Texas Water Resources Institute

make every drop count

The Texas Water Resources Institute (TWRI) serves as the focal point, clearinghouse, partner and facilitator for priority water research and educational outreach programs throughout Texas and beyond. The Institute is part of Texas AgriLife Research, the Texas AgriLife Extension Service and the College of Agriculture and Life Sciences at Texas A&M University. As the designated water resources research institute for the state of Texas, TWRI is one of 54 National Institutes for Water Resources.

Water Resources Research and Education

Working with water-related faculty and associates, TWRI successfully obtains grants from state and federal governmental agencies and others to address priority water resources issues. The Institute currently manages 93 active projects with more than $20 million in funding. Over the last eight years, the Institute has brought in more than $53 million for water resources research and education projects. During the same time, TWRI has helped acquire more than $7 million for additional facilitated projects.

Collaborations and Partnerships

TWRI thrives on collaborations and partnerships. In addition to Texas A&M University, the Institute maintains joint projects with 17 Texas universities and three out-of-state universities, involving some 250 faculty and staff. TWRI also partners with more than 40 federal, state and local governmental organizations; and numerous others, including engineering firms, commodity groups and environmental organizations.

Through these partnerships, TWRI links academic expertise with agencies and stakeholders to provide research-derived, science-based information to help answer diverse water questions. The Institute produces high-quality communications materials to convey this critical information to interested publics.

Professional Training

TWRI’s Water Resources Training Program markets and administers short courses on water-related geographic information systems, remote sensing technology and computer simulation models. The training courses provide water resources professionals with intensive hands-on instruction on the latest technologies and products of university research.
Next Generation of Researchers
Investing in the future, TWRI awards scholarships to graduate students from Texas universities through the U.S. Geological Survey Water Resources Research Grants and the W.G. Mills Scholarship Program. These scholarships enable students to conduct research on priority water issues.

TWRI Focus Areas
- Alternative Sources of Water
- Watershed Management Programs
- Water Conservation
- Water Quality
- Agricultural and Urban Irrigation Efficiency

TWRI Federal Initiatives
- Fort Hood (Fort Hood Range Revegetation & Fort Hood Training Lands Restoration and Maintenance)
- Lake Water Quality Program (Water Quality Demonstrations for Lake Granbury, Texas; & Water Quality Education for Hood County)
- Ogallala Aquifer (Water Conservation Technologies and Management Practices in the Ogallala Aquifer Region)
- Rio Grande Basin Salinity Management Program (facilitated)
- U.S./Mexico Transboundary Aquifer Assessment Program
- Water Quality Education and Planning for North Central Texas

TWRI 319(h) Projects
- Arroyo Colorado – Arroyo Colorado Watershed Protection Plan Implementation; Arroyo Colorado Agricultural Nonpoint Source Assessment
- Agricultural NPS Remediation in the Cedar Creek Reservoir
- Bacterial Source Tracking for Little Brazos River Tributaries Bacteria Assessment
- Basin-Wide Management Plan for the Pecos River in Texas
- Buck Creek – Buck Creek Watershed Protection Plan Development; Modeling Support for Buck Creek Watershed Protection Plan Development
- Education Program for Improving Water Quality in Copano Bay
- Fate and Transport of E. coli in Rural Texas Landscapes and Streams
- Lone Star Healthy Streams
- Texas Watershed Protection Shortcourse

Other Projects
- Arroyo Colorado – Arroyo Integrated Farm Management Education Program, Pesticide Education in the Coastal Zone of the Arroyo Colorado Watershed
- Assembly and Testing of an On-Farm Manure to Energy Conversion BMP for Animal Waste Pollution Control
- Bacteria Runoff BMPs for Intensive Beef Cattle Operations
- Microbiology, Wastewater Treatment and Wetland Issues in Harris County
- Modeling Support and Bacterial Source Tracking for Big Cypress Creek Bacteria Assessment
- Modeling Support for Little Brazos River Tributaries Bacteria Assessment TMDL
- World Bank Dry Land Technologies, Objectives and Tasks