

## Publications

### TR-61

#### Systematic Analysis of Priority Water Resources Problems to Develop a Comprehensive Research Program for the Southern Plains River Basins Region

R. E. Babcock, J. W. Clark, E. J. Dantin, M. T. Edmison, N. A. Evans, W. L. Power, J. R. Runkles

- [Full Text](#)

During the past twenty years, there have been several evaluations of national water resources research requirements. Many states have made similar analyses of their water resources research needs. Funding for water resources research generally has not been directed to these identified requirements; also, the level of funding has not been commensurated with the magnitude of the water resources problems. The Office of Water Research and Technology and the associated state water resources research institutes (or centers) initiated a regional problem analysis program to improve the effectiveness of research programs on major regional and national water resources problems.

Today no single university or water resource agency possesses the competence to adequately analyze our major water resources problems and to conduct the research necessary to solve these problems, thus the regional problem analysis program was conducted in close cooperation between the universities and the state and federal water resource agencies in the region. The state institutes (or centers) in the Southern Plains River Basins Region Joined together and developed a series of workshops to analyze some of the major regional water resources problems. The water resources research institutes in the Southern Plains River Basins Region have made significant contributions to water resources knowledge in their respective states. In spite of this, the Institutes are striving to improve the effectiveness of their research programs. A potential area for improving the effectiveness of the Institutes is through the inter-institute cooperative problem analysis program to identify research needs for urgent regional water resources problems. This approach provides an opportunity to examine the "total" problem, all alternative solutions, and the probable impact of research on solution of these problems. Upon completion of the systematic analysis of these problems, the Institutes should be able to provide more effective leadership in the state water resources research programs.

The objectives of the systematic problem analysis program for the region was as follows:

1. To develop a detailed description of each regional priority problem and sub-problems.
2. To identify and describe the alternatives and sub-alternatives of each priority problem and sub-problems.
3. To identify and describe the knowledge essential to implementation of the complete alternatives sets.
4. To develop a comprehensive research program for the Southern Plains River Basins Region based on the research needs and feasible alternatives identified in the systematic analysis.

The objectives at the problem analysis program was accomplished through a series of workshops. Prior to the workshops, considerable discussion was held in each state on important water resource problems. The water resources research institute directors in each state had input on the problem from state and federal agencies in each state as well as faculty knowledge in the area of the particular problem. Thus, the institute directors had input into the problem analysis process from the water resources profession on each problem and sub-problems being conducted by the region.

## Texas Water Resources Institute

1500 Research Parkway A110  
2260 TAMU  
College Station, TX 77843-2260

TWRI and the [Texas A&M Institute of Renewable Natural Resources](#) are working together to foster and communicate research and educational outreach programs focused on water and natural resources science and management issues in Texas and beyond.

Phone: 979.845.1851  
Fax: 979.845.0662  
Email: [twri@tamu.edu](mailto:twri@tamu.edu)



[Compact with Texans](#) | [Privacy and Security](#) | [Accessibility Policy](#) | [State Link Policy](#) | [Statewide Search](#) |  
[Plug-ins](#) | [Veterans Benefits](#) | [Military Families](#) | [Texas Homeland Security](#) | [Open Records/Public Information](#)  
[Equal Opportunity Statement](#) | [Risk, Fraud & Misconduct Hotline](#)

© 2013 All rights reserved. Problem with this page? Contact: [twri-webmaster@tamu.edu](mailto:twri-webmaster@tamu.edu)

