# State of Arkansas



## DEPARTMENT OF ENVIRONMENTAL QUALITY

## 2010 List of Impaired Waterbodies





#### ARKANSAS'S 2010 303(d) LIST (LIST OF IMPAIRED WATERBODIES)

Arkansas's 2010 List of Water Quality Limited Waterbodies has been formatted to reflect the most current guidance issued by the US Environmental Protection Agency (USEPA). As part of that guidance, USEPA suggests placing waterbody segments into categories reflecting their attainment status. Category 5 is subdivided by ADEQ for planning and management purposes.

- 1 = Attaining all water quality standards;
- 2 = Attaining some water quality standards, but there is insufficient data to determine if other standards are being attained;
- 3 = Insufficient data to determine if any water quality standards are attained;
  - No data available;
  - The data does not meet the spatial and/or temporal requirements outlined in this assessment methodology;
  - Waters in which the data is questionable because of QA/QC procedures and those requiring confirmation of impairment before a TMDL is scheduled.
- 4 = One or more water quality standards not attained but does not require the development of a TMDL because:
  - a. A TMDL has been completed for the listed parameter(s);
  - b. Waters which are impaired by point source discharges and future permits restrictions are expected to correct the problem(s).
  - c. Waters that currently do not meet an applicable water quality standard, but the impairment is not caused by a pollutant.
- 5 = The waterbody may be impaired, or one or more water quality standards may not be attained. Waterbodies in Category 5 will be prioritized in the following manner:

a. High

- Truly impaired; develop a TMDL or other corrective action(s) for the listed parameter(s).
- b. Medium
  - Waters currently not attaining standards, but may be de-listed with future revisions to Regulation No. 2, the state water quality standards; or
  - Waters which are impaired by point source discharges and future permit restrictions are expected to correct the problem(s).
- c. Low
  - Waters currently not attaining one or more water quality standards, but all designated uses are determined to be supported; or
  - There is insufficient data to make a scientifically defensible decision concerning designated use attainment; or
  - Waters ADEQ assessed as unimpaired, but were added to the list by EPA.

Water quality data from a very large pool of stream and lake sampling sites was considered. These stations were associated with either one of ADEQ's monitoring networks; special surveys conducted by ADEQ; sites maintained by the U.S. National Park Service; sites maintained by the U.S. Geological Survey; sites associated with the Arkansas Natural Resources Commission activities; and other entities that supplied the Department with data.

Each table within the list contains the name of the waterbody, HUC (Hydrologic Unit Code) and stream reach identifier, the number of stream miles affected, and the monitoring station(s) used to assess the segment. Some segments may have more than one designated use, or none at all, assessed as not attaining. Some segments are listed solely because a water quality standard is not being attained. Some stream segments are impaired by multiple sources (i.e. municipal point source and surface erosion) or causes (metals and silt), while an individual cause (silt) may be from multiple sources (municipal point source and surface erosion).

The Water Quality Limited Waterbody tables utilize the following abbreviations:

General:	Designated Uses:
x = Designated Use or	FC = Fish Consumption
Water Quality Standard not attained	$FSH = Fisheries^1$
H = High Priority	PC = Primary Contact
M = Medium Priority	SC = Secondary Contact
L = Low Priority	DW = Domestic Water Supply
	AI = Agriculture & Industry Water Supply
Water Quality Standard:	Sources:
Tb = Siltation/Turbidity	AG = Agriculture
AM = Ammonia	$SE = Surface Erosion^2$
$NO_2 - Nitrogen$	PF – Pesource Extraction

- $NO_3 = N_1 trogen$
- TP = Total Phosphorus
- pH = pH
- DO = Dissolved Oxygen
- PA = Pathogen Indicators (bacteria)
- Tm = Temperature
- CL = Chlorides
- $SO_4 = Sulfates$
- TDS = Total Dissolved Solids
- PO = Priority Organics
- Be = Beryllium
- Cd = Cadmium
- Cu = Copper
- Pb = Lead
- Zn = Zinc
- Hg = Mercury

#### Notes:

1 Previously Aquatic Life Use.

2 Surface Erosion - This category includes erosion from agriculture activities, construction activities, unpaved road surfaces, and in-stream erosion mainly from unstable stream banks.

- RE = Resource Extraction
- SV = Silviculture
- UR = Urban Runoff
- RC = Road Construction/Maintenance
- IP = Industrial Point Source
- MP = Municipal Point Source
- HP = Hydropower
- UN = Unknown

#### **Glossary of Terms Used**

**Channel-Altered Stream** – Waterbodies mainly located in the State's Delta ecoregion that have been straightened for irrigation and flood control purposes.

Fisheries – Fish, macroinvertebrate, and plant life in a waterbody.

**Hydrologic Unit Code (HUC)** – An eight digit number used to identify large sections of streams and/or rivers. Used in conjunction with the Stream Reach Identifiers.

**Macroinvertebrate** – Small aquatic organisms that live all or part of their life in the water. They are a vital part of the food chain in the stream.

**Nitrates** – A chemical in the water derived from nitrogen. Excessive nitrates in drinking water pose serious human health threats. Excessive nitrates in streams, rivers, and lakes can lead to excessive algae growth and can threaten the health of the aquatic life in those systems.

Pathogens – Bacteria, most commonly fecal coliforms and/or Escherichia coli.

**Quality Assurance/Quality Control (QA/QC)** – The procedures used when sampling, analyzing, assessing, and reporting environmental data to insure that the data is scientifically defensible.

**Regulation No. 2** – Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas (http://www.adeq.state.ar.us/regs/default.htm).

**Silt** – Very fine particles of soil that are easily transported in the water column of streams and rivers. These particles settle out onto the bottom of the streams and rivers and can impair the aquatic life of the waterbody.

**Stream Reach Identifier** – Three digit numbers used to identify distinct small portions of streams, rivers, and/or tributaries that make up larger hydrologic units.

**Total Dissolved Solids (TDS)** – Those particles in the water column that exist in the dissolved form and typically do not settle out onto the bottom of the stream.

**Total Maximum Daily Load (TMDL)** - a determination of the total amount of a substance that can be present in a waterbody without adversely affecting the designated use(s) of the waterbody.

Waterbody – A stream, river, lake, reservoir, or any portion thereof being referred to.

## **INTRODUCTION**

This assessment methodology considers the Environmental Protection Agency's (EPA) most current 305(b) reporting and 303(d) listing requirements and guidance following the percent method. In addition, ADEQ follows the specific requirements of 40 CFR Sections 130.7 and 130.8. The criterion within this assessment methodology are utilized to make attainment decisions of the designated uses of a given waterbody or waterbody segment. Monitoring data will be assessed based upon the frequency, duration, and/or magnitude of water quality standard exceedances. A one-time exceedance of water quality criteria due to anthropogenic disruptions may or may not cause a water quality impact, but allows for the pursuit of enforcement actions.

ADEQ develops a biennial report on the condition of the state's waters. As per EPA guidance, "Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act July 29, 2005," these waters are evaluated in terms of whether their assigned designated uses, as delineated in the Arkansas Pollution Control and Ecology Commission's Regulation No. 2, Reg 2.302, are being supported.

The following assessment methodology will be used to determine water quality standards attainment from long-term and/or frequently occurring exceedances of the water quality criteria.

The primary data used in the evaluations is generated as part of the Arkansas Department of Environmental Quality's (ADEQ) water quality monitoring activities as described in the most recent version of the "State of Arkansas's Water Quality Monitoring and Assessment Program." In addition, pursuant to 40 CFR §130.7(b)(5), ADEQ will assemble and evaluate all existing and readily available water quality data and information.

State and federal agencies and other entities that collect water quality data are solicited to aid ADEQ in its evaluation of the State's waters. All data submitted to ADEQ will be considered. However, the data must

- represent actual annual ambient conditions, as described below;
- have been collected and analyzed under a quality-assurance/quality-control protocol equivalent to or more stringent than that of ADEQ or the USGS;
- have been analyzed pursuant to the rules outlined in the State Environmental Laboratory Certification Program Act (Act 876 of 1985 as amended);
- be reported in standard units recommended in the relevant approved method;
- be accompanied by precise sample site location(s) data, preferably latitude and longitude in either decimal degrees or degrees, minutes, seconds;
- be received in either an excel spreadsheet or compatible format; and
- have been collected within the period of record.

The data set must be spatially and temporally representative of the actual annual ambient conditions of the waterbody. Sample locations in streams and open waterbodies should be characteristic of the main water mass or distinct hydrologic areas. At a minimum, samples distributed over at least three seasons (to include inter-seasonal variation) and over two years (to include inter-year variation) will be utilized. The data set should not be biased toward specific

conditions, such as flow, runoff, or season. No more than two-thirds of the samples should be in one year or one season. The exception to this is the analysis of data for those designated uses that require seasonally based water quality data; i.e. primary contact recreation, or macroinvertebrate data that should be collected over two seasons.

#### **PERIOD OF RECORD:**

metals and ammonia toxicity analysis - *April 1, 2006 to March 31, 2009* all other analyses - *April 1, 2004 to March 31, 2009* 

Data developed prior to the period of record should only be used for long-term trend analysis because the data would have been evaluated as part of a previous assessment. Data developed after the period of record, including but not limited to water quality data, the completion of surveys (including the completion of the final report), changes in water quality standards, and the completion of total maximum daily loads, will be considered during the next assessment period.

