

TMDL Revisions: Process and Examples

Regional Perspective

June 5, 2025

Selena Medrano, EPA Region 6

Notification



REGULAR MEETINGS
WITH STATES



EMAIL NOTIFICATION



DRAFT WQMP

Revision: as a new TMDL



ENVIRONMENTAL QUALITY

April 1, 2020

Mr. Richard Wooster, Section Chief
Water Quality Protection Section (WDPQ)
U. S. Environmental Protection Agency, Region 6
1201 Elm Street, Suite 500
Dallas, TX 75270-2101

Dear Mr. Wooster:

The Arkansas Department of Energy and Environment, Division of Environmental Quality (DEQ), Office of Water Quality respectfully requests approval of revision of four (4) TMDLs on Ten Mile Creek, Arkansas, for pathogens.

DEQ proposes to revise four pathogen TMDLs for AU AR_11010014_009, Ten Mile Creek for *E. coli* and fecal coliform for both primary and secondary contact recreation seasons. Waste load allocations (WLA) for City of Pleasant Plains were calculated for each pathogen and season

Revision: through WQMP

Appendix I. Updates to One TMDL for Indicator Bacteria in Cotton Bayou Tidal

AU 0801C_01

This appendix provides updates to a TMDL previously submitted through the state’s WQMP for: Cotton Bayou Tidal (o8o1C).

The report, *One Total Maximum Daily Load for Indicator Bacteria in Cotton Bayou Tidal for Assessment Unit o8o1C_01*, was adopted by TCEQ on May 22, [2024](#) and approved by EPA on July 26, 2024. Upon EPA approval, the TMDL became part of the state’s WQMP.

The Texas WQMP has since been updated twice prior to this update for this TMDL. The previous update revised the list of individual WLAs in the original TMDL document.

The purpose of this update is to make the following changes to the TMDL (presented in Table I-1):

- Add one new permit.
- Reduce flow for an existing permit.

Original TMDLs for Ten Mile Creek AR_11010014_009 for fecal coliform (FC) and *E. coli* for both primary contact recreation (PCR-S) and secondary contact recreation (PCR-W/SCR).

Arkansas Assessment Unit	Pollutant	Criteria	MOS cfu/day	WLA cfu/day	LA cfu/day	TMDL cfu/day
AR_11010014_009	FC	PCR-S	1.88E+12	0	1.69E+13	1.88E+13
AR_11010014_009	FC	PCR-W/SCR	9.38E+12	0	8.44E+13	9.38E+13
AR_11010014_009	<i>E. coli</i>	PCR-S	1.92E+12	0	1.73E+13	1.92E+13
AR_11010014_009	<i>E. coli</i>	PCR-W/SCR	9.61E+12	0	8.65E+13	9.61E+13

The proposed TMDL revisions are necessary because a new facility, City of Pleasant Plains WWTP, has applied for a permit and will discharge pathogens into this AU.

This revision, along with associated 208 Plan updates, was public noticed in a state-wide publication on February 24, 2020 and received no comments during the public comment period.

Waste load allocations (WLA) for City of Pleasant Plains were calculated for each pathogen and season condition and subtracted from the corresponding load allocation (LA), keeping the total TMDL the same. Please note that each WLA is so small compared to the LA that the LA for each TMDL does not change with the subtraction of the WLA.

Revised WLA and LA for Ten Mile Creek AR_11010014_009 for fecal coliform (FC) and *E. coli* for both primary contact recreation (PCR-S) and secondary contact recreation (PCR-W/SCR).

Arkansas Assessment Unit	Pollutant	Criteria	MOS cfu/day	WLA cfu/day	LA cfu/day	TMDL cfu/day
AR_11010014_009	FC	PCR-S	1.88E+12	1.51E+09	1.69E+13	1.88E+13
AR_11010014_009	FC	PCR-W/SCR	9.38E+12	7.57E+09	8.44E+13	9.38E+13
AR_11010014_009	<i>E. coli</i>	PCR-S	1.92E+12	1.55E+09	1.73E+13	1.92E+13
AR_11010014_009	<i>E. coli</i>	PCR-W/SCR	9.61E+12	7.76E+09	8.65E+13	9.61E+13

WLAs for TPDES-permitted facilities

AU	TPDES Number	Permittee	Full Permitted Flow (MGD)	Enterococci WLAWWTF (billion CFU/day)
0801E_01	WQ0016031001/ 16031-001	Parkland Development LLC	0.20	0.265

TMDL summary calculations for one AU in the TMDL watershed

Updates Table 17, p. 41 in the original TMDL document.

All loads expressed as billion cfu/day Enterococci.

AU	State Permit Number	Permittee Name	Flow (MGD)	WLA	TMDL Comments
0801E_01	16120-001	GOLIVE ACQUISITIONS LLC	0.015	0.020	New permit
0801E_01	16031-001	PARKLAND DEVELOPMENT LLC	0.1	0.132	Reduced flow

The Texas WQMP has since been updated twice prior to this update for this TMDL. The previous update revised the list of individual WLAs in the original TMDL document.

The changes reflected in this update resulted in the shifting of allocations between the sum of the individual WLAs and the allowance for future growth (FG) in one assessment unit (AU). This was originally presented in Table 17 in the original TMDL document. The affected AU in this update is included here as Table I-2.

Table 17. TMDL allocation

AU	TMDL	WLA _{WWTF}	WLA _{SW}	LA	FG	MOS
0801C_01	89.169	6.554	24.389	45.068	8.700	4.458

All loads are expressed in billion cfu/day Enterococci.

Table I-2 - TMDL summary calculations for one AU in the TMDL watershed

Updates Table 17, p. 41 in the original TMDL document.

All loads expressed as billion cfu/day Enterococci.

AU	TMDL	WLA _{WWTF}	WLA _{SW}	LA	FG	MOS
0801C_01	89.169	6.766	24.389	45.068	8.488	4.458

Abbreviations: WLA_{WWTF} – Wasteload Allocation for Wastewater Treatment Facilities, WLA_{SW} – Wasteload Allocation for Regulated Stormwater, LA – Load Allocation, MOS – Margin of Safety