



# Improving Water Quality in the Trinity River A TMDL Project for PCBs in Fish Tissue

In four segments of the Trinity River—Upper Trinity River, Lower West Fork Trinity River, West Fork Trinity River Below Lake Worth, and Clear Fork Trinity River Below Lake Benbrook—polychlorinated biphenyls (PCBs) have accumulated in fish. “PCBs” is a general term used to describe 209 toxic, environmentally persistent compounds.

In 2002, the Texas Department of State Health Services (DSHS) issued an aquatic life order and fish consumption advisory to protect consumers from adverse health effects caused by PCB accumulation in fish. In 2010, DSHS rescinded the aquatic life order and issued a revised consumption advisory that extended the geographic area of concern. Learn more about fish consumption advisories by visiting the DSHS website at [www.dshs.state.tx.us/seafood/default.shtm](http://www.dshs.state.tx.us/seafood/default.shtm).

The TCEQ is conducting a total maximum daily load project to determine the measures necessary to restore water quality in the 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 the 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, monitoring, and TMDLs by reading *Preserving and Improving Water Quality*, available on our website at [www.tceq.texas.gov/goto/tmdl/](http://www.tceq.texas.gov/goto/tmdl/).

## Description of the Project Watersheds

The four project segments (twelve impaired assessment units) are located within the Trinity River Basin, and flow 174 miles through six counties. Their watersheds cover approximately 1,540 square miles, including the densely populated Dallas/Fort Worth metropolitan area. To varying degrees, all the segments are affected by municipal and industrial wastewater discharges, and by storm water runoff from agricultural, industrial, and urban areas.

### Upper Trinity River

Segment 0805 is located upstream of the confluence of the Cedar Creek Reservoir discharge canal in Henderson/Navarro County to the confluence of Elm Fork Trinity River in Dallas County. The segment is 100 miles long, with a watershed of approximately 1,000 square miles. The watershed includes portions of Navarro, Henderson, Ellis, Kaufman, and Dallas counties.



There are two major tributaries that discharge into Segment 0805—East Fork Trinity River (0819) and Elm Fork Trinity River Below Lewisville Lake (0822). The watershed also includes Cottonwood Branch, Red Oak Creek, Parson’s Slough, Ten Mile Creek, Prairie Creek, White Rock Creek, and Five Mile Creek. Most of the watershed is rural with residential, range, and cropland uses. The portion of the watershed located in Dallas County is densely populated and heavily urban. The fish consumption impairment applies to all portions of the segment (five assessment units).

### Lower West Fork Trinity River

Segment 0841 is located upstream of the confluence of the Elm Fork Trinity River in Dallas County to the confluence of Village Creek in Tarrant County. The stream segment is 27 miles long. The watershed is approximately 240 square miles and is located in western Dallas and eastern Tarrant counties in a densely populated urban area. Tributaries that discharge into the segment include Mountain Creek, Bear Creek, Johnson Creek, and Village Creek. The fish tissue impairment applies to all portions of the segment (two assessment units).

### West Fork Trinity River Below Lake Worth

Segment 0806 is in Tarrant County, located upstream of the confluence of Village Creek to Lake Worth Dam. The stream segment is 33 miles long and the wa-

tershed is approximately 210 square miles. The only major tributary that discharges into the segment is Clear Fork Trinity River Below Benbrook Lake (0829). Other tributaries that discharge into the segment include Big Fossil Creek, Little Fossil Creek, Sycamore Creek, and Marine Creek. The watershed is located in a densely populated urban area. The fish consumption impairment applies to all portions of the segment (two assessment units).

**Clear Fork Trinity River Below Lake Benbrook**

Segment 0829 is 14 miles long and located upstream of the confluence with the West Fork Trinity River (Segment 0806) to Benbrook Dam in Tarrant County. The watershed is approximately 93 square miles and includes portions of Tarrant and Parker counties. In western Tarrant County, the watershed is a densely populated urban area. The fish consumption impairment applies to all portions of the segment (three assessment units).

**TMDL Development**

The TCEQ initiated the Trinity River TMDL project in January 2007, awarding a contract to Parsons Water & Infrastructure Inc. (Parsons) in April 2007.

**Public Participation**

The TCEQ solicits advice and comment from the public at meetings and through print and media notices. 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. Public participation activities for this project are conducted in coordination with the North Central Texas Council of Governments.

**For More Information**

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

<[www.tceq.texas.gov/implementation/water/tmdl/77-trinity\\_pcb.html](http://www.tceq.texas.gov/implementation/water/tmdl/77-trinity_pcb.html)>

**TCEQ Project Managers**

Dania Grundmann  
 Headquarters–Austin  
[danial.gundmann@tceq.texas.gov](mailto:danial.gundmann@tceq.texas.gov)  
 512-239-3449

John Mummert  
 Region 04 – Dallas/Fort Worth  
[john.mummert@tceq.texas.gov](mailto:john.mummert@tceq.texas.gov)  
 817-588-589

**TMDL Development Status**

Start Date: April 2007  
 Projected End Date: August 2012  
 TCEQ Adoption:  
 EPA Region 6 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**

- Data was collected for TMDL development from March 2008 through August 2008.
- Public meetings were held in Arlington to inform stakeholders of the project’s status on July 19, 2007; August 26, 2008; May 11, 2009; February 3, 2010; and August 11, 2011.
- As a result of the fish consumption advisory released by DSHS in 2010, the TMDL allocations are being updated to include areas of Clear Fork Trinity River and West Fork Trinity River. These areas were not part of the original advisory.

Visit our website at: <[www.tceq.texas.gov/goto/tmdl/](http://www.tceq.texas.gov/goto/tmdl/)>