

EPA Responses to Comments
for TMDLs in the
Big Creek and Caddo River Basins
in Arkansas

Prepared for:

United States Environmental Protection Agency, Region 6
Water Quality Protection Division
Permits, Oversight, and TMDL Team
Dallas, TX

Prepared by:



Tetra Tech, Inc.
10306 Eaton Place, Suite 340
Fairfax, VA 22030

March 26, 2008

CONTENTS

General Comments.....	1
Audubon Arkansas Comments	1
Big Creek Watershed Comments and Responses	2
City of Sheridan Comments	2
Caddo River Watershed Comments and Responses	5
Idle Mines Comments.....	5

PLEASE NOTE: Throughout this document there are references to other comments and responses. For brevity and the reader’s convenience, hyperlinks to these other comments and responses are provided. The hyperlinks are *underlined and italicized*. By pressing “Control” and clicking a hyperlink, the reader can go directly to the cross-referenced comments. Comment numbers and request numbers start over in each letter. References to comment numbers are within the current letter unless otherwise noted.

GENERAL COMMENTS

Audubon Arkansas Comments

“PIERSON Kevin <kpierson@audubon.org>
To: Diane Smith/R6/USEPA/US@EPA 01/16/2008 03:46 PM
cc: “SMITH, Ken” <KENSMITH@audubon.org>
Subject: Arkansas TMDLs - Comment Period Ending Today

Hello Ms. Smith.

Audubon Arkansas does not collect water quality data on the 86 waterbodies listed for public comment in the Federal Register, Vol. 72, No. 241. It is our understanding that the comment period for providing additional data closes today. We do however, strongly encourage EPA to move forward with finalizing these TMDLs so that needed restoration efforts can begin in earnest.

Audubon Arkansas has focused its efforts [sic] on the Fourche Creek watershed in Central Arkansas (www.fourchecreek.org) and the Upper White River watershed in Northwest Arkansas. In Central Arkansas, we have conducted extensive water quality monitoring in conjunction with the Arkansas Department of Environmental Quality through a Targeted Watershed Grant from US EPA. That water quality monitoring has shown significant violations of the state turbidity, metals, and bacteria standards. We are now working with ADEQ to see that this important creek is addressed on the next 303D listing. We look forward to opportunities to share this data with you when appropriate.

Thank you for the opportunity to comment and we look forward to working with you to clean up Arkansas' great water resources.

