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PUBLIC NOTICE

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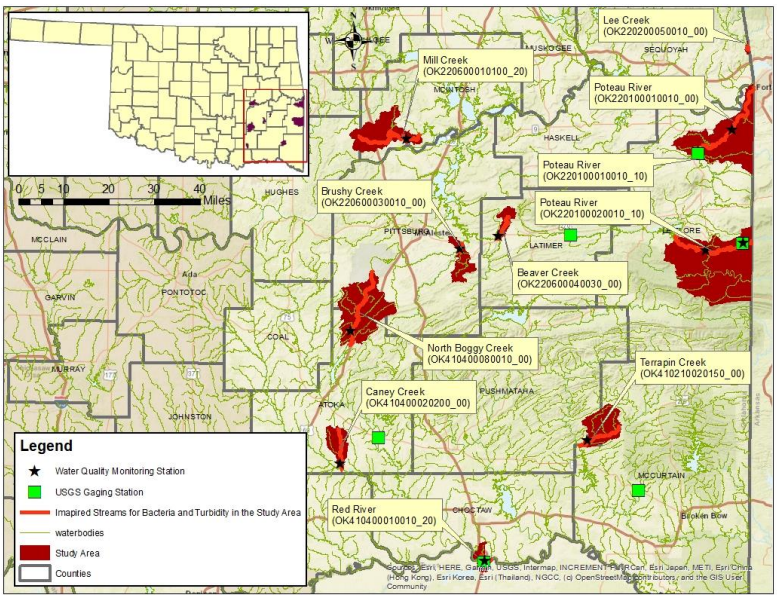
Availability of Draft Bacteria and Turbidity TMDLs for Streams in Southeast Oklahoma

Proposed Modification to Incorporate Southeast Oklahoma Bacteria and Turbidity TMDLs into Oklahoma's Water Quality Management Plan

Request for Public Comments

Public Comment Period Ends on Friday, June 27, 2025



The Oklahoma Department of Environmental Quality (DEQ) is seeking comments on a draft Total Maximum Daily Load (TMDL) report entitled, "Southeast Oklahoma Bacterial and Turbidity TMDLs". This report describes the reductions in *E, coli*, Enterococci, and total suspended solids (TSS) needed to achieve compliance with water quality standards (WQS) for bacteria and turbidity and improve water quality (WQ) in the Southeast Oklahoma Area. This TMDL report is based on Oklahoma's 2022 Integrated Report (IR) and 303(d) list. DEQ is also proposing to incorporate these TMDLs into Oklahoma's Water Quality Management Plan (208 Plan). The full TMDL report can be found on-line at: https://www.deq.ok.gov/water-quality-division/watershed-planning/tmdl/.

Beneficial Uses: The designated beneficial uses for Oklahoma streams addressed in this TMDL contain:

- Aesthetics (AES)
- Agriculture (AG)
- Fish & Wildlife Propagation
  - Warm Water Aquatic Community (WWAC)
  - Cool Water Aquatic Community (CWAC)
- Fish Consumption (FISH)
- Primary Body Contact Recreation (PBCR)
- Public & Private Water Supply (PPWS)
- Sensitive Public and Private Water Supplies (SWS)

- High Quality Water (HQW)

Table 1 is an assessment from Oklahoma's 2022 IR on whether or not the waterbodies in the Study Area met their designated beneficial uses. The designated beneficial uses addressed in the Southeast Oklahoma TMDL Report were PBCR, WWAC and CWAC.

Table 1: Assessed Beneficial Uses for Waterbodies in the Study Area

Waterbody ID	Waterbody Name	AES	AG	WWAC	CWAC	FISH	PBCR	PPWS	SWS	HQW
OK220100010010_00	**Poteau River**	F	F	N		F	N	I		
OK220100010010_10	**Poteau River**	F	F	F		F	N	I		
OK220100020010_10	**Poteau River**	F	F	N		F	N	I		
OK220200050010_00	**Lee Creek**	I	F		N	X	N	I		X
OK220600010100_20	**Mill Creek**	F	F	N		X	F	I		
OK220600030010_00	**Brushy Creek**	N	F	N		N	N	N		
OK220600040030_00	**Beaver Creek**	N	I	N		X	N			
OK410210020150_00	**Terrapin Creek**	F	F		N	X	F	I		X
OK410400010010_20	**Red River**	F	F	N		F	N	I		
OK410400020200_00	**Caney Creek**	N	F	N		X	N			
OK410400080010_00	**Boggy Creek, North**	F	F	N		X	I	I	X	
F – Fully supporting	**N** – Not supporting	**I** – Insufficient		**X** – Not assessed		Source: DEQ 2022 Integrated Report				

Impairments: Based on an assessment of water quality monitoring data for the 2022 IR, Oklahoma DEQ has determined that waterbodies in Table 1 are not supporting their designated uses for PBCR or Fish and Wildlife Propagation. Elevated levels of pathogen indicator bacteria in aquatic environments indicate that a waterbody is contaminated with human or animal feces and that a potential health risk exists for individuals exposed to the water. Elevated turbidity levels caused by excessive sediment loading and stream bank erosion impact aquatic biological communities.

