



Improving Water Quality in Clear Creek Above Tidal Two TMDLs for Total Dissolved Solids and Chloride

Water Quality in Clear Creek Above Tidal

The state of Texas requires that most streams, lakes, and bays be suitable for swimming, wading, fishing, a healthy aquatic environment, and use as a source of drinking water. These requirements may vary somewhat for specific bodies of water. In Clear Creek, elevated total dissolved solids and chloride (salts) levels indicate that existing conditions are not optimal for aquatic life.

In response to these conditions, the TCEQ Total Maximum Daily Load (TMDL) Program initiated a project to evaluate the extent and severity of the elevated salt concentrations in the water body. 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 load is then allocated among all the potential sources of pollution within the watershed, and measures to reduce pollutant loads are developed as necessary.

Learn more about water quality standards and monitoring by reading *Clean Water for Texas: Working Together for Water Quality*, available on the Web at www.tceq.org/goto/tmdl/.

Description of the Clear Creek above Tidal Watershed

Clear Creek above Tidal is identified as Segment 1102 in the State of Texas Surface Water quality Standards. This waterbody is a suburban freshwater stream located in the southernmost portion of the city of Houston, Texas. This is an area which has undergone significant changes in the previous ten years due to development around Houston. Historically, this has been a predominantly rural area influenced by agriculture and oil exploration activities. More recently the construction of Beltway 8 has resulted in an increased amount of development and residential land uses.

Clear Creek above Tidal is a third order stream represented by a 24.5 mile reach within a 115 square mile watershed. This waterbody originates in the eastern portion of Fort Bend County and flows east to become the boundary of Harris and Brazoria Counties and then Harris and Galveston Counties before entering the tidal portion of Clear Creek. Land use based upon 2002 coverages indicates a primarily developed watershed with additional agriculture uses



and woody land types. The cities of Houston, Pearland, Brookside Village and Friendswood are located within this watershed.

The TMDL study revealed that the excessive total dissolved solids and chloride levels were the result of a single discharge associated with dewatering of a sand and gravel quarry, which is on top of the Mykawa Salt Dome and has salty ground water. That discharge was addressed via permit enforcement activities, and has since ceased. Load allocations stated in the final TMDL were calculated to represent only the small subwatershed area that contains that quarry.

TMDL Adoption

The TMDL was adopted by the TCEQ on April 12, 2006. The EPA approved the TMDL on June 26, 2006.

For More Information

To find out more about this project, contact:

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TMDL Development Status

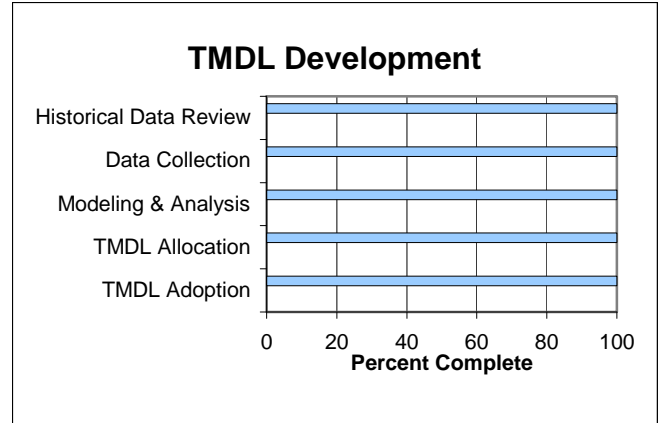
Start Date: January 2003

Projected End Date: August 2005

TCEQ Adoption: April 12, 2006

Submitted to EPA Region 6: May 9, 2006

EPA Region 6 Approval: June 26, 2006



TMDL Project Highlights

- A continuous monitoring site has been deployed and is operational at Clear Creek and Mykawa Rd <www.tceq.state.tx.us/cgi-bin/compliance/monops/water_daily_summary.pl?cams=761>
- The levels of chlorides in the segment were determined to be below the criteria for the 2006 assessment and the impairment was removed from the 303(d) List.

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