In 2006, TCEQ assessment indicated that in Lower Leon Creek, concentrations of bacteria were regularly at levels that might pose a health risk for swimmers. High concentrations of bacteria, which are commonly found in the intestines of warm-blooded animals, may indicate the presence of disease causing organisms. This can pose an increased health risk to people who swim or wade in the creek—activities called “contact recreation” in the state’s standards for water quality.

In 2008, the TMDL Program initiated an assessment project to determine the extent and severity of water quality impairment in Lower Leon Creek.

Learn more about water quality standards and monitoring by reading Preserving and Improving Water Quality, available on the TMDL Program’s Web pages at <www.tceq.texas.gov/goto/tmdl/).

**Lower Leon Creek Watershed**

Lower Leon Creek, Segment 1906, drains an area of 228 square miles and has a total continuous length of 57 miles. It originates as a spring-fed stream in the Edwards Plateau region of south central Texas. The creek runs from its headwaters in northern Bexar County to its confluence with the Medina River. The creek generally flows south and enters the main portion of the Kelly Air Force Base (AFB) from the northwest, near the intersection of Billy Mitchell Road and Westover Road.

Leon Creek drains a highly urbanized residential area and the Kelly and Lackland AFBs. Water quality in the creek is affected by industrial and municipal wastewater discharges and storm water. The project watershed includes the municipalities of San Antonio, Cross Mountain, Helotes, and Leon Valley.

**Project Development**

The San Antonio River Authority (SARA) collected data to support the assessment and coordinated public involvement in the Lower Leon Creek Watershed. Data collection began in 2008, and included bacteria sampling and storm event sampling. The sampling and analysis were completed in the summer of 2010.

Bacteria sampling associated with the project showed that the contact recreation use was being met. The bacteria impairment was subsequently removed from the Texas 303(d) list of impaired waters.
Project Highlights

- A two-year intensive effort to collect additional data about indicator bacteria was completed in 2010.
- Review and analysis of the new data showed the creek is supporting its contact recreation use.