



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. Since 2002, the Texas Department of State Health Services (DSHS) has warned people to limit the type and amount of fish they eat from these four Trinity River segments.

Polychlorinated biphenyls (PCBs) are a group of chemicals that share a common structure called biphenyl, but vary in the number and location of attached chlorine atoms. Prior to discovery of their toxicity in the early 1970s, PCBs were widely used in electrical equipment and sealants. PCBs are linked to increased rates of certain cancers in rats, mice, and other study animals, suggesting they are probably cancer-causing in humans.

The TCEQ is evaluating options for restoring the safety of fish consumption in the waterways affected by the advisory. A map of the ADV-49 area and additional consumption advice are available on the DSHS website at www.dshs.state.tx.us/seafood/survey.shtm.

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/.

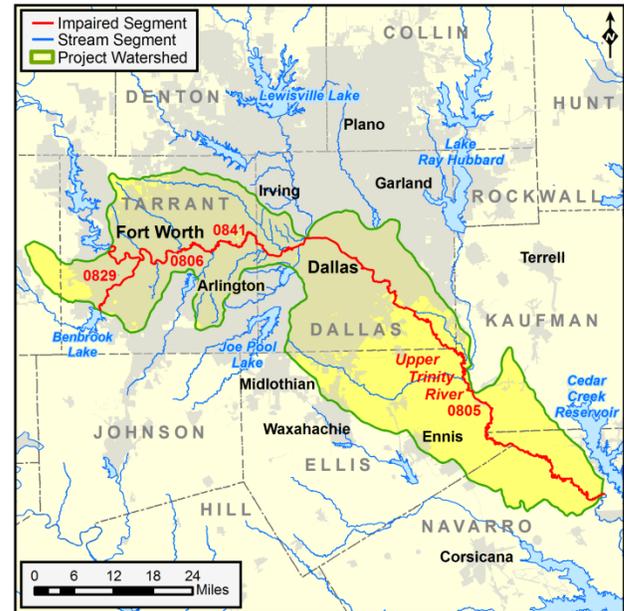
Description of the Project Watersheds

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 stormwater 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 watershed 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).

Public Participation

The TCEQ gathers opinion and information from people in the community who represent government, permitted facilities, agriculture, business, environmental, and community and private interests in the watershed. The North Central Texas Council of Governments is coordinating community involvement in this project.

For More Information

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

<www.tceq.texas.gov/waterquality/tmdl/77-trinity_pcbs.html>

TCEQ Project Managers

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TMDL Development Status

Start Date: April 2007

Project: Percent Complete

	10	20	30	40	50	60	70	80	90	100
Data Collection										
Assessment										
Final Report										

Project Highlights

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

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