

## **Regional Watershed Management System**

Durmus Cesur<sup>1</sup>

San Antonio River Authority, San Antonio, TX 78229

**Abstract.** The management, maintenance, and distribution of consistent and up to date modeling information is critical to make proper decision and to take necessary measures for the management of watersheds and their environments. This paper describes the use of Geographic Information Systems (GIS) as a framework to manage water resources information through a comprehensive decision support and workflow management system called as Regional Watershed Management System (RWMS). The RWMS is expected to streamline modeling practices through the timely delivery of information to facilitate decision making related to floodplain management, environmental protection and other watershed related issues. The RWMS will serve as an integral tool for flood mitigation planning, flood plain management, flood alert, flood warning systems, and capital improvement project prioritization when fully developed.

When fully implemented, the RWMS will incorporate various other modeling systems, topographic data, document management system, supplementary system administration tools, end-user visualization and GIS functionalities, and will evolve into a holistic enterprise decision support and workflow management system for watershed management on a GIS platform.

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<sup>1</sup> Watershed Management/GIS  
San Antonio River Authority,  
San Antonio, TX 78229  
Tel: (210) 302-4248  
E-mail: [dcesur@sara-tx.org](mailto:dcesur@sara-tx.org)