

Report for 2004TX153B: Improving Capabilities for Dealing with Key Complexities of Water Availability Modeling

- unclassified:
 - No publication.

Report Follows

**Improving capabilities for addressing key complexities of water
availability modeling**

FINAL REPORT

December, 2004

**Hector E. Olmos
Ralph A. Wurbs, Ph.D.**

Texas A&M University

This research project addressed several complexities and improvements to water availability modeling (WAM), using the Water Rights Analysis Package (WRAP) and a conditional reliability model. The main tasks of this project were to:

1. Develop guidelines to simplify an existing WAM dataset
2. Perform yield-reliability analyses for alternative system management strategies and modeling premises
3. Evaluate the impact of beginning of simulation reservoir storage on reliabilities
4. Improve, test and provide methodologies to apply the conditional reliability model and develop a new modeling methodology
5. Develop a tool to provide a spatial display of simulation results

All the above tasks have been completed successfully and are documented by: Olmos, Hector E. "Improving Capabilities for Dealing With Key Complexities of Water Availability Modeling", Texas A&M University, College Station, Texas, 2004; available at the Texas A&M University library.

All the funds provided by this grant have been invested on tuition fees for summer 2004.

I will be graduating in December 17, 2004 with my master's degree in Civil Engineering and initiate my professional career in the water resources field.

I greatly appreciate the support provided by this research grant.

Hector E. Olmos