#### ASSESSMENT

ADEQ must take into consideration the possibility of naturally occurring disruptions that may cause exceedances of a standard, but do not result in designated use impairment. Exceedances resulting from *Naturally Occurring Excursions* (NOE), or determined to be *Natural Background* conditions, as defined in Reg. 2.106, will not be assessed as impaired. These determinations will be made on a case-by-case basis which will usually involve performing an intensive survey of the stream segment as outlined in the "State of Arkansas Water Quality Monitoring and Assessment Program, Revision 3, March 2009."

Routine water quality data collection generally follows a monthly or bimonthly sampling regime, producing 12 to 60 data points over a five-year period. Therefore, a minimum of 12 water quality samples is required for water quality standards attainment decisions, unless otherwise established by Regulation No. 2 or elsewhere in this assessment methodology

For the assessment of waterbodies with no new data, the previous assessment decisions will be carried forward. However, if a significant change in the water quality standards or the assessment methodology has occurred, and those changes would affect the previous assessment decisions, the waterbody will be re-assessed utilizing the dataset from the previous assessment.

The percent exceedance shown in the Assessment Criteria Tables are calculated using the total number of samples collected. The number of data points exceeding the criteria that are necessary for an assessment decision will be calculated and rounded up to the nearest whole number; e.g. 25% of 38 data points = 9.5, therefore ten (10) exceedances equal 25%.

An evaluated assessment of attainment of water quality standards, in the absence of data, can be made for contiguous stream segments to monitored waters if there is reason to believe that the segments are similar with respect to the watershed characteristics and watershed conditions. Otherwise, the contiguous stream segments will remain unassessed. An evaluated assessment of non-attainment can be made for contiguous stream segments to monitored waters if there is reason to believe that the segments are similar with respect to the potential cause and magnitude of impairment. However, an evaluation of non-attainment can not be made for contiguous stream segments to monitored waters when the source or the origin of the source of the impairment is unknown, and/or when the magnitude or frequency of the impairment is such that contiguous segments may not be affected. In addition, an evaluation of non-attainment can not be made for contiguous stream segments to monitored waters when a tributary enters the water body either upstream or downstream of the monitored segment, and monitoring data for that tributary indicates impairment. In such cases, the contiguous stream segments will remain unassessed.

Water quality standards, assessment criteria, and monitoring strategies are currently being developed for the state's lakes. Once these items have been adopted into Regulation No. 2 and compiled into the State's overall monitoring strategy plan, an assessment methodology can be developed that will address lake water quality standards. Until this has been accomplished, only those water quality standards currently listed in Regulation No. 2 can be assessed. In addition, there has not been a significant quantity of data collected from any of the states lakes in the past five years, except for a very limited amount of data collected from four lakes to determine reference conditions.

#### Narrative Criteria

Waters will be assessed as "non-support" when violation of any narrative water quality standard has been verified by ADEQ. This will be accomplished by use of reports documenting a water quality standards impairment caused by the exceedance of a narrative criterion. The validity of the report must have been verified by an ADEQ employee. In addition, waters will be assessed as "non-support" if any associated numeric standard of a narrative criterion is violated pursuant to this assessment methodology.

#### Numeric Criteria

All waters of the State with qualifying data will be assessed as either "support" or "nonsupport" based on the assessment of numeric criteria outlined in Section 4.0.

#### **Impairment Source Determination**

For any water body segment where a water quality standard has been evaluated as not supported, the source(s) of impairment will be identified using available information (field observation, land use maps, point source location, nonpoint source assessment reports, special studies, and knowledge of field personnel familiar with the water body) and best professional judgment.

## WATER QUALITY STANDARDS

#### Antidegradation

A Tier 3 waterbody (e.g. Extraordinary Resource Waters, Ecologically Sensitive Waters, Natural and Scenic Waterways) will be listed as "non-support" if the water quality that existed at the time of designation has declined. For all other waters (Tier 1 and Tier 2) the listing requirements discussed above will apply.

The following are ecoregion or stream segment-specific assessment criteria that are used to evaluate waterbody water quality standards attainment. These criteria were developed using Arkansas's water quality standards, EPA guidance documents, and historical surveys.

Designated Use	Parameters
Fisheries (Regulation 2.302F)	Biological Integrity (macroinvertebrate and/or fish) data.
Domestic Water Supply (Regulation 2.302G)	Compounds which are not easily removed by drinking water treatment facilities; compounds with established secondary MCL's, e.g., Cl, SO <sub>4</sub> , TDS,
Primary and Secondary Contact (Regulation 2.302D, E)	<i>Escherichia coli</i> (use Fecal Coliform bacteria data in the absence of <i>E. coli</i> data).
Industrial Water Supply (Regulation 2.302H)	Compounds which interfere with industrial uses such as cooling water or the water used in certain manufacturing
Agriculture Water Supply (Regulation 2.302I)	processes; or waters unsuitable for livestock watering or crop irrigation; most often includes CL, SO <sub>4</sub> , TDS.

#### **Designated Uses**

Arkansas bases its water quality assessments on the ability of a waterbody to support the State's water quality standards. Two decisions are employed – "Supporting" and "Not Supporting." A waterbody is assessed as "Supporting" if the waterbody meets all assessment criteria for which data are available. A waterbody will be assessed as "Not-Supporting" if any assessment criterion is not attained.

Key to the footnotes in the assessment criteria tables is as follows:

- 1 Except for site specific standards approved in water quality standards
- 2 Criteria based on 90<sup>th</sup> percentile of ecoregion values
- 3 Refers to the number of data points instead of a percentage (i.e. greater than one value exceeding criteria = non-support).

#### General Criteria

#### **Reg. 2.405 - Biological Integrity**

The Fisheries designated use (aquatic life) will be evaluated based on the biological integrity (macroinvertebrate and/or fish communities) of the waterbody, if biological data exists to make an evaluation. At a minimum, the data must have been collected over two seasons using methods outlined in a quality assurance project plan with requirements equal to or more stringent than that of ADEQ's. The following tables outline the evaluation protocol and the listing protocol for biological integrity support determinations.

Indicator	Data Type	Supporting	Not Supporting			
Macroinvertebrate Community	Macroinvertebrate	Until MBMI* is developed and critiqued, an upstream/downstream comparison of communities will be utilized, or the community data will be compared to historical ecoregion data using: total taxa richness, EPT, and % dominant taxa. As these metrics are indicative of perturbation/degradation.				
	Community Data Available	Hilsenhoff Biotic Index (HBI), Ephemeroptera/Plecoptera/Trichoptera (EPT), and taxa richness indices are highly, generally, or fairly similar to comparison site.	HBI, EPT, and taxa richness indices are not similar to comparison site.**			
Fish Community	Fish Community Data Available	IBI score either highly, generally, or fairly similar; general presence of sensitive and indicator species.	IBI score not similar; absence of sensitive and indicator species.**			

#### **Biological Integrity Evaluation Protocol**

\* - Macroinvertebrate Biological Monitoring Index

\*\* - The aquatic life will be assessed as fully supporting if the low IBI score is caused by an abnormal occurrence in the aquatic life community, not an environmental factor (low dissolved oxygen, low pH, toxicity).

Evaluation methods for the determination of similarity as referenced in the table above are those outlined in Arkansas's Water Quality and Compliance Monitoring Quality Assurance Project Plan, May 2009 (QTRAK #07-350).

#### Specific Standards

#### Reg. 2.502 - Temperature

If more than 10 percent of the total samples from a site exceed the water temperature standard, as listed in the following tables, because of a discernible man-induced cause, the water body will be listed as not attaining the temperature standard. However, if the water temperature standard is exceeded due to a natural condition, excessively high ambient temperatures, drought, etc., the water body will not be listed as impaired.

True of Doto	Evaluation Result			<b>303</b> (d)
Present	Fish Community	Macroinvertebrate Community	Assessment	Listing Category
Fish Community	S	S	FS	1
Macroinvortabrata	S	NS	NS	5
Community	NS	S	NS	5
Community	NS	NS	NS	5
	S	NA	FS	1
At Least One	NA	S	FS	1
Biological	S	S	NA	1
Diological	NA	S	NA	1
Community	NS	NA	NS	5
	NA	NS	NS	5
Fish Community	S	S	FS	1
and/or	S	NS	NS	5
Macroinvertebrate	NS	S	NS	5
Community	NS	NS	NS	5
S = Supporting N	VS = Not Supporting	FS = Fully Supporting NA =	None Available	

## **Fisheries Designated Use Listing Protocols**

#### ASSESSMENT CRITERIA FOR OZARK HIGHLANDS ECOREGION STREAMS

PARAMETER	STAN	IDARD	SUPPORT		NON-SUPPORT	
			DATA	POINTS EXC	EEDING CRITERIA	
TEMPERATURE <sup>1</sup>	29 C		< =	10%	>10	0%
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical
<10 mi <sup>2</sup>	6	2	< 5 samples or <= 10% >10%		0%	
10-100 mi <sup>2</sup>	6	5	< 5 samples	< 5 samples or $< = 10%$		0%
> 100 mi <sup>2</sup>	6	6	< 5 samples	< 5 samples or <= 10% >10%		0%
Trout Waters	6	6	< 5 samples	or < = 10%	>10	0%
pH	6 to 9 stand	lard pH units	< =1	10%	>10	0%
TURBIDITY						
Base Flows	10	NTU	< = 25%		>2:	5%
All Flows	17	NTU	< =	20%	>20	0%

