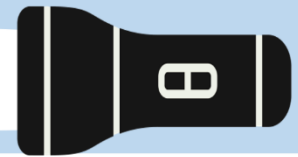


# Light on the Legislature: Good-Tasting Waco Water



## Background:

A “watershed” is a land area that channels water (run-off from rain, snow melt, etc.) into a common body of water. The North Bosque Watershed is the land area that channels water into the North Bosque River; it stretches southeast from Erath County into Lake Waco. The North Bosque River flows into Lake Waco, providing 75% of drinking water for Waco and the surrounding area.

Upstream, in North Central Texas, Erath County, has long been dairy farming country. In the 80’s and early 90’s, the dairy industry grew tremendously. Erath county became the leading county for milk production in the state. Much larger dairies began operating in the area. These larger dairies, technically categorized as “Concentrated Animal Feeding Operations” (CAFOs), kept larger numbers of cattle than the previous small dairies, and they kept the cattle in smaller spaces such as open lots and corrals. This meant all the manure nutrients could no longer bind well with the soil. Instead, the CAFOs managed the manure by collecting and selling it as a soil amendment, or applying it as a fertilizer to their own fields. When too much manure is spread in a field, it tends to wash out with rain events, and in this case into the North Bosque River, and from there to Lake Waco.

The water run-off from the CAFOs carries extra nutrients from the manure, such as Phosphorus. Downstream these nutrients contributed to excessive plant growth, especially algae blooms. This excessive algae growth caused the water in Waco to taste and smell bad. Beginning in 1996, the Texas Commission on Environmental Quality (TCEQ), the state’s environmental protection agency, identified excessive algae growth in the North Bosque River.

Under the Clean Water Act, the federal Environmental Protection Agency (EPA) requires each state to prepare a list of impaired and threatened bodies of water. This is called the 303(d) list after the section of the Clean Water Act which requires it. In 1998 the North Bosque River was listed as impaired due to high levels of pollutants, especially soluble reactive phosphorus (SRP).

As part of the strategy to reduce these levels of phosphorus and the resulting algae growth, the Texas Natural Resource Conservation Commission (now TCEQ) established a Total Maximum Daily Load (TMDL) for the North Bosque River, in 2001. A TMDL is a value of the maximum amount of a pollutant a body of water can receive while still meeting water quality standards. At that time the TNRCC estimated that the amount of phosphorous in the water flowing down the North Bosque River toward Lake Waco needed to be reduced to reduce the algae growth that was harming water quality in Waco.

Since that time, the TCEQ and Texas State Soil and Water Conservation Board have worked with stakeholders in the North Bosque River Watershed to develop and implement a multi-faceted plan for meeting the standards set in the TMDLs. Through additional permitting and monitoring requirements, improvements to upstream wastewater treatment infrastructure and management, a temporary program to compost manure and haul it out of the watershed, education, and other efforts, TCEQ and partners have made a measure of progress. As of the most current review of the water quality data, the TMDL has not been met at 2 of the 5 measuring stations along the North Bosque River, even after 20+ years of the Implementation Plan being in place.



**The North Bosque River Watershed**

<https://www.tceq.texas.gov/waterquality/tmdl/06-bosque.html>

*The Assessment of Water Quality Trends for the North Bosque River Through 2023* reported decreasing amounts of SRP at all five measuring stations along the North Bosque River, with measurements reaching goal levels at four of the five stations. However, an independent review of the data suggested that the TMDL has not been met at 2 of the 5 index stations, and that the other three met the TMDL before it was established. This suggests that the original calculations for the contaminant load were overestimated.

The North Bosque River is a critical water resource for Waco and the Greater Waco area. The water quality of this resource depends on cooperation between the City of Waco and agricultural interests upstream. This cooperation, and significant city investment through the years in advanced water purification systems, gives us the good-tasting water we enjoy today.

## How has the Texas Legislature affected this issue in the past?

[HB 2912, 77th Session, 2001](#) - The City of Waco lobbied hard for legislation in 2001 that required the CAFOs affecting the North Bosque Watershed to go through a special individual permitting process that would allow communities affected by the watershed (for example Waco) to have insight and feedback into the operation, and into whether or not the operation could obtain necessary permits. This legislation was passed as a part of the TNRCC (TCEQ) sunset legislation, HB 2912. This legislation is credited by Wacoans as helping to improve the water quality in Waco.

[HB 2827, 88th Session, 2023](#) - In 2023, House Bill 2827, authored by Rep. DeWayne Burns, R-Cleburne, would have ended individual permitting in the watershed in favor of standardized general permits, disallowed requiring nutrient testing of some fields, and removed nutrient management education requirements for farmers. This would have enabled CAFO operators to skip the special permitting process implemented in 2001, and to obtain their permits without getting feedback from downstream communities such as Waco. City of Waco officials rallied to oppose this bill. The bill passed the House but died in committee in the Senate. The Senate committee was headed by Senator Brian Birdwell who represented both Erath and McLennan Counties. **Final Vote:** TX House District 56, Anderson (R) - No, TX House District 13, Orr (R) - Yea.

## What to watch for in the 89th Session, 2025

Look for a bill to provide a Watershed Protection Tax Credit. This would provide franchise tax benefits to dairy farmers upstream of Lake Waco who haul manure out of the North Bosque River Watershed and other impaired watersheds. This could potentially be a benefit to both the upstream dairy farmers, and the downstream communities such as Waco that depend on the watershed for drinking water.

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### References:

- [2024 Texas Integrated Report of Surface Water Quality for Clean Water Act Sections 305\(b\) and 303\(d\) - Texas Commission on Environmental Quality - www.tceq.texas.gov](#)
- [Assessment of Water Quality Trends for the North Bosque River Through 2023](#)
- [The Expanding Dairy Industry: Impact on Ground Water Quality and Quantity with Emphasis on Waste Management System Evaluation for Open Lot Dairies](#)
- North Bosque River Discussion, 2021. <https://www.tceq.texas.gov/downloads/water-quality/tmdl/north-bosque-river-narrative-criteria-06/stakeholders-06/06-anchor-qea-presentation-wq-goals-2021-01-21.pdf>
- [North Bosque River: General Uses - Texas Commission on Environmental Quality - www.tceq.texas.gov](#)
- [Preserving and Improving Water Quality \(Print Version\)](#)
- Reducing Phosphorus in the North and Upper Bosque River - [GI-267,7.02 En, pdf](#)
- Two Total Maximum Daily Loads for Phosphorus in the North Bosque River - [06-north-bosque-river-tmdl.pdf](#)
- [Waco, dairies seek common ground after legislative feud](#)