



Improving Water Quality in E.V. Spence Reservoir Two TMDLs for Dissolved Solids and Sulfate

Water Quality in E.V. Spence Reservoir

The state of Texas requires the water quality in E.V. Spence Reservoir (Segment 1411) to be suitable for swimming, wading, fishing, drinking (with treatment), and aquatic life. However, water quality testing has found that excessive levels of sulfate and total dissolved solids (salinity) are affecting the lake and its use as a source of drinking water.

In response to these conditions, a Total Maximum Daily Load (TMDL) project was initiated to determine the measures necessary to restore water quality in the reservoir. The project focused primarily on the area between E.V. Spence Reservoir and Lake J.B. Thomas. 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 beneficial uses. The load is then allocated among the sources of pollution within the watershed, and measures to reduce pollutant loads are developed as necessary.

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

Description of the E.V. Spence Reservoir Watershed

E.V. Spence Reservoir is a 15,893-acre reservoir located in the upper Colorado River Basin, approximately two miles west of Robert Lee. The reservoir was completed in June 1969, and is managed by the Colorado River Municipal Water District. The watershed has an area of 15,278 miles and is characterized by mesquite-covered rolling plains in the lower portion of the basin and high plains grasslands in the upper portion. Inflow into the reservoir is partially controlled by Lake J.B. Thomas, Lake Colorado City, and Champion Creek Reservoir.

E.V. Spence Reservoir is an important water supply for the surrounding region. It provides a portion of the water for the 30,000 residents of the cities of Big Spring, Coahoma, Midland, Odessa, Robert Lee, San Angelo, and Stanton. The lake is also known for its striped bass, luring large numbers of fishermen each year. The Colorado River Municipal Water District is permitted to draw 50,000 acre-feet of water from the reservoir each year for municipal, mining, and industrial uses.



Public Participation Process

A steering committee was formed in April 1999 to ensure local involvement and to solicit advice, comments, and ideas from interested parties. Membership includes a diverse cross-section of stakeholders in the upper Colorado River Basin, including representatives from industry, agriculture, petroleum operations, environmental groups, private citizens, and government agencies.

For More Information

For information about the project, contact one of the project staff members listed below. Or visit our Web site at www.tceq.org/goto/tmdl/. Information is also available on the Colorado Municipal Water District's Web site at www.crmwd.org/tmdl.html.

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Colorado River Municipal Water District:

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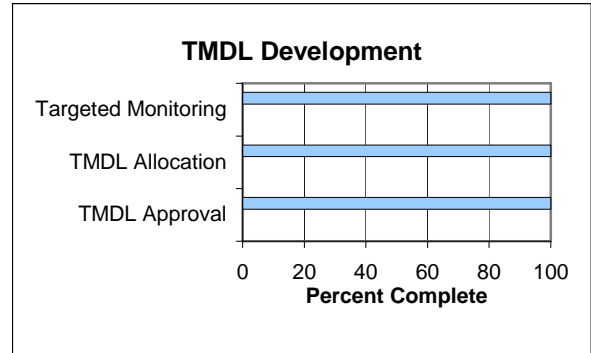
TMDL Development Status

Start: May 1998

TCEQ Adoption: November 17, 2000

Submitted to EPA Region 6: August 17, 2000

EPA Region 6 Approval: May 9, 2003



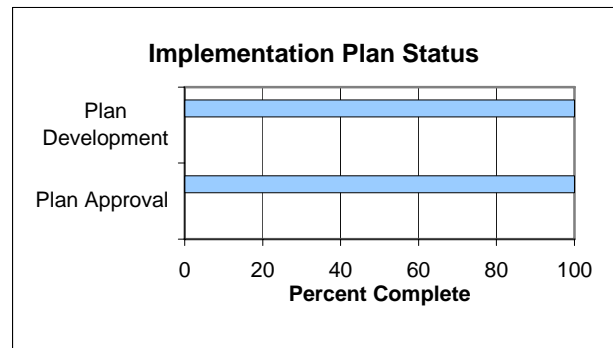
TMDL Project Highlights

- In August 1999, the TCEQ and the Railroad Commission of Texas (RRC) announced a collaborative partnership to fund plugging of abandoned oil and gas wells in the E.V. Spence Reservoir watershed. Leaking abandoned wells have been identified as a source of salinity in the reservoir. Together, the agencies committed \$2.6 million to plug approximately 171 abandoned wells in the watershed through 2002.
- The TCEQ solicited public comment on the draft TMDLs for a 30-day period ending October 15, 2000. A public hearing was held to receive comment in October in Midland, Texas.
- The final report, *Two Total Maximum Daily Loads for Total Dissolved Solids and Sulfates in E.V. Spence Reservoir*, was approved by the Commission in November 2000, and adopted as an update to the Texas Water Quality Management Plan.
- The TMDLs were submitted to the EPA in November 2000.
- The EPA approved the TMDLs on May 9, 2003.
- The final report is available on the Web at www.tceq.state.tx.us/implementation/water/tmdl/04-spence.html.

Implementation Plan Status

Start: November 2000

TCEQ Approval: July 13, 2001



Implementation Plan Highlights

- A public meeting was held on July 19, 2001, in Midland to receive comments on the draft implementation plan. Written comments were solicited for a 30-day period ending June 25, 2001.
- The *Implementation Plan for Sulfate and Total Dissolved Solids in the E.V. Spence Reservoir* was approved by the TCEQ on August 10, 2001.
- The Implementation Plan provides a description of the control actions and management measures that will be implemented to achieve the water quality target. The plan includes a schedule for activities and a follow-up monitoring plan to verify the effectiveness of the pollutant reduction strategies.
- The final plan is available on the Web at www.tceq.state.tx.us/implementation/water/tmdl/04-spence.html.