supply use(GC-2,#17)

Little Cornie Bayou from Walker Branch to State line - no domestic water supply use(GC-2,#18)

Alcoa unnamed trib to Hurricane Cr. and Hurricane Cr. - no domestic water supply use(GC-4,#19)

Holly Creek - no domestic water supply use(GC-4,#20)

Dry Lost Creek and Tribs. - no domestic water supply use(GC-4,#21)

Lost Creek - no domestic water supply use(GC-4,#22)

Albemarle unnamed trib (AUT) to Horsehead Creek - no domestic water supply use(GC-2,#27)

Horsehead Creek from AUT to mouth - no domestic water supply use(GC-2,#27)

Dismukes Creek and Big Creek to Bayou Dorcheat - no domestic water supply

Boggy Creek from the discharge from Clean Harbors El Dorado LCC downstream to the confluence of Bayou de Loutre - no domestic water supply use

Unnamed tributary to Flat Creek from EDCC Outfall 001 d/s to confluence with unnamed tributary A to Flat Creek - no domestic water supply use (GC-2,#37)

Unnamed tributary A to Flat Creek from mouth of EDCC 001 ditch to confluence with Flat Creek - no domestic water supply use (GC-2,#38)

Flat Creek from mouth of UTA to confluence with Haynes Creek - no domestic water supply use (GC-2,#39)

Haynes Creek from mouth of Flat Creek to confluence with Smackover Creek - no domestic water supply use (GC-2,#40)

Loutre Creek- Limited Gulf Coastal Fishery (Small/Urbanized/Historical Resource Extraction) (GC-2, #41)

#### SPECIFIC STANDARDS: GULF COASTAL ECOREGION

(Plates GC-1, GC-2, GC-3, GC-4)

		pical eams	Spring Water Streams	Lakes and Reservoirs
Temperature °C (°F)* Ouachita River (state line to Little Missouri River) Red River	32	(86) (89.6) (89.6)	30 (86)	32 (89.6)
Turbidity (NTU) (base/all) Red River (base/all)	21/32 50/150		21/32	25/45
Minerals	see Re	g. 2.511		see Reg. 2.511
Dissolved Oxygen (mg/1) **	Pri.	Crit.		see Reg. 2.505
<10 mi <sup>2</sup> watershed 10 mi <sup>2</sup> -500 mi <sup>2</sup> >500 mi <sup>2</sup> watershed All sizes	5 5 5 6	2 3 5 5		
	,		• 1 \	

All other standards (same as statewide)

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

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

#### Variations Supported by UAA

Loutre Creek - from headwaters to railroad bridge, critical season D.O. standard - 3 mg/1; primary season - 5 mg/1; from railroad bridge to mouth, critical season D.O. - 2 mg/1 (GC-2,#1)

Unnamed tributary to Smackover Creek - headwaters to Smackover Creek, year round D.O. criteria - 2 mg/1 (GC-2,#2)

Unnamed tributary to Flat Creek - from headwaters to Flat Creek, year round D.O. criteria - 2 mg/1 (GC-2,#4)

Dodson Creek - from headwaters to confluence with Saline River, critical season D.O. standard - 3 mg/1 (GC-4,#5)

Jug Creek - from headwaters to confluence with Moro Creek, critical season D.O. standard - 3 mg/1 (GC-2,#6)

Lick Creek - from headwaters to Millwood Reservoir, critical season D.O. standard - 2 mg/1 (GC-1,#7)

Coffee Creek and Mossy Lake - exempt from Reg. 2.406 and Chapter Five (GC-3,#8)

Red River from Oklahoma to confluence with Little River - total dissolved solids - 850 mg/1 (GC-1,#9)

Bluff Creek and unnamed trib. - sulfates 651 mg/1; total dissolved solids 1033 mg/l(GC-l,#10)

Muddy Fork Little Missouri River - sulfates 250 mg/1; total dissolved solids 500 mg/l(GC-1,#24)

Little Missouri River - sulfates 90 mg/1; total dissolved solids 180 mg/l(GC-l,#25)

Mine Creek from Highway 27 to Millwood Lake - chlorides - 90 mg/1; sulfates - 65 mg/1; TDS - 700 mg/1 (GC-1,#11)

Caney Creek - chlorides 113 mg/1; sulfates 283 mg/1; total dissolved solids 420 mg/l(GC-1,#12)