PARAMETER	STAN	IDARD	SUPPORT		NON-SUPPORT	
			DATA	POINTS EXC	EEDING CRI	ΓERIA
TEMPERATURE <sup>1</sup>	3	1 C	< = 10%		>10%	
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical
<10 mi <sup>2</sup>	6	2	< 5 samples or $< = 10%$		>10%	
> 10 mi <sup>2</sup>	6	6	< 5 samples or $< = 10%$		>10%	
pH	6 to 9 stand	lard pH units	<=10%		>10%	
TURBIDITY						
Base Flows	10 NTU		<= 25%		>2:	5%
All Flows	19	NTU	< = 2	20%	>20	0%

#### ASSESSMENT CRITERIA FOR BOSTON MOUNTAINS ECOREGION STREAMS

#### ASSESSMENT CRITERIA FOR ARKANSAS RIVER VALLEY ECOREGION STREAMS

PARAMETER	STAN	IDARD	SUPPORT		NON-SUPPORT		
			DATA	POINTS EXC	EEDING CRI	EDING CRITERIA	
TEMPERATURE <sup>1</sup>	3	1 C	< =	10%	>10%		
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical	
<10 mi <sup>2</sup>	5	2	< 5 samples or < = 10%		>10%		
10-150 mi <sup>2</sup>	5	3	< 5 samples or $< = 10%$		>10%		
151-400 mi <sup>2</sup>	5	4	< 5 samples or <= 10%		>10%		
>400 mi <sup>2</sup>	5	5	< 5 samples	or <= 10%	>10%		
pH	6 to 9 stand	lard pH units	<=10%		>10%		
TURBIDITY							
Base Flows	21	NTU	< = 25%		>25%		
All Flows	40	NTU	< =	20%	>2	0%	

#### ASSESSMENT CRITERIA FOR OUACHITA MOUNTAINS ECOREGION STREAMS

PARAMETER	STAN	IDARD	SUPPORT		NON-SUPPORT	
			DATA POINTS EXCEEDING CRITERIA			
TEMPERATURE <sup>1</sup>	30	) C	< =	10%	>10%	
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical
<10 mi <sup>2</sup>	6	2	< 5 samples or $< = 10%$		>10%	
>10 mi <sup>2</sup>	6	6	< 5 samples or $< = 10%$		>10%	
pH	6 to 9 stand	lard pH units	<=10%		>10%	
TURBIDITY						
Base Flows	10 NTU		< = 25%		>25%	
All Flows	18	NTU	< = 20%		>20%	

PARAMETER	STAN	IDARD	SUPPORT		NON-SUPPORT		
			DATA	DATA POINTS EXC		EEDING CRITERIA	
TEMPERATURE <sup>1</sup>	30	0 C	<=10% >10%		0%		
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical	
<10 mi <sup>2</sup>	5	2	< 5 samples or $< = 10%$		>10%		
10-500 mi <sup>2</sup>	5	3	< 5 samples	< 5 samples or $< = 10%$		>10%	
>500 mi <sup>2</sup>	5	5	< 5 samples	or <= 10%	>10%		
pH	6 to 9 stand	lard pH units	< =	10%	>1	0%	
TURBIDITY							
Base Flows	21 NTU		< = 25%		>2	.5%	
All Flows	32	NTU	<=	20%	>2	.0%	

#### ASSESSMENT CRITERIA FOR GULF COASTAL ECOREGION (typical streams)

#### ASSESSMENT CRITERIA FOR GULF COASTAL ECOREGION (springwater influenced)

PARAMETER	STAN	IDARD	SUPPORT		NON-SUPPORT	
		EEDING CRITERIA				
TEMPERATURE <sup>1</sup>	30 C		< = 10%		>10%	
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical
ALL WATERSHEDS	6	5	< 5 samples or $< = 10%$		>10%	
pH	6 to 9 stand	lard pH units	<=10%		>10%	
TURBIDITY						
Base Flows	21 NTU		< = 25%		>2	.5%
All Flows	32	NTU	< = 20%		>20%	

#### ASSESSMENT CRITERIA FOR DELTA ECOREGION (least altered)

PARAMETER	STAN	IDARD	SUPPORT		NON-SUPPORT		
			DATA	POINTS EXC	EEDING CRITERIA		
TEMPERATURE <sup>1</sup>	3	0 C	<=	10%	>10%		
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical	
<10 mi <sup>2</sup>	5	2	< 5 samples or $< = 10%$		< 5 samples or <= 10% >10%		
10-100 mi <sup>2</sup>	5	3	< 5 samples	< 5 samples or $< = 10%$		>10%	
>100 mi <sup>2</sup>	5	5	< 5 samples	or <= 10%	>1	0%	
pH	6 to 9 stand	lard pH units	<=10%		>1	0%	
TURBIDITY							
Base Flows	45 NTU		<=25%		>2	5%	
All Flows	84	NTU	<=	20%	>2	.0%	

PARAMETER	STAN	IDARD	SUPPORT		NON-SUPPORT		
			DATA	POINTS EXC	EEDING CRI	TERIA	
TEMPERATURE <sup>1</sup>	32	2 C	< =	10%	>10%		
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical	
<10 mi <sup>2</sup>	5	2	< 5 samples or $< = 10%$		< 5 samples or <= 10% >10%		
10-100 mi <sup>2</sup>	5	3	< 5 samples	< 5 samples or < = 10%		>10%	
>100 mi <sup>2</sup>	5	5	< 5 samples	< 5 samples or $< = 10%$		0%	
pH	6 to 9 stand	lard pH units	< =	10%	>1	0%	
TURBIDITY							
Base Flows	75 NTU		<=25%		>2	.5%	
All Flows	250	NTU	< =	20%	>2	.0%	

#### ASSESSMENT CRITERIA FOR DELTA ECOREGION (channel-altered)

ASSESSMENT CRITERIA FOR WHITE RIVER (MAIN STEM)

PARAMETER	STANDARD SUPPORT		NON-SUPPORT				
	DATA PO		POINTS EXC	EEDING CRI	TERIA		
TEMPERATURE <sup>1</sup>							
DAM #1 TO MOUTH	3	2 C	< =1	10%	>10%		
OZARK HIGHLANDS	2	9 C	< =	10%	>1	0%	
TROUT WATERS	2	0 C	< =	10%	>1	0%	
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical	
DELTA	5	5	< 5 samples	or <= 10%	>1	0%	
OZARK HIGHLANDS	6	6	< 5 samples	or <= 10%	>10%		
TROUT WATERS	6	6	< 5 samples	< 5 samples or < = 10%		>10%	
pH	6 to 9 stand	lard pH units	< =10%		>10%		
CL/SO <sub>4</sub> /TDS <sup>1</sup>							
Mouth to Dam #3	20/6	50/430	< =10%		>1	0%	
DAM #3 TO MO. LINE <sup>1</sup>	20/2	20/180	<=10%		>1	0%	
MO. LINE TO HEADWATERS <sup>1</sup>	20/2	20/160	< =10%		>1	0%	
TURBIDITY							
Base Flows - Delta	45 NTU		<= 25%		>2	5%	
All Flows - Delta <sup>2</sup>	84 NTU		<= 20%		>2	0%	
Base Flows - Ozark Highlands	10	NTU	< = 1	<=25%		5%	
All Flows - Ozark Highlands <sup>2</sup>	17	NTU	<= 20%		>20%		

PARAMETER	STANDARD		SUPPORT		NON-SUPPORT	
			DATA POINTS EXCEEDING CRITERIA			ITERIA
TEMPERATURE <sup>1</sup>	3:	2 C	< =	10%	>	10%
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical
ALL WATERS	5	5	< 5 samples	< 5 samples or $< = 10%$		10%
pH	6 to 9 standard pH units		<=10%		>10%	
CL/SO <sub>4</sub> /TDS <sup>1</sup>						
MOUTH TO 36 <sup>0</sup> N. LAT. <sup>1</sup>	10/3	0/330	<=10%		>	10%
36 <sup>0</sup> N. LAT. TO 36 <sup>0</sup> 30'N LAT. <sup>1</sup>	10/2	0/180	<=10%		>	10%
TURBIDITY						
Base Flows	75 NTU		< = 25%		>	25%
All Flows	100	NTU	< = 20%		>2	20%

#### ASSESSMENT CRITERIA FOR ST. FRANCIS RIVER

#### ASSESSMENT CRITERIA FOR THE ARKANSAS RIVER

PARAMETER	STANDARD		SUPPORT		NON-SUPPORT	
			DATA POINTS EXCEEDING CRITERIA			TERIA
TEMPERATURE <sup>1</sup>	32	2 C	< =	10%	>10%	
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical
ALL WATERS	5	5	< 5 samples	or < = 10%	>10	)%
pH	6 to 9 standard pH units		<=10%		>10%	
CL/SO <sub>4</sub> /TDS <sup>1</sup>						
MOUTH TO L&D #7 <sup>1</sup>	250/1	00/500	< =	10%	>10	)%
L&D #7 TO L&D #10 <sup>1</sup>	250/1	00/500	< =	10%	>10	)%
L&D #10 TO OK LINE <sup>1</sup>	250/120/500		<=10%		>10	)%
TURBIDITY						
Base Flows	50 NTU		< =	25%	>25	5%
All Flows	52	NTU	< =	20%	>20	)%

