



Improving Water Quality in Four Austin Area Streams A Project to Protect Recreational Uses

The city of Austin is located in central Travis County, on the Colorado River. Since 2006, elevated bacteria concentrations have been found in four of the city's streams. High concentrations of bacteria, which are found in both human and animal waste, may indicate a health risk to people who swim or waded in the water body—activities called “contact recreation” in the state's standards for water quality.

In response to these conditions, TCEQ developed total maximum daily loads (TMDLs) to improve water quality in the creeks. A TMDL is like a budget—it determines the amount (or load) of a pollutant that a body of water can receive and still support its assigned uses. The allowable load is then allocated among categories of sources within the watershed.

At the same time, residents worked together with TCEQ to develop an implementation plan (I-Plan) for the TMDLs. I-Plans outline the measures that will be used to reduce bacteria in the streams and improve the safety of recreation. People who represent the various community interests that have a stake in changes to the watersheds, as identified by Austin citizens, led development of the I-Plan.

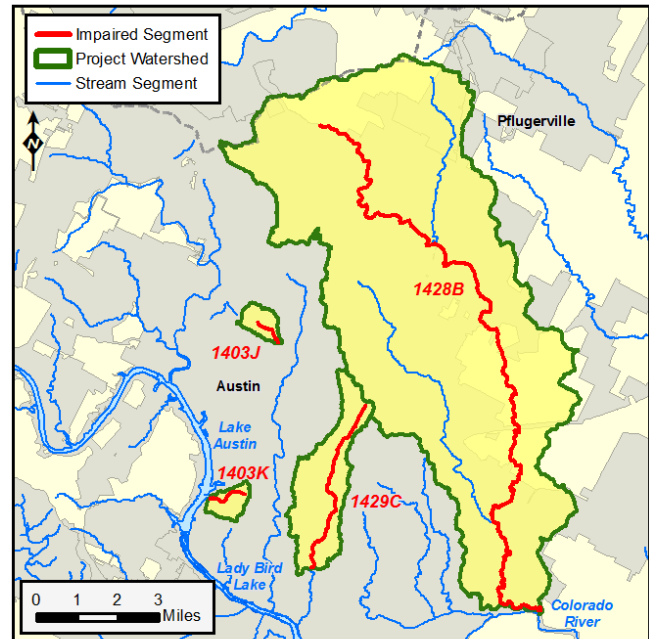
Learn more about water quality standards, monitoring, and TMDLs by reading [Preserving and Improving Water Quality](#)¹, available on our website and in print.

Project Watersheds

The watersheds for which TMDLs were developed include Waller Creek, Walnut Creek, Spicewood Tributary (a tributary of Shoal Creek), and Taylor Slough South.

Waller Creek (1429C): Waller Creek, with a drainage area of six square miles upstream of the Waller Creek Tunnel, is strongly influenced by runoff from the immediate downtown area. It flows through several residential neighborhoods, the University of Texas Campus, and the downtown business district, ending in Lady Bird Lake. Austin Water Utility maintains a wastewater collection system in the Waller Creek watershed. Wastewater collector pipes run the length of the creek, crossing it many times.

Walnut Creek (1428B): This creek flows from northern Austin to the Colorado River. It is naturally flowing most of the time, and drains about 43 square



miles. Development in the upper section of the watershed has been faster and denser than in the lower section.

Spicewood Tributary (1403J): This small tributary of Shoal Creek is in northwest Austin. It is heavily influenced by stormwater runoff from Spicewood Springs Road and other adjacent neighborhood streets, and perhaps by the single-family residences along the creek. Wastewater pipes in the wastewater collection system run the length of the tributary. Spicewood Spring, the source of the tributary, is at a higher elevation and is not affected by water quality in the stream.

Taylor Slough South (1403K): This stream is about a mile long, with a watershed of about half a mile. It flows through the central-west part of the city and into Lake Austin. Wastewater collection pipes also cross under Taylor Slough. Multiple wastewater pipes parallel and cross the creek immediately upstream of Reed Park, which maintains a swimming pool and restrooms. Some sections of the creek, which lies entirely within the Edwards Aquifer recharge zone, become dry for part of the year.

¹ <https://www.tceq.texas.gov/publications/gi/gi-351>

Project Development

Work on this project began in fall 2012. TCEQ staff completed a draft version of the TMDLs in 2014 with advice from stakeholders. Meanwhile, stakeholders developed a draft I-Plan. Staff members with the City of Austin took an active role in all aspects of the project.

The TMDLs and the I-Plan were adopted and approved by TCEQ commissioners in January 2015. The stakeholders will implement their plan over five years.

Public Participation

In all its projects, 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. TCEQ solicits advice and comment from these stakeholders at meetings and through print and electronic media notices.

The University of Texas Center for Public Policy Dispute Resolution (UTCPPDR) coordinated public participation in development of this TMDL and its implementation plan. The stakeholder Coordination Committee facilitated by UTCPPDR held regular meetings to develop the I-Plan. This diverse group of people was chosen to represent the community during early public meetings about the project.

In 2016, 2019, and 2020, stakeholders met to evaluate their progress in completing the activities described in their I-Plan. In 2016, they produced a status report for the first two years of implementation. In 2019, they produced a status report for the third and fourth years implementing the plan, and in 2020, produced a status report for the fifth year. All three reports are available on the project webpage.

For More Information

Contact the project manager listed following, or visit the project website at:

www.tceq.texas.gov/waterquality/tmdl/101-austin-bacteria>

TCEQ Project Manager

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TMDL Dates

Start Date: September 2012

TCEQ Adoption: January 21, 2015

EPA Region 6 Approval: March 18, 2015

I-Plan Date

TCEQ Approval: January 21, 2015

Highlights

- Stakeholders formed a Coordination Committee in 2013 to organize their activities and develop the I-Plan.
- TCEQ solicited public comments on the draft I-Plan and TMDLs from July 18 through August 18, 2014.
- Stakeholders met in 2016, 2019, and 2020 to assess their progress produced reports of their status implementing the I-Plan at each meeting. These reports are available on the project webpage.

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