Bois d'Arc Creek from Caney Creek to Red River - chlorides 113 mg/1; sulfates 283 mg/1; dissolved solids 420 mg/l(GC-1,#13)

Town Creek below Acme tributary - sulfates 200 mg/1; TDS 700 mg/l(GC-4,#14)

Unnamed trib. from Acme - sulfates 330 mg/1; TDS 830 mg/l(GC-4,#14)

Gum Creek - chlorides 104 mg/L; TDS 311 mg/L(GC-2,#15)

Bayou de Loutre from Gum Creek to State line - Chlorides 250 mg/1; TDS solids 750 mg/l(GC-2,#16)

Walker Branch - chlorides 180 mg/1; total dissolved solids 970 mg/l(GC-2,#17)

Ouachita River - from Ouachita River mile(ORM) 223 to the Arkansas-Louisiana border(ORM 221 .l),site specific seasonal D.O.criteria: 3 mg/L June and July; 4.5 mg/L August; 5 mg/L September through May. These seasonal criteria may be unattainable during or following naturally occurring high flows, (i.e., river stage above 65 feet measured at the lower gauge at the Felsenthal Lock and Dam, Station No.89-o, and also for the two weeks following the recession of flood waters below 65 feet), which occurs from May through August. Naturally occurring conditions which fail to meet criteria should not be interpreted as violations of these criteria (GC-3,#26)

Alcoa unnamed trib. to Hurricane Cr. And Hurricane Cr. - see Reg. 2.511 (CG-4,#19)

Holly Creek - See Reg. 2.511 (CG-4,#20)

Saline River bifurcation - see Reg. 2.511 (GC-4,#23)

Dry Lost Creek and tributaries - see Reg. 2.511 (GC-4,#21)

Lost Creek - see Reg. 2.511 (GC-4,#22)

Albemarle unnamed trib (AUT) to Horsehead Creek - chlorides 137 mg/1; TDS 383 mg/1 (GC-2,#27)

Horsehead Creek from AUT to mouth - chlorides 85 mg/1; TDS 260 mg/l (GC-2,#27)

Bayou Dorcheat - sulfates 16 mg/1 (GC-2,#27)

Dismukes Creek - chlorides 26 mg/L; TDS 157 mg/L (GC-2,#28)

Big Creek from Dismukes to Bayou Dorcheat - chlorides 20 mg/L; TDS 200 mg/L (GC-2,#28)

Bayou de Loutre from Chemtura outfall to Loutre Creek - maximum water temperature 96°F (GC-2,#29)

Unnamed tributary of Lake June below Entergy Couch Plant to confluence with Lake June - maximum water

temperature 95 degrees F (limitation of 5 degrees above natural temperature does not apply) (GC-1,#30)

Unnamed tributary from Great Lakes Chemical Company Outfall 002 to Bayou de Loutre-chloride 65, sulfate 35 mg/L, TDS 141 mg/L (GC-2,#31)

Unnamed tributary from Great Lakes Chemical Company Outfall 004 to Bayou de Loutre-chloride 239 mg/L., TDS 324 mg/L (GC-2,#32)

Bayou de Loutre from mouth of UT004 to mouth of Loutre Creek, chloride 278 mg/L (GC-2,#33)

Unnamed tributary from Great Lakes Chemical Company Outfall 003 (UT003) downstream to unnamed tributary to Little Cornie Bayou - chloride 538 mg/L, sulfate 35 mg/L, and TDS 519 mg/L (GC-2,#34)