PARAMETER	STANDARD		SUPPORT		NON-SUPPORT	
		DATA POINTS EXCE		EEDING CRI	TERIA	
TEMPERATURE <sup>1</sup>						
L. MISSOURI TO S.LINE	32	2 C	<=	10%	>1	0%
ABOVE L. MISSOURI	30	0 C	< =	10%	>1	0%
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical
ALL WATERS	5	5	< 5 samples	or <= 10%	>10%	
рН	6 to 9 standard pH units		<=10%		>1	0%
CL/SO <sub>4</sub> /TDS <sup>1</sup>						
LA LINE TO CAMDEN <sup>1</sup>	160/4	40/350	< =10%		>1	0%
CAMDEN TO CARPENTER DAM <sup>1</sup>	50/4	0/150	< =10%		>10%	
CARPENTER DAM TO HEADWATERS <sup>1</sup>	10/10/100		< =10%		>1	0%
TURBIDITY						
Base Flows	21 NTU		< = 25%		>2	5%
All Flows	32	NTU	< = 20%		>2	0%

#### ASSESSMENT CRITERIA FOR THE OUACHITA RIVER

#### ASSESSMENT CRITERIA FOR THE RED RIVER

PARAMETER	STAN	DARD	SUPPORT		NON-SUPPORT	
			DATA	A POINTS EXC	EEDING CRIT	ERIA
TEMPERATURE <sup>1</sup>	32	2 C	< = 10%		>10%	
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical
ALL WATERS	5	5	< 5 samples or < = 10%		>10%	
pH	6 to 9 standard pH units		< =10%		>10%	
CL/SO <sub>4</sub> /TDS <sup>1</sup>						
OK LINE TO CONFLUENCE WITH LITTLE RIVER <sup>1</sup>	250/200/850		< =10%		>10	)%
LITTLE RIVER TO LA LINE <sup>1</sup>	250/20	00/500	<=10%		>10	)%
TURBIDITY						
Base Flows	50 NTU		<= 25%		>25	5%
All Flows	150	NTU	< = 20%		>20%	

PARAMETER	STANDARD		SUP	PORT	NON-SUPPORT		
			DATA	DATA POINTS EXCEEDING CRITERIA			
TEMPERATURE <sup>1</sup>	3	2 C	< =	< = 10%		>10%	
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	Primary	Critical	Primary	Critical	Primary	Critical	
ALL WATERS	5	5	< 5 samples	or <= 10%	>10%		
pH	6 to 9 standard pH units		<=10%		>10%		
CL/SO <sub>4</sub> /TDS <sup>1</sup>							
LA LINE TO AR RIVER <sup>1</sup>	60/1	50/425	<=10%		>1	0%	
AR RIVER TO MO LINE <sup>1</sup>	60/1	75/450	<=10%		>10%		
TURBIDITY							
Base Flows	50 NTU		< =	25%	>2	5%	
All Flows	75	NTU	< =	20%	>2	0%	

#### ASSESSMENT CRITERIA FOR THE MISSISSIPPI RIVER

#### ASSESSMENT CRITERIA FOR LAKES

PARAMETER	STANDARD	SUPPORT	NON-SUPPORT
		DATA POINTS EXCEEDING CRITERI	
TEMPERATURE <sup>1</sup>	32 C	< = 10%	>10%
DISSOLVED OXYGEN <sup>1</sup> (mg/l)	5	< 5 samples or $< = 10%$	>10%
pH	6 to 9 standard pH units	<=10%	>10%
CL/SO <sub>4</sub> /TDS <sup>1</sup>	205/205/500	< =10%	>10%
TURBIDITY			
Base Flows	25 NTU	< = 25%	>25%
All Flows	45 NTU	< = 20%	>20%

#### Reg. 2.503 – Turbidity

Turbidity, Reg. 2.503, will be evaluated for both base and all flows. If a waterbody is not meeting either of these conditions, it will be listed as not supporting the turbidity criteria.

Base flow values represent the critical season, June 1 to October 31, when rainfall is infrequent. If four or more samples, or more than 25 percent of the total samples, whichever is greater, collected between June 1 and October 31 for the period of record exceed the base flows values, the stream segment will be listed as not attaining the turbidity standard.

All flows assessment takes into account samples collected throughout the year. If more than 20 percent of the total samples (not to be less than 24) collected from the Ambient Water Quality Monitoring Network (AWQMN) sites exceed the all flows values, the waterbody will be listed as not attaining the turbidity standard. For data collected from sites other than the AWQMN, if five or more samples, or more than 20 percent of the total samples, whichever is greater, exceed the all flows values, the waterbody will be listed as not attaining the turbidity standard.

#### Reg. 2.504 - pH

If greater than 10 percent of the samples collected exceed the pH standards due to a waste discharge, the waterbody will be listed as not attaining the pH standard.

#### Reg. 2.505 - Dissolved Oxygen

Dissolved oxygen standards are divided into two categories: primary season when water temperatures are at or below  $22^{\circ}$  C; and critical season when water temperatures exceed  $22^{\circ}$  C. If five or more samples, or greater than 10 percent of the total samples collected, which ever is greater, fail to meet the minimum dissolved oxygen standard, the water body will be listed as not attaining the dissolved oxygen standard.

#### Reg. 2.506 - Radioactivity

For the assessment of ambient waters for radioactivity, at no time shall the concentration of radium-226 exceed 3 picocuries/Liter nor shall the concentration of strontium-90 exceed 10 picocuries/Liter. If qualifying data indicate an exceedance of either of these parameters, the water body will be listed as impaired.

#### Reg. 2.507 - Bacteria

For assessment of ambient waters, contact recreation designated uses will be evaluated using *Escherichia coli* as outlined in Reg. 2.507. In the absence of *Escherichia coli* bacteria data, fecal coliform bacteria data will be utilized as outlined in Reg. 2.507. In either case, a minimum of eight (8) samples, all of which must be collected and equally spaced within one contact recreation season (May through September or October through April of contiguous months) to make an evaluation of non-attainment. However, a minimum of six (6) samples, all of which must meet the criteria, may be used to make an evaluation of attainment. The geometric mean will be calculated on a minimum of five (5) samples equally spaced over a 30-day period.

In either case, if either the single sample criterion or the geometric mean is exceeded for the period of record, the waterbody will be listed as impaired. Data sets of less than those described above will be evaluated if they represent actual seasonal or annual ambient conditions as discussed earlier. Listings prior to 2004 may have identified waterbodies as water quality impaired using fecal coliform data. These listings were, and will be retained unless additional data for *E. coli* becomes available. If data shows the current *E. coli* criteria are met, the waterbody will be de-listed.

1	Escherichia coli	STANDARD	SUPPORT	NON-SUPPORT
L	ERW, ESW, and	298 col/100 ml (May-Sept)	< = 25%	>25%
IAC.	Lakes, Reservoirs	GM 126 col/100 ml	< = standard	> standard
PRI CONT All ot	All other waters	410 col/100 ml (May-Sept)	< = 25%	>25%
	ERW, ESW, and	1490 col/100 ml(anytime)	< = 25%	>25%
ACT	Lakes, Reservoirs	GM 630 col/100 ml	< = standard	> standard
SEC. CONT/	All other waters	2050 col/100 ml(anytime)	< = 25%	>25%
	Fecal Coliform	STANDARD	SUPPORT	NON-SUPPORT
PRI	RIMARY CONTACT 400 col/100 ml (May-Sept)		< = 25%	>25%
ERW, ESW, NSW, Lakes, and Reservoirs		GM 200 col/100 ml	< = standard	> standard
<u>SECONDARY</u> <u>CONTACT</u> All Waters including ERW, ESW, NSW, Lakes, and Reservoirs		2000 col/100 ml(anytime)	< = 25%	>25%
		GM 1000 col/100 ml	< = standard	> standard

#### Statewide Bacteria Assessment Criteria

In accordance with Reg. 2.508, metals toxicity will be evaluated based on instream hardness values at the time of sample collection. If the ambient hardness value is less than 25 mg/l, then a hardness value of 25 mg/l will be used to calculate metals toxicity. If more than one exceedance of the criterion occurs during the period of record, the water body will be listed as impaired for that criterion.

State while metally missessment enterna					
	Acute <sup>3</sup>	Chronic			
Support	< =1	< =1			
Non-Support	>1	>1			

#### **Statewide Metals Assessment Criteria**

Waters will be listed as "non-support" for fish consumption if a primary segment of the fish community (e.g., all predators or all Largemouth bass) is recommended for nonconsumption by any user group (e.g., general population or high risk groups). However, if a consumption restriction is recommended, e.g., no more than two meals per month or no consumption of fish over 15-inches, these waters will <u>not</u> be listed as "non-support".

Statewide Tish Consumption Assessment Criteria				
Support	No restriction or limited consumption			
Non-Support	No consumption for any user group			

Statewide Fish Consumption Assessment Criteria

#### Reg. 2.511 - Mineral Quality

Mineral quality will be evaluated as follows: assessments for waterbodies with site specific criteria are made according to the specific values listed in Reg. 2.511(A). For those waterbodies without site specific criteria, and those stream segments that receive waste water effluent, the criteria of 250 mg/l of chlorides, 250 mg/l of sulfates, and 500 mg/l of total dissolved solids will apply. In either case, if greater than 10 percent of the total samples for the period of record exceed the applicable criteria, the waterbody will be included on the 303(d) list as being impaired for the mineral(s) assessed.

**Statewide Minerals Assessment Criteria** 

Parameter	Standard	Support	Non-Support
Site Specific Standards (mg/L)	See Reg. 2.511(A)	<=10%	>10%
CL/SO <sub>4</sub> /TDS <sup>1</sup>	250/250/500	<=10%	>10%

The Calculated Ecoregion Reference Stream Values (mg/l) listed in Reg. 2.511(B) are used to determine whether there is a 'significant modification of the water quality.' These values are not intended to be used to evaluate designated use attainment. Any discharge that results in instream chlorides, sulfates, and or total dissolved solids concentrations greater than the calculated values listed below and greater than 10 percent of the time will be considered to be a significant modification of the water quality and the process outlined in Reg. 2.306 should be implemented.

