



## **USDA-CSREES 2006 National Water Quality Conference**

### [Sustainable Agricultural Water Conservation in the Rio Grande Basin](#)

The sustainable use of the Rio Grande and its transboundary resources remains an elusive goal, with significant economic and ecosystem implications for both the United States and Mexico. Utilizing the diverse expertise and skills of researchers from all the universities in the Texas State University System, the primary activities undertaken in this project focus on identifying and analyzing the constraints to the sustainable use of this important transboundary water system, including their root causes. Utilizing the results of these analyses, this project further seeks to identify effective, realistic solutions to the identified problems. Project elements include characterization, quantification and modeling of the basin's surface and groundwater resources, water supply-demand issues throughout the Rio Grande drainage basin, human health-related water pollution issues, identification and characterization of the basin's biological integrity and aquatic habitats, and wastewater characterization and treatment options. An accurate and comprehensive database and easily-accessible clearinghouse of organizations and agencies doing water-related research and socioeconomic work relevant to the sustainable use of the Rio Grande and its resources also is being developed, as are methods for expressing the project results in a manner that can be understood and readily-utilized by scientists, managers, decision-makers, the public and other major Rio Grande stakeholders. A transboundary diagnostic analysis outline for the Rio Grande drainage basin also is under development as a framework for identifying and integrating the results of this project, and as a knowledge framework for subsequent development of a management action plan. Specific challenges faced during the development of this project include the organization of the diverse group of researchers, the integration of the research results into a comprehensive package, and the difficulties associated with collecting information about an international basin.

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