Kansas Water Resources Institute

2011 KWRI Sponsored Projects

Sediment Baseline Assessment:

- Modeling was done on three watersheds (Banner Creek Lake, Centralia Lake and Atchison County Lake) and is currently being calibrated by Kansas State University to determine sources of sediment and potential management measures to reduce sediment transport in streams and sediment delivery to water bodies.
- A riparian forest health inventory is being performed by Kansas Forest Service in the Centralia Lake watershed.
- A comparison between the surface soil properties of crop and pasturelands is being conducted by Kansas State University in Banner Creek Lake, Centralia Lake and Atchison County Lake. Results will be provided to the USDA-NRCS for use in continued updates to the SSURGO database in addition to watershed modelers for more accurate values of infiltration and horizon thickness in concert with the land use data.

Aquifer Storage and Recovery in Near-Surface Aquifers:

This study involves the development of a new recharge approach using smalldiameter, low-cost wells for aquifer storage and recovery utilizing direct push technology. These injection wells are low in construction costs and maintenance costs and limited to depths of less than 30m. Potential sites for the aquifer recharge have been chosen and the project will continue into further years.

Conferences:

1. <u>Water and the Future of Kansas Conference</u>. "Kansas Water Resources: Vision for 2050".

Speakers provided information regarding sustainability in relation to:

- Conditions in the Ogallala Aquifer,
- Wichita Water 2050,
- Trends for Water Use in the U.S.,
- Dealing with Drought and Water Resources in Texas , and
- International Comparative Water Law.
- 2. <u>Kansas Water Forums.</u> "Just Add Water: Kansas and the Economy".
 - Speakers provided information regarding energy development.
 - Oil and Gas Development,
 - Development, Production and Water,
 - Watering the Boom in Oklahoma,
 - Water Bills in the 2012 Kansas Legislature, and
 - Planning the Mix of Energy Sources to Meet Future Demands.
- 3. <u>Research and Extension Symposium</u>. "Conserving the Ogallala Aquifer".
 - Speakers provided information regarding the Ogallala Aquifer.
 - An Overview of the Ogallala Aquifer,
 - Kansas Irrigation Trends and Impacts,
 - Effectiveness of Irrigation Technologies
 - Economic Implications of Water Management Policy, and
 - Setting the Future Research and Extension Objectives.





<u>KWRI Mission</u> The Kansas Water Resource Institute develops and supports research on high priority water resource problems and objectives, as identified through the state water planning process. It is also designed to facilitate effective communication between water resources professionals and to foster the dissemination and application of research results.

For more information, contact: Dan Devlin, Director, 44 Waters Hall Manhattan, KS 66506 <u>ddevlin@ksu.edu</u> (785)532-0393.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service www.ksre.ksu.edu

