

## A Brief History of Mill Creeks Water Quality

### Impaired Waters and TMDLs

The Alabama Department of Environmental Management (ADEM) maintains a list of impaired surface waters within the state of Alabama called the 303(d) list. This list is a requirement of Section 303(d) of the Clean Water Act which requires states to maintain a list of waterbodies that are not in compliance with local water quality standards.<sup>[1]</sup>

A surface water is considered to be impaired when water quality testing determines that one or more of its quality parameters exceeds established water quality standards. Per Section 303(d) a Total Maximum Daily Load (TMDL) is usually established for impaired waters. A TMDL is a tool that is specific to a particular surface water. It establishes how much of a particular pollutant that surface water can take in without exceeding water quality standards.<sup>[2]</sup> In theory, if a TMDL is well developed, feasible, and successfully implemented an impaired surface water will recover.

For more information on TMDLs please visit: <https://adem.alabama.gov/programs/water/tmdl.cnt>

To learn more about how water quality standards are developed and adopted please visit: <https://www.epa.gov/wqs-tech/how-are-water-quality-standards-developed>



### Mill Creek

In 2006, Mill Creek was listed on ADEM's 303(d) list as an impaired waterway.<sup>[3]</sup> Water sampling completed in 2008 concluded that the cause for Mill Creek's inclusion on the list was "organic enrichment", specifically Carbonaceous Biochemical Oxygen Demand (CBOD) and Nitrogenous Biochemical Oxygen Demand (NBOD), caused primarily by urban development.<sup>[4]</sup>

In response to this the Mill Creek Watershed Management Plan (MCWMP) was created with the aim of improving the water quality and overall health of the creek. All of the actions taken to improve the water quality of Mill Creek paid off when it was excluded from the 2018 303(d) list for the state of Alabama.<sup>[5]</sup>

To this day Mill Creek is not considered to be impaired and does not appear on ADEM's 303(d) list. Even so, the City of Phenix City continues to monitor the water quality of Mill Creek by conducting quarterly water sampling at four specific locations along the creek within the city limits. The latest sampling event occurred on September 26, 2023. The samples were processed by an independent lab and the results indicate that the water quality of Mill Creek is within acceptable levels.

### How do I get involved?

It's up to all of us to do our part to make sure that our waterways and waterbodies remain clean and free of pollutants and contaminants. To achieve this we can take simple everyday actions such as reporting possible illicit discharges that we may observe within our community or picking up after ourselves so that trash and debris does not end up being washed into the City's waterways.

If you have any questions, would like more information on these topics, or would like to report a possible water quality issue within Phenix City please visit our website at: <https://phenixcityal.us/engineering-public-works/engineering/storm-water-management/> or call the Engineering/Public Works Department at 334-448-2760.



1. "Overview of Listing Impaired Waters Under CWA Section 303(D) | US EPA." US EPA, 11 Aug. 2023, [www.epa.gov/tmdl/overview-listing-impaired-waters-under-cwa-section-303d](https://www.epa.gov/tmdl/overview-listing-impaired-waters-under-cwa-section-303d)
2. "Alabama Department of Environmental Management." *Adem.alabama.gov*, [adem.alabama.gov/programs/water/tmdl.cnt](https://adem.alabama.gov/programs/water/tmdl.cnt).
3. "303(D) Information and Map." Alabama Department of Environmental Management, [adem.alabama.gov/programs/water/303d.cnt](https://adem.alabama.gov/programs/water/303d.cnt)
4. "Mill Creek Watershed Management Plan." Alabama Cooperative Extension System, [ssl.acesag.auburn.edu](https://ssl.acesag.auburn.edu)
5. Foster, Jonathan. "Storm Water Management Program Annual Report." City of Phenix City, City of Phenix City, 22 May 2023, [phenixcityal.us/wp-content/uploads/2023/05/2022-2023](https://phenixcityal.us/wp-content/uploads/2023/05/2022-2023)