Best Regards,

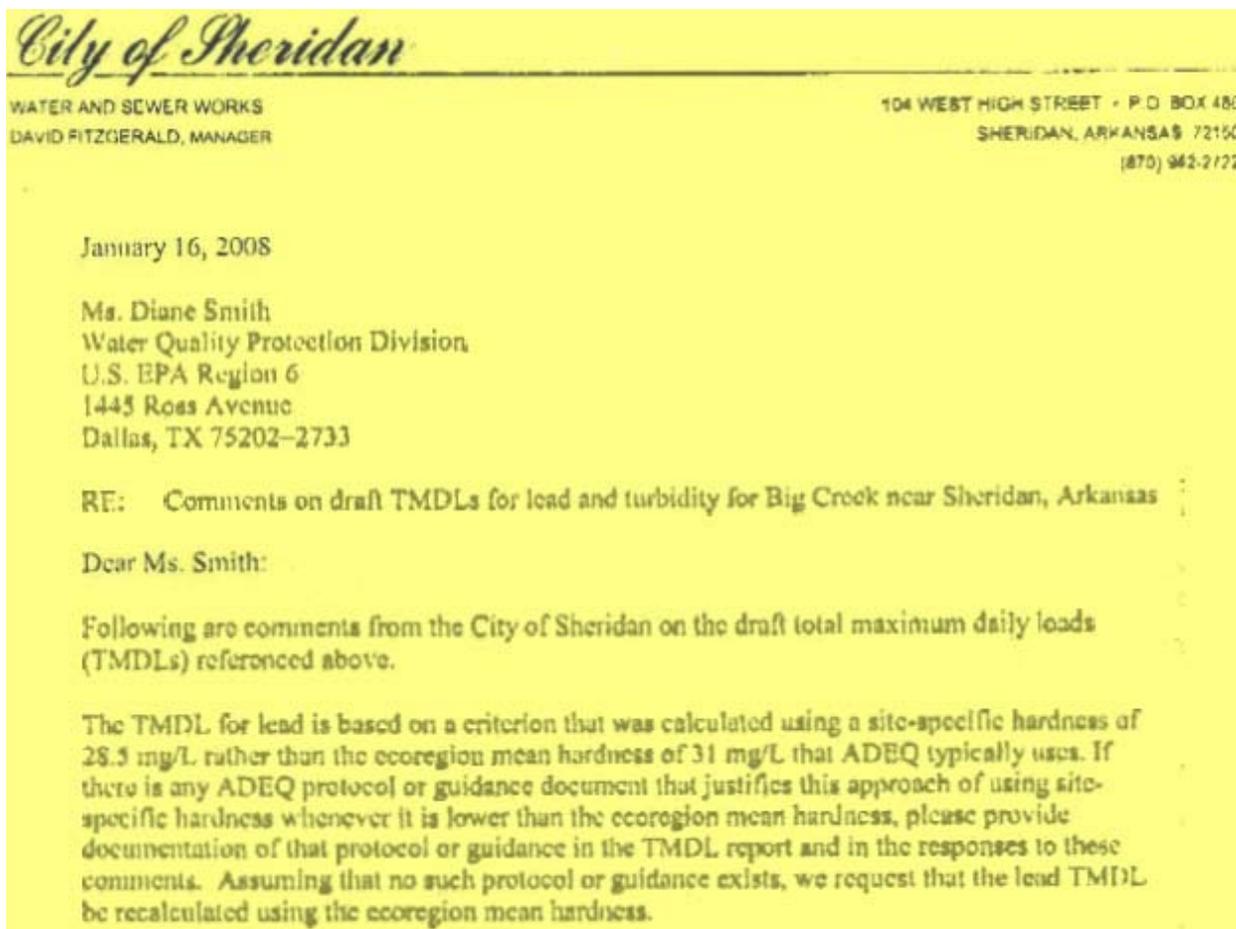
Kevin Pierson
Director of Conservation
Audubon Arkansas
201 East Markham Street, Suite 450
Little Rock, AR 72201
kpierson@audubon.org

Tel 501.244.2229
Fax 501.244.2231

[Response: EPA acknowledges your comments and the effort your organization has made to help improve water quality in the Fourche Creek watershed.](#)

BIG CREEK WATERSHED COMMENTS AND RESPONSES

City of Sheridan Comments



Response: Site-specific hardness data were used to determine the appropriate water quality criterion for lead in Big Creek. EPA believes that this hardness provides a more accurate lead assimilative capacity of the stream than that provided by using the general ecoregion hardness. WLAs were developed to meet end-of-pipe criteria. (*Technical Support Document For Water Quality-based Toxics Control*, EPA/505/2-90-001, March 1991).

The TMDL report needs to acknowledge the extensive, persistent dumping that occurs at the bridge where ADEQ collects its data for station OUA0018. Materials that have been dumped at this bridge include appliances, furniture, electronics, car batteries, and many other items. It is very likely that this dumping is a cause of lead in the samples collected at station OUA0018 and this needs to be acknowledged in the TMDL report. ADEQ has recently acknowledged that this sampling site needs to be moved due to the likely contamination caused by the dumping.

Response: Text will be added to section 2.7 of the report to identify the dumping of appliances and trash as a possible source of lead. However no data exist which show that dumping is a significant source of contribution.

The proposed wasteload allocation (WLA) for lead for the City of Sheridan is based on an effluent concentration of 0.7 µg/L of dissolved lead, which is roughly equivalent to the chronic criterion. There is no reason for the City of Sheridan to be required to meet water quality standards at the end of the pipe when the approved dissolved oxygen (DO) TMDL for Big Creek specifies that the effluent flow rate should be limited to no more than 30% of the upstream flow during January – February and 20% of the upstream flow during the remainder of the year. Our consultant has taken ADEQ's spreadsheet for calculating metals permit limits and used it to calculate the effluent concentrations in the table below. These are the same values ADEQ would use if they were developing monthly average limits for this discharge. We request that the City of Sheridan's WLA for lead be re-calculated using those values.

