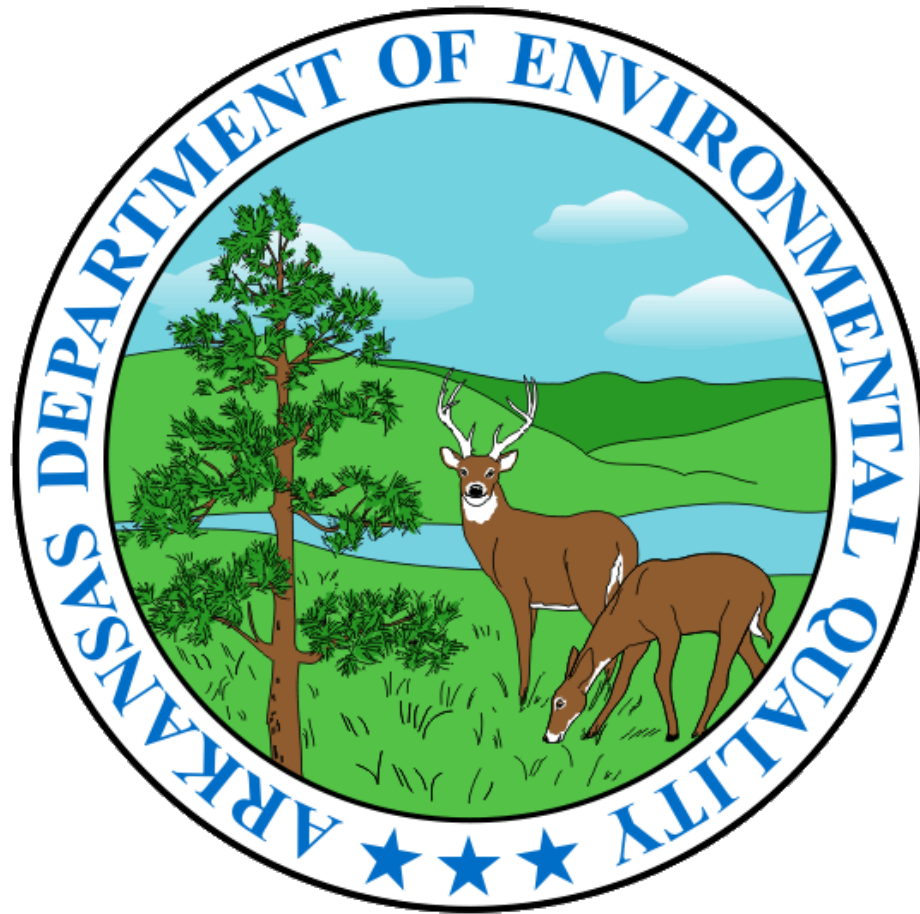


Permit Writer/TMDL Writer Coordination Identifying Solutions to Coordination Challenges

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Arkansas' TMDL Universe

Arkansas' TMDLs

- 159 TMDLs (within 40 separate TMDL study documents) that include narrative evaluations and allocations for:
 - Minerals 34
 - Turbidity 31
 - Mercury 25
 - Pathogens 25
 - Nutrients 19
 - Other Metals 14
 - DO 4

Arkansas Streams Affected by TMDLs

- All TMDLs
- Mineral
- Pathogens
- Nutrient

Arkansas TMDLs for Nutrients

- 10 for Total Phosphorous (TP)
- 7 for Nitrates (NO_3)
- 2 Ammonia (NH_3)

TMDL Instigation

- Of the current TMDLs, 37 were in response to a Consent Decree
- No new TMDLs have been finalized since 2012

