



# Arkansas Department of Health

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Governor Asa Hutchinson

Nathaniel Smith, MD, MPH, Director and State Health Officer

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Engineering Section, Slot 37

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September 7, 2018

Sarah Clem  
Water Division  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock AR 72218  
*via email:* [WaterbodyComments@adeq.state.ar.us](mailto:WaterbodyComments@adeq.state.ar.us)

RE: ADH Public Comments on ADEQ 2018 Draft Impaired Waterbodies List 303(d)

Dear Ms. Clem,

The ADEQ Draft Impaired Waterbodies List includes 45 proposed impaired assessment units (AUs) that impact 25 public water systems (PWS) servicing 1,204,727 Arkansans (Table 1). Table 1 was compiled by comparing the recently-issued ADEQ draft 303(d) impaired waterbodies list for 2018 and GIS geodatabases to surface water intake locations and their respective watershed protection areas for PWSs in the state. Table 1 includes specific stream or lake information compiled by ADEQ, affected PWS(s) with an intake or source assessment area within the impaired AU, and the population served by that water system. An additional 588,000 Arkansans' have drinking water sourced from newly listed tributaries on the 2018 303(d) list compared to the 2016 list. Turbidity, pH, pathogens, and nitrogen are of particular concern for drinking water supplies. Pathogens and mercury are public health concerns because of swimming (primary contact) and mercury/fish consumption by people.

The Arkansas Department of Health Engineering Section has primacy in the state for implementation of the federal Safe Drinking Water Act and ADEQ implements the federal Clean Water Act. The primary mission of the ADH is the protection of public health, and the strong link between safe public drinking water and public health drives our program. We recognize ADEQ shares this goal and we request your continued partnership in this worthwhile endeavor. To that end, ADH requests that drinking water sources always be given the highest priority when determining the final 303(d) Impaired Waterbodies Listing.

Water bodies impaired by pathogens, turbidity, and/or minerals can significantly increase the cost of treatment required to meet National Primary and Secondary Drinking Water Regulations requirements. Turbidity and mineral pollution also increase the risk of exposure to regulated pathogenic contaminants. For example, high sediment in a stream increases the cost for the water utility to meet the Primary Drinking Water Standard for turbidity. Similarly, sediment loading is one indicator of microbiological contaminants in source water, including *E. coli*, *Giardia lamblia*, and *Cryptosporidium sp.* Removal of microbiological contaminants also increases treatment costs.

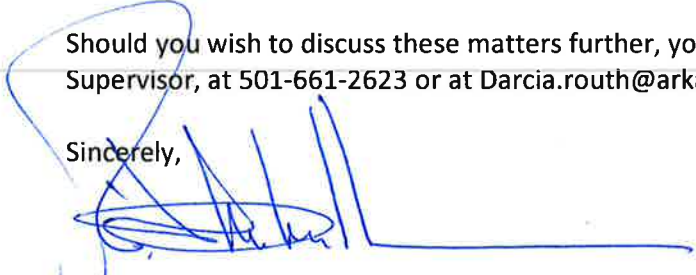
We request your assistance in placing a high priority on protecting these vulnerable drinking water sources, which serve approximately 42% of all public drinking water users, when evaluating and addressing the 2018 list of impaired waterbodies. ADH recommends the following actions that your agency and other Clean Water Act partners could take that would reflect that priority:

1. Higher priority in protecting any in-use drinking water source.
2. Increased monitoring to better identify the temporal and spatial areas of impairment, especially for the Category 4a and 4b waterbodies, which may impact public water supplies.
3. Higher priority in identifying and correcting the sources of impairment, which remain unknown for several source waters.
4. Increased compliance scrutiny on the monitoring and operational reports of wastewater, stormwater, resource extraction, and other applicable permittees.
5. Stricter effluent standards for new and renewed permits, or a ban on new permits, when warranted in source waters.
6. The timely establishment of TMDLS as well as adoption of other non-point source management strategies for all impaired source waters.
7. Increased emphasis and coordination on controlling nonpoint pollution sources, including better utilization of EPA's extensive Source Water Collaborative resources and tool kit.
8. Preferential funding of assessment, restoration, and mitigation projects for nonpoint pollution sources in source waters.
9. Application of turbidity, pH, pathogens, and nitrogen criteria to make drinking water designated use attainment decisions.

The protection of drinking water sources from minerals, turbidity, and pathogens and the protection of individuals from primary and secondary contact recreation and fish consumption illness will require the active engagement of the public from all levels of government. The Department of Health will continue to pursue these goals through its public water system oversight program. Other federal, state, and local agencies must also contribute. Your collaborative efforts are appreciated.

Should you wish to discuss these matters further, you may contact me or Darcia Routh, Geology Supervisor, at 501-661-2623 or at [Darcia.routh@arkansas.gov](mailto:Darcia.routh@arkansas.gov).