Ecoregion	Chlorides	Sulfates	TDS
Ozark Highlands	17.3	22.7	250
Boston Mountains	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

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

#### Reg. 2.512 - Ammonia

Total ammonia nitrogen will be evaluated using Reg. 2.512A - D based on instream pH and temperature, as applicable, at the time of sample collection.

If more than one violation of the one-hour average concentration of total ammonia nitrogen exceeds the calculated Acute Criterion; or

If more than one violation of the thirty-day average concentration of total ammonia nitrogen exceeds the Chronic Criterion; or

If more than one violation of the four-day average within a 30-day period exceeds 2.5 times the Chronic Criterion value, the water body will be listed as not attaining ammonia toxicity standards.

	ONE-HOUR AVERAGE	THIRTY-DAY AVERAGE	4-DAY AVERAGE
Support	< =1 in 3 years	< =1 in 3 years	<=1 in 3 years
Non-Support	>1 in 3 years	>1 in 3 years	>1 in 3 years

Statewide Total Ammonia Nitrogen Assessment Criteria

#### Domestic, Agricultural, and Industrial Water Supply

For assessment of ambient waters, the domestic, agricultural, and industrial water supply designated uses will be evaluated using (Reg 2.511) chloride, sulfate, and total dissolved solids in accordance with the Federal Safe Drinking Water Act. If greater than 10 percent of the total samples for the period of record exceed the criteria, the waterbody will be listed as impaired.

13 11111			
PARAMETER	STANDARD	SUPPORT	NON-SUPPORT
CL/SO <sub>4</sub> /TDS <sup>1</sup>	250/250/500	<=10%	>10%

#### Statewide Water Supply Assessment Criteria

#### **REOCCURRING ISSUES**

The evaluation of the fisheries designated use (aquatic life) as impaired based solely on water chemistry data instead of biological data has become an issue. Past and recent studies conducted by ADEQ (Physical, Chemical and Biological Assessment of the Bayou Bartholomew Watershed, April 2001; Physical, Chemical and Biological Assessment of the Strawberry River Watershed, December 2003; Total Maximum Daily Load (TMDL) for pH, Mulberry River, Arkansas, 2009) have all indicated that stream segments that were listed as not supporting the

fisheries designated use based on water chemistry data were in fact fully supporting the fisheries designated use. This list has over 130 stream segments, over 2100 stream miles, listed as not supporting the fisheries designated use; yet only five of these stream segments, less then 25 stream miles, have biological data to support the listing.

Many streams in the state have low pH values and are unable to meet the minimum pH standard of 6 standard units. Arkansas's pH standards, adopted in the 1970's, were established to protect the variable life stages of the most sensitive aquatic life species. These standards were based on data generated in a laboratory setting, unlike most of Arkansas's other water quality standards that were developed by utilizing the least-disturbed ecoregion reference stream approach. In addition, the current assessment protocol is from an EPA guidance document that establishes a nationwide exceedance criterion. Thus, neither Arkansas's current pH standards, nor the assessment criteria, can adequately evaluate natural occurring conditions.

## Category 4a Waters: Impaired Waterbodies (Streams) With Completed TMDLs.

STREAM NAME	HUC	RCH	PLNG	MILES	MONITORING	De	signat	ed Use	Not S	Suppor	ted			١	Nater	Qua	lity Sta	andaı	d Nor	n-Attai	nmer	nt					SO	URCE		
			SEG		STATIONS	FC	FSH	PC	SC	DW	AI	DO	pН	Tm	Tb	CI	SO4	TDS	PA	Cu	Pb	Zn	Oth	ner	IP	MP	SE	AG	UR	Other
Dorcheat Bayou	11140203	3-022	1A	8.4	RED0015A	х																		Hg						UN
Dorcheat Bayou	11140203	3-020	1A	11.9		х																		Hg						UN
Dorcheat Bayou	11140203	8 -026	1A	11.7	UWBDT01,02	х																		Hg						UN
Dorcheat Bayou	11140203	3 -024	1A	7.0		х																		Hg						UN
Days Creek	11140302	2 -003	1B	11.0	RED0004A					х														NO3		х				
Rolling Fork	11140109	9-919	1C	12.8	RED0058																		TP	NO3	х					
Oak Bayou	8050002	2-910	2A	18.3	OUA0179		х			х	х				х	х		х										х		
Boeuf River	8050001	l -019	2A	49.4	OUA0015A		х			х	х				х	х	х											х		
Bayou Bartholomew	8040205	5 -001	2B	60.1	OUA0013		х								х													х		
Bearhouse Creek	8040205	5 -901	2B	24.4	OUA0155			х											х											UN
Bayou Bartholomew	8040205	5-002	2B	17.9	UWBYB01	х	х								х	х								Hg				х		UN
Deep Bayou	8040205	5-005	2B	28.9	OUA0151		х								х													х		
Melton's Creek	8040205	5-903	2B	8.7	OUA0148			х											х											UN
Harding Creek	8040205	5-902	2B	4.6	OUA0145		х	х											х									х	Х	
Deep Bayou	8040205	5-005	2B	28.9	OUA0151			х											х								х			UN
Bayou Bartholomew	8040205	5-006	2B	82.3	OUA0033		х								х													х		
Cutoff Creek	8040205	5-007	2B	16.8	UWCOC01	х									х									Hg						UN
Bayou Bartholomew	8040205	5-912	2B	82.7	UWBYB02		х								х	х	х	х										х		
Cross Bayou	8040205	5-905	2B	2.4	OUA0152														х											YN
Bayou Bartholomew	8040205	5-013	2B	33.9	UWBYB03		х								х				х									х		
Bayou Bartholomew	8040205	5-012	2B	25	UWBYB02	х	х								х									Hg				х		UN
Chemin-A-Haut Cr.	8040205	5-907	2B	30.5	OUA0012														х											UN
Saline River	8040203	3 -001	2C	0.2	OUA0010A,117	х																		Hg						UN
Saline River	8040204	4 -001	2C	2.8		х																		Hg						UN
Saline River	8040204	4 -002	2C	53		х																		Hg						UN
Saline River	8040204	4 -004	2C	16.4		х																		Hg						UN
Big Creek	8040204	4 -005	2C	28.9	OUA0043										х															
Saline River	8040204	4 -006	2C	17.5	OUA0118	х																		Hg						UN
Ouachita River	8040202	2-002	2D	4.0	OUA008B	х																		Hg						UN
Ouachita River	8040202	2 -003	2D	8.4		х																		Hg						UN
Ouachita River	8040202	2-004	2D	28.9	OUA0124B	х																		Hg						UN
Moro Creek	8040201	I -001	2D	12.0	OUA0028	х																		Hg						UN
Moro Creek	8040201	I -001	2D	12.0	OUA0028										х												х			
Moro Creek	8040201	I -901	2D	57.9											х												х			
Ouachita River	8040201	I -002	2D	22.5	OUA008B	х																		Hg						UN
Ouachita River	8040201	I -004	2D	2.5	OUA0037	х																		Hg						UN
L. Champagnolle Cr.	8040201	-903	2D	20.9		х																		Hg						UN
Champagnolle	8040201	I -003	2D	20	UWCHC01	х																		Hg						UN
Elcc Tributary	8040201	-606	2D	8.5	OUA0137A+		х			х						х	х	х					AM		х					
Flat Creek	8040201	-706	2D	16.0	OUA0137C		х			х						х	Х	х												RE
Salt Creek	8040201	-806	2D	8.0	OUA0137D		х			х						х		х												RE
Prairie Creek	8040101	I -048	2F	10.0	OUA0040										х												х			
S. Fork Caddo	8040102	2 -023	2F	16.6	OUA0044															х		х								RE
Caddo River	8040102	-019	2F	7.7	OUA0023																	х								RE
Caddo River	8040102	-018	2F	4.1	OUA0023																	х								RE
Caddo River	8040102	2-016	2F	13.5	OUA0023																	х								RE
Fourche LaFave	11110206	6-002	3E	8.7		х																		Hg						UN
White Oak Creek	11110203	3 -927	3F	10.0	ARK0053		х								х															UN

## Category 4a Waters: Impaired Waterbodies (Streams) With Completed TMDLs.

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Stone Dam Creek	11110203	-904	3F	3	ARK0051	
Whig Creek	11110203	-931	3F	10	ARK0067	
Whig Creek	11110203	-931	3F			
Poteau River	11110105	-001	31	2.0	ARK0014	
Poteau River	11110105	-031	31	6.6	ARK0055	
Cache River	8020302	-032	4B	11.4		
Cache River	8020302	-031	4B	3.4		
Cache River	8020302	-029	4B	3.9		
Cache River	8020302	-028	4B	5.9	UWCHR04	
Cache River	8020302	-027	4B	3.9		
S. Fk. L. Red River	11010014	-036	4E	2.0		х
M. Fk. Little Red	11010014	-028	4E	12.0		
M. Fk. Little Red	11010014	-027	4E	8.8	WHI0043	
Strawberry River	11010012	-011	4G	20.4	UWSBR01	
L. Strawberry River	11010012	-010	4G	16.0	WHI0143H+	
Strawberry River	11010012	-009	4G	28.4	UWSBR02	
Strawberry River	11010012	-008	4G	8.4		
Strawberry River	11010012	-006	4G	19.0	WHI0024	
Strawberry River	11010012	-005	4G	0.7		
Strawberry River	11010012	-004	4G	0.3		
Strawberry River	11010012	-002	4G	9.4	UWSBR03	
White River	11010003	-902	41	3.0	USGS	
North Fork River	11010006	-001	4F	4.2	USGS	
West Fork	11010001	-024	4K	27.2	WHI0051	
White River	11010001	-023	4K	6.2	WHI0052	
Holman Creek	11010001	-059	4K	9.1	WHI0070	
L'Anguille River	8020205	-001	5B	19.7	FRA0010	
L'Anguille River	8020205	-002	5B	16.8		
L'Anguille River	8020205	-003	5B	1.8		
L'Anguille River	8020205	-004	5B	16.0	UWLGR01	
L'Anguille River	8020205	-005	5B	44.1	UWLGR02	



