AGRICULTUR & LIFE SCIENCE

Conservation Matters

A publication of the Texas Water Resources Institute and the Texas A&M Institute of Renewable Natural Resources

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 txH_2O magazine meets a unique need in Texas by bridging the information gap between citizens and scientists, featuring stories on current water resources research and outreach programs in Texas and providing science-based perspectives on priority water issues facing the region. The magazine continues to be the flagship publication of the Texas Water Resources Institute (TWRI), and the institute is committed to using it to further water research and education. txH_2O is currently open access and available in print and online.

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Next Carter Creek Stream Team training June 16 in College Station



Local students, homeowners and interested citizens are invited to join the Carter Creek Stream Team and help monitor local water quality in Bryan and College Station. The effort is a part of the <u>Carters Creek</u> <u>Watershed Assessment Project</u>, said **Lucas Gregory**, <u>Texas Water Resources Institute</u> project specialist.

The next stream team training will be held June 16 and attendees will have the opportunity to be officially certified as a volunteer monitor. Participants can register by emailing <u>carterstreamteam@gmail.com</u>.

Volunteers will have the opportunity support efforts to develop a better understanding of potential causes and sources of local water quality impairments by collecting water quality data and participating in watershed surveys.

"This is really a great opportunity to volunteer locally and provide a very useful service to the community," Gregory said. "By volunteering to monitor water quality in the watershed, needed data is collected and provided to resource managers in the watershed so that they can use their available resources to the best of their ability to improve local water resources."

New USGS study shows accelerating deficits in aquifers across the country



A new U.S. Geological Survey (USGS) study has reported that the nation's aquifers are being drawn down at an accelerating rate. Researchers conducting the study, <u>Groundwater Depletion in the United</u> <u>States (1900–2008)</u>, evaluated long-term cumulative depletion volumes in 40 separate aquifers, or distinct underground water storage areas, in the United States, and brought together reliable information from previous references and from new analyses, according to USGS.

"Groundwater is one of the nation's most important natural resources. It provides drinking water in both rural and urban communities. It supports irrigation and industry, sustains the flow of streams and rivers, and maintains ecosystemeters.

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Suzette Kimball, acting USGS director. "Because groundwater systems typically respond slowly to human actions, a long-term perspective is vital to manage this valuable resource in sustainable ways."

TPWD reminds boaters to "clean, drain and dry" to combat zebra mussels



As Texans head to their favorite lakes this summer, the <u>Texas Parks and Wildlife Department</u> (TPWD) is urging boaters and anglers to follow their simple "clean, drain and dry" procedure to keep zebra mussels from further expansion in the state.

"Now that water temperatures are getting warmer, zebra mussels are approaching their peak period

of reproduction," said **Brian Van Zee**, TPWD inland fisheries regional director. "The best way to stop zebra mussels is for boaters who operate their vessels on Lakes Texoma, Lewisville or Ray Roberts, to clean, drain and dry their boats before launching into another body of water."

Extension offering Weslaco homeowner water conservation program June 29



To help residents save water now and in the future, the Texas A&M AgriLife Extension Service has partnered with other agencies to provide an educational program on home water conservation from 9 a.m.-1p.m. **June 29** at the Texas A&M AgriLife Research and Extension Center at Weslaco, 2401 E. Highway 83.

"Hopefully, the severe drought we are currently experiencing will end soon, but according to the National

Weather Service, there will be others," said **Ashley Gregory**, AgriLife Extension assistant for water programs who works for the <u>Texas Water Resources Institute</u> through the <u>Arroyo Colorado Watershed Partnership</u>. "That coupled with the fact that the Lower Rio Grande Valley's population is expected to double in the next 40 years means we need to think regionally, and we need to think long-term in conserving water."

Topics to be covered at the no-cost educational program include indoor water conservation, rainwater collection and landscape design using native plants and soil amendments to help retain moisture. Participants will also be encouraged to take the <u>40-Gallon Challenge</u>, a statewide effort to save 40 gallons of water per day per person, she said.

Pecos River Watershed Protection Plan update meetings set for June 4-5



Landowners in the Pecos River watershed are invited to participate in discussions on local water quality and updates to the <u>Pecos River Watershed Protection Plan</u> during a series of upcoming meetings.