- **Bacteria:** The PBCR beneficial use includes swimming. If the PBCR beneficial use is not met, that means there is too much bacteria in that waterbody. Many types of bacteria are pathogens which are things that can cause disease in animals or plants. According to the OWQS, bacterial testing is done for *E. coli* and Enterococci. They may be found in fecal matter entering waterbodies from sources such as sewage discharges, leaking septic tanks, or runoff from animal feedlots. Therefore, they are used as a surrogate for pathogen bacteria in this TMDL.
- **Turbidity:** When more than 10% of turbidity samples in a lake are greater than the turbidity standard (50 NTU for WWAC or 10 NTU for CWAC) based on long-term record of most recent 5 years, the Fish and Wildlife Propagation beneficial use will be considered not attained. Turbidity is a measure of water clarity, so it cannot be expressed as a mass load. Total suspended solids (TSS) are therefore modeled and evaluated as a surrogate for turbidity using a site-specific relationship derived from TSS and turbidity measurements.

Watershed: The Southeast Oklahoma Study Area is located in the southeastern part of Oklahoma. The waterbodies and their watersheds addressed in this report are scattered over Atoka, Choctaw, Hughes, Latimer, Le Flore, McCurtain, McIntosh, Pittsburg, Pushmataha, and

Sequoyah counties. The watersheds range in size from 1,108 acres (Lee Creek, OK220200050010_00) to 151,364 acres (Poteau River, OK220100020010_10).

Point Source Discharges:

- **OPDES regulated municipal wastewater treatment facilities:** There are seven municipal facilities in the Study Area. Municipal WWTFs are designated with a Standard Industrial Code (SIC) number 4952. They discharge organic TSS with limits for $CBOD_5$ so they are not considered a potential source of turbidity. The three municipal wastewater treatment facilities in the Poteau River (OK220100010010_00 and OK220100020010_10) watersheds will receive WLA for their bacteria TMDL. This can be found in Table 3-1 of the TMDL report.
- **OPDES regulated industrial wastewater treatment facilities:** There are six industrial facilities in the Study Area, but only one facility, the OG&E River Valley Generating Station (OK0040169), will receive WLA for the bacteria TMDL.
- **OPDES regulated stormwater discharges:** DEQ regulates stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s), industrial sites, and construction sites. However, DEQ's stormwater program does not include the discharges from Indian Country lands, discharges related to oil & gas extraction, or discharges associated with agricultural purposes. For details about DEQ's Stormwater Program, go to https://www.deq.ok.gov/stormwater-permitting/.
    - **MS4s:** There is only one Phase II MS4 in theTMDL Study Area [the city of Arkoma (OKR040046)]. The Town of Arkoma's Phase II MS4 will have a MS4 WLA in Poteau River (OK220100010010_00) bacterial TMDL calculation.
    - **Multi-Sector General Permit (MSGP):** An NPDES permit authorization to discharge stormwater from an industrial activity must be obtained prior to the start of any operations. The owner/operator permit holder must also develop and implement a Storm Water Pollution Prevention Plan (SWP3) for the industrial facility maintained at the site. There are nine MSGP facilities in the Study Area. This can be found in Table 3-2 of the TMDL report.
    - **Construction Sites:** A Construction General Permit (OKR10) is required for any stormwater discharges associated with construction activities that result in land disturbance of equal to or greater than one (1) acre, or less than one (1) acre if they are part of a larger common plan of development or sale that totals at least one (1) acre. A stormwater pollution prevention plan (SWP3) must be developed and implemented according to the requirements of the OKR10 permit. There were six OKR10 permits for construction projects in the Study Area. This can be found in Table 3-3 of the TMDL report.
- **No-Discharge Facilities:** For the purposes of these TMDLs, it is assumed that no-discharge facilities (such as towns with total retention lagoons) do not contribute indicator bacterial or TSS loading. However, It is possible that the wastewater collection system associated with no-discharge facilities could be a source of pollutant loading to streams, or that discharges from the WWTP may occur during large rainfall events that exceed the storage capacity of the wastewater system. There are no municipal no-discharge facilities in the Study Area.
- **Sanitary Sewer Overflows (SSO):** SSOs are a common result of the aging wastewater infrastructure around Oklahoma. Oklahoma has been ahead of other states and, in some cases EPA itself, in its handling of SSOs. Due to the widespread nature of the SSO problem, DEQ has focused its limited resources to first target SSOs that result in definitive environmental harm (such as fish kills) or lead to citizen complaints. All SSOs falling into

these two categories are addressed through DEQ's formal enforcement process. While not all sewer overflows are reported, DEQ has some data. For example in the Study Area between 1990 and 2021, 272 SSO occurrences were reported with amounts ranging from a minimal quantity to 10 million gallons. Details about these SSOs are summarized in Table 3-4 of the TMDL report.

