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Rio Grande Basin Biophysical Assessment for Sustainable Agricultural Water Conservation

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Abstract Text:

The USDA-Funded Sustainable Agricultural Water Conservation research program (SAWC) is a joint Texas State University System (TSUS) project focused on the Rio Grande Basin that is coordinated through the Rio Grande Research Center at Sul Ross State University in Alpine Texas.

The extensive land area covered by the Rio Grande watershed and diverse populations that rely upon its scarce resources, combined with the scarcity of information about the status of resources and systems within the basin's coverage area demand that this study be conducted to better identify and prioritize solutions that will address limitations to its sustainable use.

The objectives of the study are to assess the present environmental status of the Rio Grande and its resources relative to the entire drainage basin. A Transboundary Diagnostic Analysis (TDA) outline has been developed for the purpose of guiding the research projects, while allowing for the functional merging of the diverse research capabilities available within the TSUS system. SAWC research project categories include: Physical and biologic environmental assessment of systems within the basin; Surface and groundwater characterization research; Water uses and demands; Land use change and impacts; Socioeconomic characteristics of the Basin; Policies and legislation; Institutions; Environmental degradation; Education and outreach.

A central component of the study is the development a basin wide action plan incorporating information from this and other research, institutions active within the Rio Grande and the concerns of stakeholders into a basin wide action plan to ensure the sustainable use of the Rio Grande.

Impact Statement:

The project assesses the environmental status of the Rio Grande watershed and organizes funded research based upon a "diagnostic analysis" guideline.