Implementation

Implementing TMDLs

- **Easy**
- **Lucky**
- **Hard**

Implementing TMDLs

- **Easy**

Implementing TMDLs

- **Easy**
 - Non-mercury metals
 - Pathogens

Easy

TMDLs for Chloride, Copper, Dissolved Oxygen, Lead, pH, Sulfate, TDS, and Turbidity in the Bodcau Creek and Dorcheat Bayou Watersheds, Arkansas includes a **Total Recoverable Lead** Waste Load Allocation (WLA) of 0.0001 lbs/day for this facility. This WLA was calculated using a concentration of 3.41 µg/l. **40 CFR 122.44(d)(1)(vii)(B) requires that the permit be consistent with the assumptions and requirements of the assigned WLA.** Therefore, monthly average limits of 3.41 µg/l and 0.0001 lbs/day will be included in the permit. Although the WLA for Lead in the TMDL is expressed in terms of dissolved lead, 40 CFR 122.45(c) as incorporated by reference in Reg. 6.104(A)(3) requires metals limits to be expressed in terms of “total recoverable.” **The TMDL converted the dissolved WLA to total recoverable using the procedures set forth in Appendix D, Attachment V of the CPP**

Implementing TMDLs

- **Easy**
- **Lucky**
- **Hard**

Implementing TMDLs

- **Lucky**

Implementing TMDLs

- **Lucky**
 - Turbidity

Implementing TMDLs

- **Lucky**
 - Turbidity – Has only applied to POTWs, to date

Lucky

...Section 5.8 of this TMDL addresses **turbidity** by stating that the **suspended solids** discharged by **point sources** in the Boeuf River basin are **assumed to consist primarily of organic solids rather than inorganic solids**. Discharges of organic suspended solids from point sources are already addressed by ADEQ through their permitting of point sources to maintain water quality standards for DO. The WLA to support the turbidity TMDL will not require any changes to the permit concerning inorganic suspended solids. Therefore, no further permitting action is needed for turbidity.

Implementing TMDLs

- **Easy**
- **Lucky**
- **Hard**

Implementing TMDLs

- **Hard**

Implementing TMDLs

- **Hard**
 - Mercury TMDL Implementation Plan
 - Revising TMDLs

Hard

It should be noted that this facility is identified in “TMDLs for Turbidity, Chloride, Sulfate, and TDS in the Boeuf River and Bayou Macon Basins, AR”, March 3, 2005, for Turbidity, Chloride, and Sulfate for Reach #018 of the Boeuf River. The TMDL report states that a wasteload allocation (WLA) for Chloride and Sulfate is not needed for this point source because this facility **does not discharge to a reach that is impaired due to Chloride or Sulfate**. Therefore, no further permitting action is needed for Chloride or Sulfate

Hard

It should be noted that this facility is **identified** in “TMDLs for Turbidity, Chloride, Sulfate, and TDS in the Boeuf River and Bayou Macon Basins, AR”, March 3, 2005, for Turbidity, Chloride, and Sulfate for Reach #018 of the Boeuf River. The TMDL report states that a wasteload allocation (WLA) for Chloride and Sulfate is not needed for this point source because this facility **does not discharge to a reach that is impaired due to Chloride or Sulfate**. Therefore, no further permitting action is needed for Chloride or Sulfate

Tool for Difficult TMDLs

- Read and re-read the TMDLs

Tool for Difficult TMDLs

- Read and re-read the TMDLs
- Then have someone else read and re-read the TMDLs

Case Study: Mercury TMDL Implementation

Revisiting TMDLs

- ADEQ does plan on revising some TMDLs:
 - ADEQ has identified many TMDLs that need “tweaking”
 - Currently, there is one unfinished TMDL that will need to be finished by ADEQ personnel
- Permitting has sat down with our **TMDL Programing personnel to prioritize TMDLs revisions whereby the biggest bang for the buck** is received.
- The TMDL program in Arkansas must also narrow its focus to realistically target TMDLs where there is collective knowledge to tackle the calculations, i.e. Load allocations based on load duration curves, vs Load allocations based on computer modeling.

Other Solutions

- Take away, for Arkansas:
 - watershed map overlay, as opposed to waterbody overlay (thank you, Missouri!),
 - Implement during impairment determination

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