## Category 4a Waters: Impaired Waterbodies (Lakes) With Completed TMDLs.

LAKE NAME	HUC	LAKE	PLNG	ACRES	COUNTY	ASSESS	FISH	AQUATIC	PRIMARY	ECONDAR	DRINKING	AGRI &	S	OURC	E	(	CAUSE	Ξ
		TYPE	SEG				COMSUMF	LIFE	CONTACT	CONTACT	WATER	INDUSTRY	1	2	3	1	2	3
Columbia	11140203	E	1A	3000	Columbia	М	N						UN			HG		
First Old Rive	11140201	D	1B	240	Miller	М		N					UN			NU		
Grand	8050002	E	2A	900	Chicot	М		N					UN			NU		
Grays	8040204	NC	2C	36	Cleveland	М	N						UN			HG		
Monticello	8040204	В	2C	1520	Drew	М	N						UN			HG		
Winona	8040203	А	2C	715	Saline	М	N						UN			HG		
Ouachita					Ashley													1
River					Calhoun													ł
Oxbows					Union													1
below					Bradley													ł
Camden	8040202		2D		Ouachita	М	N						UN			HG		1
Big Johnson	8040201	NC	2D	49	Calhoun	М	N						UN			HG		
Felsenthal	8040202	E	2D	14,000	Bradley	М	N						UN			HG		
Cove Creek	11110202	В	3H	42	Logan	М	N						UN			HG		
Nimrod	11110206	E	3E	3550	Yell	М	N						UN			HG		1
Dry Fork	11110206		3E	90	Perry	М	N						UN			HG		
Horseshoe	8020203	E	4A	1200	Crittenden	М		Ν					UN			NU		
Frierson	8020302	С	4B	335	Greene	М		Ν					UN			SI		
Johnson																		1
Hole	11010014	А	4E		Van Buren	М	N						UN			HG		ł
Spring	11110204	В	3G	82	Yell	М	N						UN			HG		
Old Town	8020302	D	5A	900	Phillips	М		N					UN			NU		
Bear Creek	8020205	С	5B	625	Lee	М		Ν					UN			NU		
Mallard	8020204	D	5C	300	Mississippi	М		N					UN			NU		

STREAM NAME	HUC RCH PLNG MILES	MONITORING	Des	ignate	d Use	Not	Suppo	orted			W	ater C	Quality	y Stan	dard I	Non-A	ttainm	ent					SOL	JRCE			
	SEG	STATIONS	FC	FSH	PC	SC	DW	AI	DO	pН	Tm	Tb	CI	SO4	TDS	PA	Cu	Pb	Zn	Other	IP	MP	SE	AG	UR	Other	Priority
Dorcheat Bayou	11140203-026 1A 11.7	UWBDT02		Х						х								Х								UN	L
Beech Creek	11140203-025 1A 15.7	UWBCH01		х					х			х						х								UN	L
Dorcheat Bayou	11140203-024 1A 7.0	RED0065								х															$\square$	UN	L
Big Creek	11140203-923 1A 18.5	UWBIG01		Х						х								Х			х				$\square$		L
Big Creek	11140203-023 1A 18.5	UWBIG02		Х									х	Х	х			х			х				$\square$		L
Dorcheat Bayou	11140203-022 1A 8.4	RED0015A		Х				х		х				Х				х							$\square$	UN	L
Horsehead Creek	11140203-021 1A 16.8	UWHHC01								х								х								UN	L
Dorcheat Bayou	11140203-020 1A 11.9			х				х		х				х				х								UN	L
Bodcau Creek	11140203-007 1A 7.8	RED0057																х								UN	L
Little Bodcau Creek	11140205-010 1A 19.5	RED0056		х					х									х								UN	L
Bodcau Creek	11140205-006 1A 22.4	RED0027		х						х		х					х	х					х			UN	М
Bodcau Creek	11140205-002 1A 6.0			х						х		х					х	х					х			UN	М
Red River	11140106-025 1B 8.0							х				х	х	х	х											UN	L
Red River	11140106-005 1B 25.3	RED0025						х				х	х	х	х											UN	L
Red River	11140106-003 1B 9.8							х				х	х	х	х											UN	L
Red River	11140106-001 1B 34.8							х				х	х	х	х											UN	L
McKinnev Bayou	11140201-014 1B 21.6	RED0055						х						х	х											UN	L
McKinney Bayou	11140201-012 1B 23.1	RED0054						х					х	х	х											UN	L
Red River	11140201-011 1B 15.2	RED0046						х							х											UN	L
Bois D"Arc Creek	11140201-008 1B 8.9	UWBDK02							х																	UN	L
Red River	11140201-007 1B 40.1	RED0045						х					х		х											UN	L
Red River	11140201-005 1B 12.0							х					х		х											UN	L
Red River	11140201-004 1B 4.0							х					х		х											UN	L
Red River	11140201-003 1B 15.5	RED0009		х				х				х			х											UN	Ē
Sulphur River	11140302-008 1B 0.8										х	х											х			UN	Н
Sulphur River	11140302-006 1B 6.5	RED0005		х							х	х											х			UN	Н
Sulphur River	11140302-004 1B 0.7			х							х	х											х			UN	Н
Sulphur River	11140302-001 1B 6.3			x							x	x											x			UN	1
Sulphur River	11140302-002 1B 8.5			x							x	x											x			UN	
Mine Creek	11140109-933 1C 1.3	RED0048B		X										х	х		х		х		х						H
Mine Creek	11140109-033 1C 11.4	RED0018B												х												UN	L
Saline River	11140109-014 1C 25.1	RED0032		х					х																	UN	L
Rolling Fork	11140109-919 1C 12.8	RED0058		х													х									UN	L
Bear Creek	11140109-025 1C 17.3	RED0033																		NO3	х	х					Н
Chemin-A-Haut Cr.	8040205-907 2B 30.5	OUA0012							х																	UN	L
Cross Bayou	8040205-905 2B 2.4	OUA0152																								UN	М
Main Street Ditch	8040205-909 2B 2.0	OUA0146		х					х								х	х							х		М
Harding Creek	8040205-902 2B 4.6	OUA0145		х													х	х	х						х		М
Bayou Imbeau	8040205-910 2B 7.5	OUA0147		х					х									х							Х		М
Able's Creek	8040205-911 2B 14.6	OUA0158										х														UN	М
Bearhouse Creek	8040205-901 2B 24.4	OUA0155		х					х									х								UN	М
Bayou Bartholomew	8040205-013 2B 33.9	UWBYB03		х	х				х															х			М
Cut-Off Creek	8040205-007 2B 16.8	UWCOC01		х					х																	UN	М
Bayou Bartholomew	8040205-006 2B 82.3	OUA0033																х								UN	L
Bayou Bartholomew	8040205-002 2B 17.9	OUA0154		х					х															х		UN	L
Bayou Bartholomew	8040205-912 2B 82.7	UWBYB02		х					х															х			М
Wolf Creek	8040205-701 2B 10.8	OUA0156		х	1				х																	UN	L
Overflow Creek	8040205-908 2B 9.9	OUA0012A	1	х	1							х	х	1	1				1			1				UN	M
Saline River	8040203-010 2C 29.8	OUA0026,41		х								х	1		х								х			UN	Н
Big Creek	8040203-904 2C 10.0	OUA0018		х	1							х											х			UN	Н
Saline River	8040204-006 2C 17.5	OUA0118			l							х	1	1	х				l			l				UN	L
Big Creek	8040204 -005 2C 28.9	OUA0043	1	х	1					х			1	1					1			1				UN	Ē
Saline River	8040204-004 20 16.4		1	Y									1	1	×		Y		1			1	'		r – I	LIN	<u> </u>