- NPDES regulated **Animal Feeding Operations (AFOs):** The Agricultural Environmental Management Services (AEMS) is a program within the Oklahoma Department of Agriculture, Food and Forestry (ODAFF). Through regulations established by the Oklahoma Concentrated Animal Feeding Operation (CAFO) Act, Swine Feeding Operation (SFO) Act, and the Registered Poultry Feeding Operation (PFO) Act, AEMS helps develop, coordinate, and oversee environmental policies and programs aimed at protecting the Oklahoma environment from pollutants associated with agricultural animals and their waste. This is done through the use of Best Management Practices (BMPs). BMPs include dikes, berms, terraces, ditches or other similar structures used to isolate animal waste from outside surface drainage. ODAFF is the NPDES-permitting authority for CAFOs and SFOs in Oklahoma under what ODAFF calls the Agriculture Pollutant Discharge Elimination System (AgPDES). PFOs are smaller animal feeding operations so they are not required to get NPDES permits. These operations are only required to register with ODAFF and follow PFO rules. In the Study Area, there are 66 PFOs.

Nonpoint Sources Discharges:

- Fecal coliform loads from the four major nonpoint source categories (commercially raised farm animals, pets, deer, and septic tanks) were estimated in Section 3.3 of the TMDL report.
- **Wildlife** – Estimated numbers of wild deer range from 53 to 1,486 in the study watersheds.
- **Farm animals** – Estimated numbers of farm animals are summarized in Table 3-10 of the TMDL report. The magnitude of loading to land surface from farm animals is the largest, but it may not reflect the magnitude of loading to a stream.
- **Pets –** Estimated numbers of pets (cats and dogs) range from 58 to 3,781 in the study watersheds.
- **Failing Septic Systems –** Estimated numbers of failing septic systems range from 3 to 157 in the study watersheds.

TMDL Calculations:

The purpose of a TMDL is to identify sources of pollutants in a watershed and calculate the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards. The Southeast Oklahoma Study Area contains waterbodies that are in violation of Oklahoma WQS with respect to bacteria and/or turbidity. The TMDL calculates the reduction in bacteria and TSS that would be needed for these streams to be in compliance with Oklahoma WQS. This was done using load duration curves. The calculations include present and future sources as well as a margin of safety. For more information on how the TMDLs were developed, read Sections 4 & 5 and Appendixes C, D & E of the TMDL report.

TMDL Results:

The TMDLs were calculated using load duration curves in this report and Table 2 indicates the amount that each pollutant will need to be reduced [Percent Reduction Goal (PRG)] for

the impaired waterbody to meet water quality standards and its designated beneficial uses:

Table 2: PRG Needed for Waterbody to meet Water Quality Standards

WBID	Waterbody Name	These impairments must be reduced by the following amounts in order to meet water quality standards.		
		E. coli	Enterococci	Turbidity
OK220100010010_00	Poteau River		65.8%	
OK220100020010_10	Poteau River	38.8%	91.9%	
OK220600010100_20	Mill Creek			80.1%
OK220600030010_00	Brushy Creek			53.7%
OK220600040030_00	Beaver Creek			15.2%
OK410210020150_00	Terrapin Creek			49.1%
OK410400010010_20	Red River			18.3%
OK410400020200_00	Caney Creek			55.5%
OK410400080010_00	North Boggy Creek			52.8%

Providing comments

- DEQ invites your comments. The comment period will be open for 45 days. The TMDL report is a draft document and is subject to change based on comments received during the public participation process.
- You may also request a public meeting in writing. If there is a significant degree of interest, DEQ will schedule a public meeting.
- All official comments for the record must be submitted either in writing or by e-mail before the end of the comment period. DEQ will prepare a responsiveness summary addressing all comments received. After evaluating comments received and making any necessary changes, the TMDL report will be submitted to EPA for final approval. The final results of the TMDL will be incorporated into Oklahoma's Water Quality Management Plan.

Please submit your comments in writing to: Soojung Lim, Water Quality Division, Oklahoma Department of Environmental Quality, P.O. Box 1677, Oklahoma City, OK 73101-1677; (405) 702-8195; E-mail: Water.Comments@deq.ok.gov

Comments must be received by 4:30 pm on Friday, June 27, 2025.

Obtaining copies: You may view the full TMDL Report by going to the DEQ website at: https://www.deq.ok.gov/water-quality-division/watershed-planning/tmdl/ or by picking up copies at the DEQ main office, Water Quality Division, 707 North Robinson, Oklahoma City from 8:30 am – 4:00 pm. A document copying fee may apply.

You are receiving this notice because you are either on DEQ's list to receive all public notices, or you requested notices about your watershed. In addition to proposed TMDL reports, DEQ's Watershed Planning Section sends out public notices about proposed wasteload allocations (208s), proposed changes to the CPP or Integrated Report, 404 projects, and 401 Certification requests.

If you would like to receive any or all of these public notices via e-mail, please send your e-mail address to Water.Comments@deq.ok.gov. Also, please let us know if you want to receive notices for the entire State or just for your watershed.

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