Sincerely,



Richard L. McMullen, Ph.D.  
Associate Director for Science, Center for Local Public Health  
State Environmental Health Director  
Arkansas Department of Health

JS:TL:DR:BG:tc

cc: Bruce Holand., Executive Director, AR Natural Resources Commission  
Jeff Stone, P.E., Director, Engineering Section, ADH  
Terry Paul, Branch Chief, Environmental Health, ADH

Enclosure: 2018 303(d) list impaired assessment units with public water system intake watersheds



**2018 Draft Impaired Waterbodies 303(d) within Source Water  
Assessment Areas for Public Water Systems**

Basin	Stream Name	HUC	Rch/Pseg	WQ Standard(s)	Source	Public Water System	Total Population Served
<b>Arkansas River Basin</b>	East Fork Cadron Creek	11110205	002/3D	Turbidity	Surface Erosion	Conway Water System	58908
	Fourche LaFave River	11110206	001/3E	DO	Unknown	Perryville Waterworks	4937
	South Fourche LaFave River	11110206	014/3E	DO	Unknown		
	Whig Creek	11110203	931/3F	Aquatic Life, DO, Ammonia	Unknown	Dardanelle Waterworks	5896
	*Nimrod Lake	11110206	3E	DO	-	Tri-County Water Distbr Dist	16698
	East Fork Illinois Bayou	11110202	013/3H	DO	Unknown		
	Illinois River	11110103	023/3J	Pathogens	Surface Erosion	Siloam Springs Waterworks	18457
	Illinois River	11110103	020/3J	Cl-, SO <sub>4</sub>	Unknown		
	Lee Creek Reservoir	11110104	3H	pH	-	Fort Smith Water Utilities	158206
	Blue Mountain Lake	11110204	3G	Aquatic Life, DO, Turbidity	Surface Erosion	Danville Waterworks	15718
South Fork Little Red River	11010014	036/4E	pH	Unknown	Clinton Waterworks	12838	
<b>White River Basin</b>	Greenbrier Creek	11010004	017/4F	Aquatic Life, DO	Unknown	Batesville Water Utilities	15950
	Fourche River	11010009	008/4G	Aquatic Life, Turbidity	Surface Erosion	Pocahontas Waterworks	7547
	Kings River	11010001	542/4K	DO	Unknown	Kingston School	250
	Beaver Lake	11010001	4K	Primary Contact, Turbidity, Pathogens	Surface Erosion	Beaver Water District	325942
	Beaver Lake	11010001	4K	Turbidity, Pathogens	Surface Erosion		
	Beaver Lake	11010001	4K	pH, Turbidity, Pathogens	-		

Basin	Stream Name	HUC	Rch/Pseg	WQ Standard(s)	Source	Public Water System	Total Population Served
<b>Red River Basin</b>	Mine Creek	11140109	819/1C	pH	Unknown	Caddo Waterworks Inc	30
	Caney Creek	11140109	921/1C	pH	Unknown		
	Saline River	11140109	014/1C	DO	Unknown	Dierks Water Works	2364
	Cossatot River	11140109	018/1C	DO	Unknown	Gillham Regional Water Dist	4240
	Little River	11140109	001/1C	Temp	Unknown	Hope Water Light Comm	15843
<b>Ouachita River Basin</b>	Saline River East Bifurcation	08040203	913/2C	Turbidity	Surface Erosion	Arkansas Health Center	1000
	North Fork Saline River	08040203	011/2C	DO	Unknown		
	Alum Fork Saline River	08040203	014/2C	DO, pH	Unknown	Benton Waterworks	38635
	Cedar Creek	08040203	021/2C	DO	Unknown		
	Lockett Creek	08040203	922/2C	DO	Unknown		
	Alum Fork Saline River	08040203	018/2C	pH	Unknown	Central Arkansas Water	429948
	Middle Fork Saline River	08040203	019/2C	DO	Unknown	Hot Springs Village Water	13921
	South Fork Ouachita River	08040101	043/2F	DO	Unknown	Caddo Valley Spring Water Co	50
	South Fork Caddo River	08040102	023/2F	DO	Unknown	Glenwood Water Department	7148
	Wilson Creek	08040101	901/2F	pH	Unknown		
	Indian Springs Creek	08040101	902/2F	DO, SO <sub>4</sub> , TDS	Unknown	Kimzey Regional Water District	16900
	Cove Creek	08040102	970/2F	pH, Toxicity, Zn	Resource Extraction		
	Irons Fork	08040101	838/2F	DO, pH	Unknown	Mena Water Dept	10809
Terre Noire Creek	08040103	002/2G	pH	Unknown	Camden Waterworks	22492	
						<b>Total Affected PWS Population =</b>	<b>1204727</b>

**Table 1. 2018 Draft Impaired Waterbodies 303(d) within Source Water Assessment Areas for Public Water Systems.**