STREAM NAME	HUC RCH	PLNG	MILES	MONITORING	Des	ignate	d Use	e Not	Supp	orted			W	ater C	Quality	y Stan	dard I	Non-A	ttainm	nent					SOL	JRCE			
		SEG	i	STATIONS	FC	FSH	PC	SC	DW	AI	DO	рΗ	Tm	Tb	CI	SO4	TDS	PA	Cu	Pb	Zn	Other	IP	MP	SE	AG	UR C	Other	Priority
Saline River	8040204 -002	2C	53	OUA0010A+		Х											х		х									UN	L
Saline River	8040204 -001	2C	2.8			х											х		х									UN	L
Smackover Creek	8040201 -007	2D	29.1			х					х										х							UN	Μ
Smackover Creek	8040201 -006	2D	14.8	OUA0027		х					х										х							UN	Μ
Salt Creek	8040201 -806	2D	8.0	OUA0137D		х						х							х				х						Н
Flat Creek	8040201 -706	2D	16.0	OUA0137C		х													х		х		х						Н
Elcc Tributary	8040201 -606	2D	8.5	OUA0137A+		х													х		х	NO3	х						Н
Ouachita River	8040201 -005	2D	34.2	OUA0037		х													х		х							UN	L
Moro Creek	8040201 -001	2D	12.0	OUA0028		х													х	х								UN	L
Moro Creek	8040201 -901	2D	57.9			х													х	х								UN	L
Jug Creek	8040201 -910	2D	8.0	OUA0047		х													х					х					L
Bayou De L'Outre	8040202 -008	2D	10.6			х										Х	х				х		х	х				RE	Μ
Bayou De L'Outre	8040202 -007	2D	6.9			х										Х	х				х		х	х				RE	Μ
Bayou De L'Outre	8040202 -006	2D	32.4	OUA0005		х										х	х				х		х	х				RE	Μ
Ouachita River	8040202 -004	2D	28.9	OUA0124B		х															х							UN	L
Ouachita River	8040202 -002	2D	4.0	OUA0008B		х													х		х							UN	L
Walker Branch	8040206 -916	2E	3.0			х								х		х					х							RE	Μ
Little Cornie Bayou	8040206 -816	2E	3.0			х								х		Х					х							RE	Μ
Little Cornie Bayou	8040206 -716	2E	5.0			х								х		Х					х							RE	Μ
Little Cornie Creek	8040206-016	2E	18.0			х								х		х					х							RE	Μ
Big Cornie Creek	8040206 -015	2E	15.0	OUA0002		х								х		Х					х							RE	Μ
Cove Creek	8040102 -970	2F	7.8	OUA0100+		х			х	х		х				х	х						х					RE	Н
Chamberlain Creek	8040102 -971	2F	2.5	OUA0104+		х			х	х		х				х	х		х		х	Cd	х					RE	Н
Cove Creek	8040102 -972	2F	1.1	OUA0103		х						х																RE	Н
Cove Creek	8040102 -974	2F	0.7			х						х																RE	Н
Lucinda Creek	8040102 -975	2F	2.2	OUA0171B		х						х				х					х							RE	Н
Cove Creek	8040102 -976	2F	3.6	OUA0171C								х																UN	L
Marzarn Creek	8040101-045	2F	23.3	UWMZC01		х			1	1		х																-	L
Little Mazarn Creek	8040101-047	2F	14.8	UWSFM01		x			1	1		x																UN	L
Prairie Creek	8040101-048	2F	10.0	OUA0040		x					x								x							<u> </u>		UN	М
D.C. Creek	8040102 -923	2F	5.0	OUA0044T		~					~								~		x							RF	
Caddo River	8040102-016	2F	13.5	OUA0023		x			1					x							x							RF	
Ouachita River	8040102 -006	2F	12.1	OUA0030		x															x					<u> </u>		UN	Ē
Deceiper Creek	8040102 -027	2F	24.4	UWDPC01		~						x									~							UN	Ē
Freeo Creek	8040102 -901	2F	33.9	UWFRE01					1	1		X																UN	L
White Oak Creek	8040102 -828	2F	20.8	OUA0168								х																UN	L
Tulip Creek	8040102 -928	2F	24.1	OUA0169								х																UN	L
Tulip Creek	8040102-028	2F	13.4									х																UN	L
Cypress Creek	8040102 -801	2F	30.0	OUA0170					1	1		x																UN	L
I Missouri River	8040103-008	2G	19.6	OUA0035		x			1					x							x							UN	
I Missouri River	8040103-022	2G	17.6	OUA0022		x			1					~							x							UN	
L. Missouri River	8040103-015	2G	10.5	OUA0039B		x			1												x							UN	L
Caney Creek	8040103-034	2G	13.6	UWCYC01					1			x																UN	
Terre Noir Creek	8040103-003	2G	19.6	UWTNO01					1			x																UN	
Terre Noir Creek	8040103-002	2G	27.4	UWTNR02		<u> </u>			<u> </u>	<u> </u>	<u> </u>	x											<u> </u>			$\vdash$	┝──┼	UN	
Terre Rouge Creek	8040103-031	2G	14.5	UWTRC01					1	1				x											x	$\vdash$	┢──╋	UN	L
Wabbaseka Bavou	8020401-003	3A	35.4	UWWSB01		х		1	1	1	х					1							<u> </u>					UN	Ē
Bayou Meto	8020402-001	3B	4.3	,					1	1	x												<u> </u>		i		┢──╋	UN	
Bayou Meto	8020402-003	3B	39.8	ARK0023		х		1	1	1	x					1							1		<u> </u>			UN	Ē
Bayou Two Prairie	8020402-006	3B	44.7	ARK0097			l	1	1	1	x	l	1		1	1					1				<u> </u>	1		UN	Ļ
Bayou Meto	8020402 -907	3B	12.3	ARK0060				1	1	1	x					1				х			1		<u> </u>			UN	Ē
Bayou Meto	8020402-007	3B	44.8	ARK0050		v		1	1	1	v	1		<u> </u>		1	<u> </u>	1	Y	1	1	PO	Y	<u> </u>	<u> </u>		<u> </u>		H

STREAM NAME	HUC RCH	PLNG	MILES	MONITORING	Des	ignate	d Use	e Not	Suppo	orted			W	ater C	Quality	y Stan	dard I	Non-A	ttainm	ent					SOU	JRCE			
		SEG	i	STATIONS	FC	FSH	PC	SC	DW	AI	DO	pН	Tm	Tb	CI	SO4	TDS	PA	Cu	Pb	Zn	Other	IP	MP	SE	AG	UR (	Other	Priority
Fourche Creek	11110207 -024	3C	11.2	ARK0130+							Х			х							х				х			UN	L
Fourche Creek	11110207 -022	3C	9.2	ARK0131+		х					х			х					Х						Х			UN	L
Cypress Creek	11110205 -917	3D	11.2	ARK0132		х													х		х					х			L
S. Fourche LaFave	11110206 -014	3E	26.1	ARK0052							х															$\square$		UN	L
S. Fourche LaFave	11110206 -013	3E	10.3								х																	UN	L
Fourche LaFave R.	11110206 -007	3E	20.2	ARK0037		х					х			х												$\square$		UN	L
Fourche LaFave R.	11110206 -008	3E	25.7	UWFLR01								х														$\square$		UN	L
Fourche LaFave R.	11110206 -001	3E	25.7	ARK0036							х																	UN	L
Cedar Creek	11110206 -011	3E	10.1	UWCED01		х						х																UN	L
Gafford Creek	11110206 -012	3E	8.5	UWGAF01		х						х																	L
Stone Dam Creek	11110203-904	3F	3.0	ARK0051		х								х														SE	L
Arkansas River	11110203 -932	3F	2.0	Special study							х																	HP	Н
Chickalah Creek	11110204 -002	3G	19.3	ARK0058		х								х														UN	L
Petit Jean River	11110204 -011	3G	21.6	ARK0034		х								х														UN	L
Dutch Creek	11110204 -015	3G	28.9	ARK0057		х					х			х														UN	L
Mulberry River	11110201-009	ЗH	9.1	ARK0138								х															1	UN	L
Short Mountain Cr.	11110202 -043	ЗH	14.9	ARK0011B		х													х					х			1		Н
Poteau River	11110105-001	31	2.0	ARK0014		х					х																1	UN	L
Poteau River	11110105-031	31	6.6	ARK0055													х						х	х	-			-	М
Illinois River	11110103 -023	ЗJ	8.1	ILL04			х											х								х			L
Clear Creek	11110103-029	3J	13.5	ARK0010C			х											х									х		L
Illinois River	11110103-024	3J	2.5	ARK0040										х		1									х				L
Illinois River	11110103-024	3J	2.5	ARK0040		х	х						-					х											L
Muddy Fork Illinois River	11110103 -025	3J	3.2	MFI0004		х	х											х									1		L
Sager Creek	11110103-932	3J	8.0	ARK0005												1						NO3		х	-				H
Town Branch	11070208 -901	3J	3.0	ARK0056		х							-									TP							L
Boat Gunwale Slash	8020304 - 914	4A	5.0	WHI0074							х																,	UN	L
Prairie Cypress	8020304 -014	4A	26.1	WHI0073							х																,	UN	
Big Creek	8020304 -010	4A	34.3	UWBGC03									-		х		х									х		-	L
Cache River	8020302 -032	4B	11.4			х											х			х						х	,		L
Cache River	8020302 -031	4B	3.4			х											х			х						х			L
Cache River	8020302 -029	4B	3.9			х											х			х						х			L
Cache River	8020302 -028	4B	5.9	UWCHR04		х										1	х			х					-	х			L
Cache River	8020302 -027	4B	3.9			х										1	х			х					-	х			L
Cache River	8020302 -021	4B	18.4			х							-							х						х			L
Cache River	8020302 -020	4B	22.6	UWCHR03		х										1				х					-	х			L
Cache River	8020302-019	4B	13.7			х							-							х						х			L
Cache River	8020302 -018	4B	25.0	UWCHR02		х														х						х	1		L
Cache River	8020302-017	4B	15.8			х										1				х					-	х			L
Cache River	8020302-016	4B	21.8	WHI0032		х							-							х						х			L
Bayou DeView	8020302-009	4B	20.3	WHI0026											х	1	х						х	х	-				Н
Bayou DeView	8020302 -007	4B	18.2			х							-							х						х			L
Bayou DeView	8020302 -006	4B	10.2			x														x						x	,		
Bayou DeView	8020302 -005	4B	8.6			X														X						X	·		Ē
Bayou DeView	8020302-004	4B	21.2	UWBDV02		x														x						x	·		L
Lost Creek Ditch	8020302 -909	4B	7.9	WHI0172		x	1	1		1					х	1							х	x		<u> </u>			M
Departee Creek	11010013-020	4C	46.1	UWDTC01		x	1	1		1					<u> </u>	1					х					х	<del> </del> †		L
Glaise Creek	11010013-021	4C	30.1	UWGSC01		x	1	1								1					x					x	<del> </del> <del> </del>		
Village Creek	11010013-008	4C	13.0				1	1			х				1	1							1			<u> </u>	t	UN	L
Village Creek	11010013-007	4C	1.2				1	1			x					1										$\vdash$	<del> </del> <del> </del>	UN	
Village Creek	11010013-006	4C	25.2	UWVGC01+			1	1			x					1											<del> </del> †	UN	Ē
Wattensaw Bayou	8020301-015	4D	48.2	WHI0072			1	1	<u> </u>		x					<u> </u>									<b>⊢</b>	$\vdash$	ł	UN	
Cypress Bayou	8020301-010	4D	5.0	UWCPB01		¥	1	1	<u> </u>							1				x					<b>⊢</b>	x	ł		