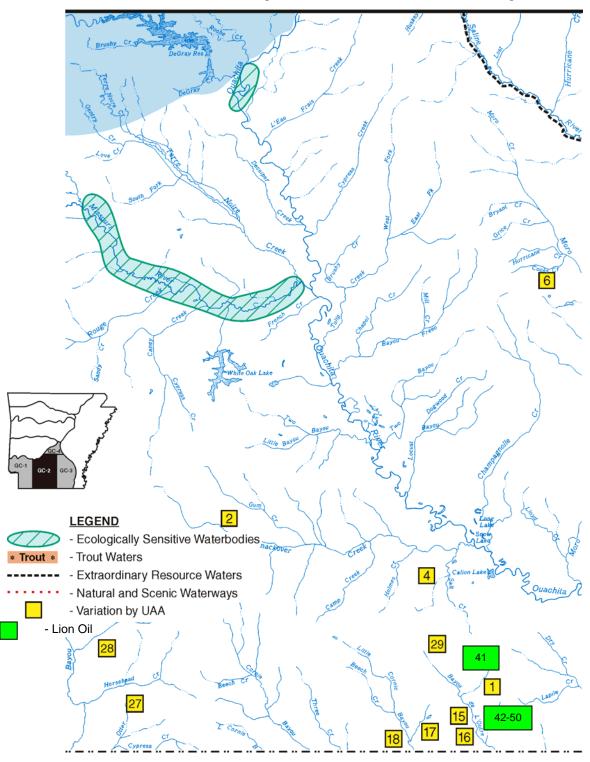
Unnamed tributary of Little Cornie Bayou to confluence with Little Cornie Bayou - chloride 305 mg/L and TDS

- 325 mg/L (GC-2,#35)
- Little Cornie Bayou from mouth UTA to state line- chloride 215mg/L,sulfate 25mg/L and TDS 500mg/L. (GC-2,#36)
- Unnamed tributary to Flat Creek from EDCC Outfall 001 d/s to confluence with unnamed tributary A to Flat Creek Chloride 23 mg/L, Sulfate 125 mg/L, TDS 475 mg/L, (GC-2,#37)
- Unnamed tributary A to Flat Creek from mouth of EDCC 001 ditch to confluence with Flat Creek, Chloride 16 mg/L, Sulfate 80 mg/L, TDS 315 mg/L, (GC-2,#38)
- Loutre Creek from Hwy 15 South to the confluence of Bayou de Loutre Chloride, 256241 mg/l\*; Sulfate 997645 mg/l\*, TDS, 47561354 mg/l\*, Selenium 38 ug/L (replaces chronic and acute criteria under Regulation 2.508) (GC-2, #41)
- Bayou de Loutre from Loutre Creek to the discharge for the City of El Dorado South facility Chloride, 264255mg/l\*; Sulfate 635410mg/l\*, TDS, 1236976 mg/l\* (GC 3,#42) (GC -42)
- Bayou de Loutre from the discharge from the City of El Dorado-South downstream to the mouth of Gum Creek. Chloride, 250 mg/l\*; Sulfate 431287 mg/1\*, TDS, 966799 mg/l\* (GC 3,#43)(GC-43)
- Bayou de Loutre from the mouth of Gum Creek downstream to the mouth of Boggy Creek Chloride, 250 mg/l\*: Sulfate 345229mg/l\*, TDS, 780750 mg/l\* (GC 3,#44)(GC-44)
- Bayou de Loutre from the mouth of Boggy Creek downstream to the mouth of Hibank Creek Chloride, 250 mg/l\*: Sulfate 296197 mg/l\*, TDS, 750 mg/l\* (GC 3,#45) (GC-45)
- Bayou de Loutre from the mouth of Hibank Creek downstream to the mouth of Mill Creek Chloride, 250 mg/l\*; Sulfate 263176mg/l\*, TDS, 750 mg/l\* (GC 3,#46)(GC-46)
- Bayou de Loutre from the mouth of Mill Creek downstream to the mouth of Buckaloo Branch Chloride, 250 mg/l\*: Sulfate 237158 mg/l\*, TDS, 750 mg/l\* (GC 3,#47)-(GC-47)
- Bayou de Loutre from the mouth of Buckaloo Branch downstream to the mouth of Bear Creek Chloride, 250 mg/l\*: Sulfate 216144mg/l\*. TDS, 750 mg/l\* (GC 3,#48)(GC-48)
- Bayou de Loutre <u>unnamed tributaries of Bayou de Loutre</u> from the mouth of Bear Creek to the final segment of Bayou de Loutre. Chloride, 250 mg/l\*; Sulfate 198133 mg/l\*, TDS, 750 mg/l\* (GC 3,#49) (GC-49)
- Bayou de Loutre (Final Segment) from the mouth of Bear Creek to the Arkansas / Louisiana State Line. Chloride, 250 mg/l\*; Sulfate 474115 mg/1\*, TDS, 750 mg/l\* (GC 3,#50) (GC-50)
- Boggy Creek from the discharge from Clean Harbors El Dorado LCC downstream to the confluence of Bayou de Loutre. Chloride, 63 mg/1; Sulfate, 63 mg/1, TDS, 1360; Selenium, 15.6 u/1
- McGeorge Creek (headwaters to Willow Springs Branch) Sulfate, 250 mg/L; TDS, 432 mg/L (GC-4,#52) Willow Springs Branch (McGeorge Creek to Little Fourche Creek) Sulfate, 112 mg/L; TDS 247 mg/L (GC-4,#53) Little Fourche Creek (Willow Springs Branch to Fourche Creek) TDS, 179 mg/L (GC-4,#54)