Months	Effluent flow (MGD)	Upstream flow (MGD)	Effluent conc. (µg/L)		Effluent load (lbs/day)	
			Total lead	Dissolved lead	Total lead	Dissolved lead
Jan.-Feb.	0.676	2.253	12.27	2.49	0.069	0.014
Mar.-Dec.	0.676	3.380	16.51	3.34	0.093	0.019

Response: Water quality monitoring at OUA0018 contains elevated levels of lead. The source is not known. Arkansas lists “municipal point source” as the source of lead impairment. The City of Sheridan WWTP lies upstream of station OUA0018, and should be considered a possible source until monitoring data are available to rule it out. If the source of lead impairment lies upstream of the WWTP, any effluent from the City of Sheridan over the water quality criterion will add to the impairment.

In Section 4.3 (Wasteload Allocations), the second to last sentence in the second paragraph should be changed. ADEQ does not automatically give permit limits for a parameter just because the receiving stream is impaired for that parameter. Permit limits are issued only when there is reasonable potential for the effluent to cause a violation of water quality standards. This section of text should include a statement indicating that permit limits may not be necessary for a facility even though the facility has been given a WLA.

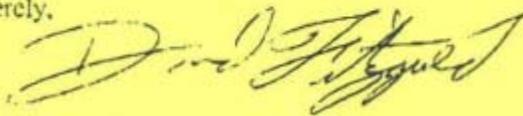
Response: The sentence does not imply that ADEQ automatically gives permit limits because a stream is impaired for a certain parameter. The sentence says, “For impaired waterbodies, permit limits are typically assigned.” No change in the text is required.

In Section 4.9 (Future Growth), the first sentence should be corrected so that it is clear to everyone that it is referring to the lead and turbidity TMDLs in this report rather than dissolved minerals TMDLs in a different report.

Response: This sentence will be revised for the final draft of the report.

The City of Sheridan appreciates the opportunity to review these draft TMDLs and submit comments. If you have any questions or need any additional information concerning these comments, please feel free to contact me at 870-942-6048.

Sincerely,



David Fitzgerald, Manager
City of Sheridan Water and Wastewater Dept.

cc: Phil Hutchison, U.S. EPA Region 6

RE: PROJECTS 4710-02 INLET/SHERIDAN DRAFT COMMENTS ON LEAD TMDL.DOC

CADDO RIVER WATERSHED COMMENTS AND RESPONSES

Idle Mines Comments

January 16, 2008

Ms. Diane Smith
Water Quality Protection Division
U.S. EPA Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

RE: Comments on draft TMDLs for copper and zinc for the Caddo River basin, Arkansas

Dear Ms. Smith:

Following are comments from Baker-Hughes on the draft total maximum daily loads (TMDLs) referenced above.

The wasteload allocations (WLAs) for Baker-Hughes are based on the final limits in our current permit. These limits were developed by ADEQ for 7Q10 conditions (i.e., no upstream dilution). We are currently developing plans to modify our discharge regime to utilize additional assimilative capacity when there is dilution water available in the receiving stream. Depending on the results of this work, we anticipate requesting a permit modification from ADEQ to revise the final limits for copper and zinc in our current permit. In order for us to discharge with higher effluent flow rates and/or higher effluent concentrations, the loads in the TMDL would need to be reallocated slightly. Section 4.7 of the TMDL report appears to allow flexibility for reallocating loads without revising the TMDL, but we would like to request assurance from EPA that we are interpreting this correctly. We request that EPA consider adding text to the report to clarify this issue further.

Baker-Hughes appreciates the opportunity to review these draft TMDLs and submit comments. If you have any questions or need any additional information concerning these comments, please feel free to contact me at 870-356-4161.

Sincerely,



Name Paul Peppers
Title Manager Idle Mines

cc: Phil Hutchison, U.S. EPA Region 6

R:\PROJECTS\6340-050\TECH\BAKER-HUGHES DRAFT COMMENTS ON TT TMDLS.DOC

Response: The future growth component documented in Section 4.7 of this TMDL report allows for reevaluation of WLAs and LAs if discharge scenarios are modified. Point sources

may be allowed to increase loads in the future provided that the assimilative capacity is not exceeded. In addition, adjustments between the WLA and LA are allowed via the water quality management plan provided that the assimilative capacity is not exceeded. These adjustments described above would require an update and approval of the State's water quality management plan. If any adjustments in the WLA and/or LA results in exceedance of the assimilative capacity, the TMDL must be modified.