



Improving Water Quality in the Upper San Antonio River A TMDL Project for Bacteria

In three segments—the Upper San Antonio River, Segment 1911, the Salado River, Segment 1910, and Walzem Creek, Segment 1910A—concentrations of bacteria are sometimes too high.

High concentrations of bacteria such as *E. coli* and fecal coliform, which are found in both human and animal waste, may indicate a health risk to people who swim or wade in the streams—activities called “contact recreation” in the state’s standards for water quality.

The TCEQ is conducting a total maximum daily load project to determine the pollutant reductions necessary to restore water quality in these streams. 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. Stakeholders work with the state to develop an implementation plan (I-Plan) with 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/waterquality/.

Description of the Project Watersheds

The Upper San Antonio River, Segment 1911, is located in the central portion of the San Antonio River Basin. Its headwaters are in southeastern Bexar County within the City of San Antonio. The river runs north to south, from the southern end of San Antonio, past Floresville and Poth, to FM 791 near Falls City in Karnes County. The upper portion of the watershed is largely developed; the lower portion is agricultural and rangeland.

Salado Creek, Segment 1910A, is located in the upper portion of the San Antonio River Basin, with its headwaters in north-central Bexar County. It flows north to south for 35 miles along the north and east side of San Antonio. Salado Creek joins the San Antonio River south of the city between Losoya and Elmendorf. The upper portion is largely undeveloped. The terrain is primarily limestone hills with sparse vegetation.

Project Development

James Miertschin and Associates Inc. worked under contract with the TCEQ to develop the TMDLs. The commission adopted the TMDLs on July 25, 2007.



Possible sources and/or causes of contamination include:

- discharges from wastewater treatment facilities and other institutions
- discharges from urban storm sewer systems
- runoff from undeveloped lands
- wildlife deposition
- pets and livestock deposition
- leaking sewer infrastructure
- failing septic systems

SARA, together with the City of San Antonio, Bexar County, and other partners, developed the Upper San Antonio River Watershed Protection Plan (WPP). The WPP is consistent with the goals of the TMDLs.

The San Antonio River Authority, the TCEQ, and other stakeholders are developing an implementation plan that will supplement the WPP. The I-Plan will set short- and long-term goals for pollutant reduction in the watershed.

Stakeholders have drafted an inventory of possible management measures for use in the I-Plan.

Public Participation

In all its projects, the TCEQ seeks to gather opinion and information from people who represent government, permitted facilities, agriculture, business, environmental, and community and private interests in the watershed. All stakeholder meetings are open to the public.

For More Information

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

<www.tceq.texas.gov/waterquality/tmdl/34-uppersanantoniobac.html>

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TMDL Development Status

TCEQ Adoption: July 25, 2007

EPA Region 6 Approval: September 25, 2007

I-Plan Development Status

Projected End Date:

TCEQ Approval:

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 commission adopted the TMDLs on July 25, 2007.
- The TCEQ is working with SARA and other stakeholders to develop an Implementation Plan.
- Project personnel are collecting additional water quality samples to characterize bacteria loads.
- The stakeholders have prepared an inventory of possible control measures.

Visit our website at: <www.tceq.texas.gov/waterquality/tmdl/>