#### Variations Supported by EIP

Holly Creek; Selenium, Chronic Standard, 17ug/l (GC-4,#1)

# Plate GC-2 (Gulf Coastal Plain)



#### **Attachment 2**

## **Executive Summary of Proposed Rule**

#### Executive Summary of Lion Oil Company Proposed Revisions to APCEC Regulation No. 2

The proposed rule will revise the dissolved minerals (chloride, sulfate, total dissolved solids (TDS)), and selenium water quality criteria in Loutre Creek (a small waterbody in Union County), and change the fishery use designation for Loutre Creek to a new sub-category of fishery referred to as a Limited Gulf Coastal Fishery. The proposed rule will also revise the chloride, sulfate, and TDS criteria for one downstream segment in Bayou de Loutre, the sulfate and TDS criteria for the next downstream segment in Bayou de Loutre, and the sulfate criteria for the remaining downstream segments of Bayou de Loutre to the Louisiana State line.

New fishery sub-category. Loutre Creek is currently designated as supporting a Typical Gulf Coastal Fishery. The rule proposes a new sub-category of fishery for Loutre Creek referred to as a Limited Gulf Coastal Fishery. This limited fishery includes 12 species of fish identified during Lion Oil's 2009-2010 Aquatic Life Field Study of Loutre Creek as compared to the 24 or more species of fish that may characterize a Typical Gulf Coastal Fishery. This sub-categorization of the fishery reflects the actual fishery in Loutre Creek. The Typical Gulf Coastal Fishery has never been found in Loutre Creek and is not an attainable use.

New dissolved minerals criteria. In 2007, the Commission approved Lion Oil's Third Party Rulemaking to establish new dissolved minerals criteria for Loutre Creek and Bayou de Loutre. These criteria remain codified in Regulation No. 2, but EPA disapproved them in 2009 and requested additional information before it would approve them. The technical documentation that the Commission would rely on to approve the proposed rule includes this additional information and requests adoption of new dissolved minerals criteria that are more stringent than the criteria previously approved. The proposed rule will not result in an increase in dissolved minerals discharged to Loutre Creek or Bayou de Loutre because the rule establishes criteria more stringent than Lion Oil's historic discharge.

New selenium criterion. The proposed rule will not cause an increase in the amount of selenium discharged to Loutre Creek or Bayou de Loutre because it will establish a selenium criterion consistent with Lion Oil's historic discharge. Selenium is found in crude oil and is transferred to wastewater in the refining process. Consequently, it has likely been present in Loutre Creek since refining activities began in the watershed almost 90 years ago. The on-going presence of the Limited Gulf Coastal Fishery in Loutre Creek and the Typical Gulf Coastal Fishery in Bayou de Loutre indicates that existing concentrations of selenium are compatible with those fisheries.

Assuming the proposed rule is approved by the Commission and EPA, the Arkansas Department of Environmental Quality ("ADEQ") will be able to rely on the revised criteria to amend Lion Oil's National Pollutant Discharge Elimination System ("NPDES") permit limits for sulfate, TDS, and selenium. Lion Oil has undertaken considerable efforts to investigate technologies and alternatives to comply with the sulfate, TDS, and selenium limits in its current permit. Reasonably available control technology does not exist that would allow Lion Oil to consistently meet these current permit limits. Lion Oil has joined other NPDES permit holders in the region to construct a pipeline that will allow Lion Oil to discharge most of its treated wastewater to the Ouachita River, rather than to Loutre Creek. This pipeline is expected to be complete no later than August 31, 2013. Lion Oil will be able to significantly reduce its discharges to Loutre Creek when the pipeline is completed. However, without the revised criteria, Lion Oil will not be able to consistently meet the sulfate, TDS, or selenium permit limits that apply to its periodic discharges to Loutre Creek.