STREAM NAME	HUC	RCH	PLNG	MILES	MONITORING	Des	ignate	d Use	Not	Suppo	orted			W	ater C	Quality	/ Stan	dard N	lon-A	ttainm	ent					SOL	RCE			
			SEG		STATIONS	FC	FSH	PC	SC	DW	AI	DO	pН	Tm	Tb	CI	SO4	TDS	PA	Cu	Pb	Zn	Other	IP	MP	SE	AG	UR (	Other	Priority
Bull Creek	802030	1-009	4D	29.0	UWBLB01		х															х					х			L
Bayou Des Arc	802030	1-007	4D	36.4	UWBDA01		х															х					х			L
Bayou Des Arc	802030	1-006	4D	17.8	WHI0056		х															х					х			L
Overflow Creek	1101001	4 -006	4E	21.7	UWOFC01		х															х					х			L
Overflow Creek	1101001	4-004	4E	0.6																		х					Х			L
Hicks Creek	1101000	4-015	4F	9.1	WHI0065			х											х						х					Н
Greenbrier Creek	1101000	4 -017	4F	10.6	WHI0167		х	х				Х							х										UN	L
Current River	1101000	8-017	4G	12.0			х					х			х											х			UN	М
Current River	1101000	8-001	4G	23.6	WHI0004		х					х			х											х			UN	М
Fourche River	1101000	9-008	4G	25.0	WHI0170		х								х											Х				L
Spring River	1101001	0-007	4H	4.0										х															UN	L
Spring River	1101001	0-006	4H	5.3	WHI0022		х							х															UN	L
Crooked Creek	1101000	3 -048	41	31.7	WHI0048A+		х											Х											RE	L
Crooked Creek	1101000	3-049	41	36.2	WHI0067+		х									х	х	х											UN	L
Big Creek	1101000	5-027	4J	2.6	BUFT18		х					Х																	UN	L
Bear Creek	1101000	5-026	4J	23.9	UWBRK01+													Х							х					L
Buffalo River	1101000	5-001	4J	11.3	BUFR09		Х							х															UN	L
Holman Creek	1101000	1-059	4K	9.1	WHI0070					х						х		х							х					L
Leatherwood Creek	1101000	1-916	4K	7.6	WHI0012B		Х					Х																	UN	L
Kings River	1101000	1-037	4K	19.1	WHI0009A													Х											UN	L
Kings River	1101000	1-042	4K	39.5	WHI0123		х					х						Х											UN	L
White River	1101000	1-023	4K	6.2	WHI0052											Х	х	Х											UN	М
West Fork	1101000	1-024	4K	27.2	WHI0051		Х										х	Х											UN	М
St. Francis River	802020	3-014	5A	22.8	FRA0008		х									х											Х			L
St. Francis River	802020	3-009	5A	17.1												х											Х			L
St. Francis River	802020	3-008	5A	55.9	FRA0013											х											Х			L
Ten Mile Bayou	802020	3-906	5A	17.3	FRA0029		х					Х																	UN	L
Caney Creek	802020	5-901	5B	9.0	FRA0034													х							х					L
Second Creek	802020	5-008	5B	16.4	FRA0012		х					х															Х			L
L' Anguille River	802020	5-005	5B	44.1	UWLGR02		Х					х				х	х	Х									Х			L
L' Anguille River	802020	5-004	5B	16.0	UWLGR01		х					Х				х		Х									Х			L
L' Anguille River	802020	5-003	5B	16.8			х					х				х		х									х			L
L' Anguille River	802020	5-002	5B	1.8			х					х				х		Х									х			L
L' Anguille River	802020	5-001	5B	19.7	FRA0010		х					х				х		Х									х			L
Prairie Creek	802020	5-902	5B	12.8	FRA0035											Х	Х	х									Х			L

LAKE NAME	HUC	RCH	PLNG	Acres	MONITORING	Desi	gnate	d Use	Not	Suppo	orted		N	/ater	Qua	ality S	Stand	dard	Non	-Atta	ainm	ent			S	SOU	RCE			
			SEG		STATION	FC	FSH	PC	SC	DW	AI	DO	pН	Tm	Tb	CIS	SO4T	DS I	PA	Cu	Pb .	Zn	Other	IP	MP	SE	AG	UR	UN	Priority
Pickthorne	8020402	D	3B	350	LARK025A		Ν																UN						х	L
Blue Mountian	11110204	Е	3G	2910	LARK028A+B		Z								х											х				L
Swepco	11110103	В	3J	531	LARK009A		Ν																UN						х	L
Greenlee	8020304	D	4A	320	LWHI006A		Ν																UN						х	L
Frierson	8020302	С	4B	335	LWHI002A		Z													х									х	L
Beaver - Upper	1101001	Α	4K	1500	LWHI013B		Ν	Ν							х				х							х				L
Poinsette	8020203	С	5A	600	LMIS002A		Ν																UN						х	L

#### NOTICE OF PUBLIC HEARING, COMMENT PERIOD

The Arkansas Department of Environmental Quality (ADEQ) will hold a public hearing at 2:00 p.m. on February 24, 2010 to receive comments on the Agency's proposed 2010 Impaired Waterbodies List (commonly called the 303d List). The hearing will be conducted in the Commission Room at the ADEQ headquarters building; 5301 Northshore Drive, North Little Rock.

Prior to accepting formal public comments at the hearing, ADEQ Water Division staff will present a short program discussing the proposed 2010 303d List. A period of time will also be set aside for informal discussion and questions and answers before the formal public comment period begins.

The 303d List is developed by ADEQ every two years under provisions of Section 303d of the Federal Clean Water Act. ADEQ assesses water quality monitoring data from numerous locations around the state and utilizes a comprehensive assessment methodology to determine which waters are not meeting their designated uses as listed in the Arkansas Water Quality Standards (Regulation No. 2 of the Arkansas Pollution Control and Ecology Commission).

Water quality data from stream and lake sampling sites were considered during the development of the proposed 2010 303d List. These sampling stations were either part of ADEQ's statewide water quality monitoring network, special surveys conducted by ADEQ, or sites sampled by U.S. National Park Service within the Buffalo River Watershed. Other water quality data from federal, state, and local government agencies, as well as from private entities, both within Arkansas and from adjoining states, were also evaluated during development of the proposed list.

A complete listing of impaired waterbodies can be found in the tables following the narrative of the draft 303d List. Copies of the list are available on the ADEQ's Internet web site at www.adeq.state.ar.us or can be obtained by contacting Jim Wise in the ADEQ Water Division; telephone, 501-682-0663; e-mail, wise@adeq.state.ar.us.

Copies of the proposed 2010 Arkansas 303d List also are available for public inspection during normal business hours at the ADEQ's Public Outreach and Assistance Division, located on the second floor of the ADEQ headquarters building, 5301 Northshore Drive, North Little Rock. In addition, copies of the list are available for public review during normal business hours at ADEQ information depositories located in public libraries at Arkadelphia Batesville, Blytheville, Camden, Clinton, Crossett, El Dorado, Fayetteville, Forrest City, Fort Smith, Harrison, Helena, Hope, Hot Springs, Jonesboro, Little Rock, Magnolia, Mena, Monticello, Mountain Home, Pocahontas, Russellville, Searcy, Stuttgart, Texarkana, and West Memphis; in campus libraries at the University of Arkansas at Pine Bluff and the University of Central Arkansas at Conway; and in the Arkansas State Library located on the State Capitol grounds at Little Rock. Oral and written comments on the proposed 2010 303d List will be accepted at the public hearing, but written statements are preferred in the interest of accuracy. In addition, written statements will be considered if received no later than 4:30 p.m., March 10, 2010. Written statements should be sent to: Jim Wise, Arkansas Department of Environmental Quality, Water Division, 5301 Northshore Drive, North Little Rock, AR 72118; e-mail: wise@adeq.state.ar.us.

Proposed revisions to the 2010 Arkansas 303d List will be incorporated into the 2010 Arkansas Integrated Water Quality Monitoring and Assessment Report (commonly called the 305b Report), after approval by the ADEQ Director and the Region 6 Office of the U.S. Environmental Protection Agency (EPA).

Dated this 4th day of February, 2010,

Teresa Marks, Director, Arkansas Department of Environmental Quality