Lake Austin Continuous Water Quality Monitoring

Project Background:

Lake Austin has been listed on the 303(d)List of Impaired Water Bodies due to depressed dissolved oxygen (DO) in the upstream portion of the impoundment. The low oxygen levels result from releases of water into Lake Austin from Lake Travis at Mansfield Dam. Water is drawn from the bottom portion of the reservoir for electric power generation and is generally low in DO. This study measures the DO near and downstream of Mansfield Dam to determine if criteria are being met during summer when levels are most critical and can be detrimental to aquatic life.

The monitorig sites on Lake Austin were established at the onset of the TCEQ continuous water monitoring programs, primarily as a test site for adopting water measurement tecnology and telemetry to water applications. Due to the seasonal needs for DO collection for this study, and the experimental nature of real-time equipment in use at the time, data were collected only for short durations in June, September and October of 2002, and July of 2003.

Project Description:

Lake Austin is located in the Colorado River Basin in Travis County, Texas. The project was initiated in 2002 and will be complete in 2004. Parameters measured include dissolved oxygen, specific conductance, pH, and temperature. Both sites are operated by the Lower Colorado River Authority.

Sites:

1. Lake Austin at Low Water Crossing Bridge
2. Lake Austin at Quinlan Park