



Improving Water Quality in the Leon River A TMDL Project for Bacteria

In the Leon River, Segment 1221, bacteria concentrations are occasionally elevated, indicating a possible health risk for people who swim or wade in them—activities called “contact recreation” in the state’s Texas Surface Water Quality Standards.

Bacteria are commonly found in the intestines of warm-blooded organisms such as humans, livestock, wildlife, and pets. These bacteria in water may indicate the presence of disease-causing microorganisms.

The TCEQ conducts a total maximum daily load project to determine the measures necessary to restore water quality in the river. The goal of a TMDL is to determine the amount (or load) of a pollutant that a body of water can receive and still support its designated uses. The allowable load is then allocated among categories of sources within the watershed, and stakeholders work with the state to develop measures that reduce pollutant loads.

Learn more about water quality standards and monitoring, and TMDLs by reading *Preserving and Improving Water Quality*, available on our website at www.tceq.texas.gov/goto/tmdl/.

The Leon River Watershed

The Leon River below Proctor Lake, Segment 1221, is located in south central Texas and has a watershed covering approximately 1,364 square miles. The segment extends 173 miles northwest from its lower end at the head of Belton Lake. Land use in the Leon River watershed is primarily rural, with rangeland (much of it forested or brushy) cropland, and pastureland, with some small urban areas.

The watershed includes portions of Comanche, Coryell, Erath, Hamilton, and Mills counties. Cities in the watershed include Comanche, Gatesville, Gustine, Hamilton, and McGregor.

Project Development

James Miertschin and Associates Inc. worked under contract with the TCEQ to develop an analysis to support development of a TMDL. A draft Modeling Report was completed in January 2006, on which stakeholders were invited to submit formal comments.

After the stakeholders reviewed the report, they asked the TCEQ to suspend work on the TMDL and the TCEQ agreed. Instead, the stakeholders wanted to develop a watershed protection plan (WPP) that would



identify strategies for holistically addressing all impairments and threats to their water resources.

The Brazos River Authority received a federal nonpoint source pollution grant through the TSSWCB to develop the Leon River WPP, which, when complete, will be a framework for implementing coordinated water quality protection and restoration strategies.

After completion of the WPP, the implementation actions in the plan will be given sufficient time to take effect before the TCEQ will consider whether a TMDL for bacteria is still needed. Prior to moving forward with any change in the water quality improvement strategy, the TCEQ will meet with stakeholders to discuss options.

Public Participation

Public participation is an important component of every TMDL project. A named-member advisory group was created to represent stakeholders in the watershed. The group advised the TCEQ on issues related to the development of the TMDL. It included landowners and representatives from cities, regional agencies, water districts, citizen groups, and private industry.

In total, the TMDL Team held eight public meetings with stakeholders. Handouts and presentations pro-

vided at stakeholder meetings are posted on the TMDL project Web page. All meetings were well attended.

At the first stakeholder meeting (August 2003), project staff presented an overview of the project, its process, and its intention. The second meeting (August 2004) summarized the review of historical data and shared the results of targeted monitoring activities.

A Technical Sub-Committee met in April 2006 to address concerns with the model. After acting on the subcommittee's work, the TCEQ held a public meeting in Hamilton in June 2006 to present the draft "Final Modeling Report and Sensitivity Analysis." The draft TMDL model received a great deal of interest and comment from the stakeholders.

In October 2007, stakeholders met to discuss the Bacteria TMDL Task Force Report, water quality standards, septic systems, wildlife, and considered adding segments. The stakeholders wanted instead to develop a watershed protection plan (WPP) that would identify strategies for holistically addressing all impairments and threats to their water resources.

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In December 2007, stakeholders met to decide about adding segments to the project, discuss general permit versus individual permits for confined animal feedlot operations, adoption of the TMDL report, and coordination of the Leon River Watershed Protection Plan (WPP) with the TMDL project.

For More Information

Contact one of the people listed below, or visit the project websites at:

<www.tceq.org/implementation/water/tmdl/34-leonbacteria.html> and
<www.tsswcb.state.tx.us/managementprogram/leonwpp>

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Project Status

Start Date: October 2001

Projected End Date:

TCEQ Adoption: *Suspended*

TMDL: Percent Complete

	10	20	30	40	50	60	70	80	90	100
Data Collection										
Assessment										
TMDL Development										
Stakeholder Review										
TCEQ Adoption										

Project Highlights

- § The TMDL report was completed and is consistent with recommendations in the joint technical task force report on Bacteria TMDLs.
- § The Brazos River Authority received a federal nonpoint source pollution grant through the TSSWCB to develop of a Leon River Watershed Protection Plan (WPP).
- § Final action on adoption of the TMDL has been suspended.