Four separate June meetings are scheduled across the watershed to give area landowners ample opportunity to attend, said **Lucas Gregory**, <u>Texas Water Resources Institute</u> project specialist and Pecos River watershed coordinator. The same information will be covered at each meeting location, he said.

Meeting dates, start times and locations are: **June 4**, 8:30 a.m., Community Hall, 508 S. Oak St., Pecos; **June 4**, 1:30 p.m., Community Center, Allison Ave., Imperial; **June 4**, 6:30 p.m., Civic Center, Alley Oop Lane, Iraan; and **June 5**, 8:30 a.m., AgriLife Extension office in Crockett County, 1301 Ave. AA., Ozona.

Newly Awarded TWRI/IRNR Projects

Relocation Plan for the Inspection of the Beck Branch Gravity Sewer Crossing at Rowlett Creek

The North Texas Municipal Water District (NTMWD) is performing an analysis of the 39" Beck Branch Gravity Sewer crossing at Rowlett Creek. The crossing is located in Breckenridge Park in Richardson, TX. As part of the inspection process, cofferdams will be used to dewater portions of the creek within the proposed project area. Generally, freshwater mussels are intolerant of emersion, especially for prolonged periods of time. Because of this a presence/absence survey was performed at this location to determine if state-threatened freshwater mussels were present up or downstream of the crossing. No live unionid mussels or shell material were observed within the area surveyed. However, unionid mussels can be difficult to locate so there is a possibility that live individuals were overlooked during the survey. Therefore, a relocation plan is needed in the event that state-listed mussel species are observed following dewatering of the proposed project.

New Publications/Papers and Training Course

New Extension publications

Native Grassland Monitoring and Management, Blake Alldredge, Larry Redmon, Megan Clayton, James Cathey, Texas A&M AgriLife Extension Service, WF-001, 2013.

<u>Phosphorous Acid Products for Controlling Downy Mildew of Grapes</u>, **Fritz Westover**, Texas A&M AgriLife Extension Service, EHT-012, 2013.

<u>Small Impoundment Management in North America</u>, Billy Higginbotham, Michael P. Masser, J. Wesley Neal, David W. Willis, Texas A&M AgriLife Extension Service, WF-002, 2013.

Texas Well Owner Network: Well Owner's Guide to Water Supply, Kristine Uhlman, Diane Boellstorff, Mark L. McFarland, Brent Clayton, John W. Smith, Texas A&M AgriLife Extension Service, B-6257, 2013.

New TWRI and IRNR publications

<u>A range-wide survey of the endangered black-capped vireo in Texas</u>,**T. M. McFarland**, H. A. Mathewson, J. E. Groce, M. L. Morrison, R. N. Wilkins, Southeastern Naturalist 12:41-60. 2013.

Bacterial Source Tracking to Support the Development and Implementation of Watershed Protection Plans for the Lampasas and Leon Rivers, L. Gregory, E. Casarez, J. Truesdale, G. Di Giovanni, R. Owen, J. Wolfe, TR-442, 2013.

Bacterial Source Tracking to Support the Development and Implementation of Watershed Protection Plans for the Lampasas and Leon Rivers, L. Gregory, E. Casarez, J. Truesdale, G. Di Giovanni, R. Owen, J. Wolfe, TR-441, 2013.

Soil & Water Assessment Tool Input/Output Documentation Version 2012, J. Arnold, J. Kiniry, R. Srinivasan, J. Williams, E. Haney, S. Neitsch, TR-439, 2013.

<u>Status of the freshwater mussel (Unionidae) communities of the mainstem of the Leon River, Texas</u>, C.R. Randklev, M.S. Johnson, E.T. Tsakiris, J. Groce, N. Wilkins, Aquatic Conservation: Marine and Freshwater Ecosystems. DOI: 10.1002/aqc.2340. 2013.

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Natural Resources Training Courses

Introduction to ArcGIS 10	July 17-18
Social Media 101-Raising Stakeholder Awareness in an Information Age	July 18
Introduction to ArcGIS 10	Oct 8-9