



*Breaking news about water resources research and education at Texas universities*

**Nov. 7, 2005**

### **1. "New Waves" Solicits News**

If your unit or department has news about water resources research or education, results of projects and programs, or new water-related research projects, publications, papers and faculty, please email Kathy Wythe at [kwythe@tamu.edu](mailto:kwythe@tamu.edu). The purpose of "New Waves," the email newsletter for the Texas Water Resources Institute, is to provide a compilation of timely, brief news to people interested in university-based water research and education programs, not only at Texas A&M University but also across the state.

### **2. Water Program Sponsors Weekly Seminars**

Texas A&M University's new Water Program, an interdisciplinary program involving 40 faculty in 10 departments and three colleges, sponsors "Sustainable Watershed Management Seminars" every Wednesday at 4 p.m. at Civil Engineering Building, Room 110. Following is a list of upcoming seminars:

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| Nov. 9  | <b>Ecohydrology</b><br>B. Mohanty, Biological and Agricultural Engineering, Texas A&M University   |
| Nov.16  | <b>Economics of Watershed Management</b><br>R. Woodward, Agricultural Economics, Texas A&M University  |
| Nov. 30 | <b>Integrating Disciplines for Effective Water Management</b><br>R. Autenrieth, Civil Engineering; & R. Kaiser, Recreation, Parks and Tourism Sciences, Texas A&M University |

For pdf files of previous seminars, visit

<http://waterprogram.tamu.edu/wmhs681/coursepages.wmhs681.html>

### **3. TWRI Solicits RFPs For USGS Student Grants**

The Texas Water Resources Institute announces a request for research proposals for its 2006-2007 U. S. Geological Survey grant program. This program, which is funded by U.S.G.S. through the National Institutes for Water Research, is aimed at funding water resources-related research of graduate students at universities in Texas.

TWRI anticipates funding 10 graduate research enhancement grants of up to \$5,000 in the area of water resources. Information and submission forms for this RFP can be found at <http://twri.tamu.edu> under the "What's New Section" or you may contact Clint Wolfe at [cwolfe@ag.tamu.edu](mailto:cwolfe@ag.tamu.edu).

#### **4. TWRI Announces RFPs for Water Resources Grants**

The Texas Water Resources Institute announces requests for proposals for the U.S. Geological Survey in cooperation with the National Institutes for Water Resources matching grants to support research on the topics of water supply and water availability.

The amount available for research under this program is estimated at \$920,000 in federal funds. Any investigator at a Texas university is eligible to apply for a grant through TWRI.

Proposals involving substantial collaboration between the USGS and university scientists are encouraged. Proposals may be for projects of 1 to 3 years and may request up to \$250,000 in federal funds. Successful applicants must match each dollar of the federal grant with one dollar from non-federal sources.

Proposals are sought in not only the physical dimensions of supply and demand but also quality trends in raw water supplies, the role of economics and institutions in water supply and demand, institutional arrangements for tracking and reporting water supply and availability, and institutional arrangements for coping with extreme hydrologic conditions.

For more information, go to <https://niwr.org/> or contact Clint Wolfe at [cwolfe@ag.tamu.edu](mailto:cwolfe@ag.tamu.edu) or 979.845.1852.

#### **4. Peterson Named To Wildlife And Conservation Policy Chair**

Dr. Tarla Rai Peterson has been named Boone and Crockett Wildlife and Conservation Policy Chair at Texas A&M University.

The chair was established with a \$500,000 gift from the Boone and Crockett Club and a matching \$500,000 from the Texas A&M Development Foundation. The purpose of the chair is to help to close the gap between the knowledge of wildlife science and the implementation of wildlife policy, according to Dr. Robert Brown, department head for the wildlife and fisheries sciences department.

Dr. Peterson was chosen for the Texas A&M position because of her academic background; her successes in teaching, grantsmanship, publication, and graduate student mentorship; and her enthusiasm and dedication to sustainable conservation and sound wildlife policy on private lands, Brown said.

Brown said Peterson is well aware of the challenges facing wildlife and wildlife habitat in Texas, the United States, and throughout the world on private land, such as the privatization of wildlife; public attitudes about hunting; private landowner conflicts over Endangered Species, Clean Air and Clean Water regulations; and the competition for water resources between urban, agricultural, industrial and wildlife/fisheries/recreational uses.

Peterson received a bachelor's degree in history from the University of Idaho in 1976. She earned a master's degree in speech communication in 1980 and a doctorate through the interdisciplinary program in environmental conflict in 1986, both from Washington State University.

Dr. Peterson has been principal investigator or co PI on grants totaling \$ 4,844,288 from such funding agencies as the National Science Foundation, the Hewlett Foundation, The Department of Energy, the Environmental Protection Agency, and the Texas Water Resources Institute.

Peterson is the newest addition to A&M's water resources faculty. Other faculty are Georgianne Moore of Rangeland Ecology and Management, Douglass Shaw of Agricultural Economics and R. Karthikeyan of Biological and Agricultural Engineering.

## **5. Environmental Quality Management Training Now Online**

Dr. Saqib Mukhtar, Texas Cooperative Extension agricultural engineer, and Dr. Brent Auvermann, Extension agricultural engineer at the Amarillo Agricultural Research and Extension Center, recently developed online training for dairy producers who operate concentrated animal feeding operations (CAFOs). Environmental Quality Management of Animal Feeding Operations training is now online at <http://www.peopleware.net/1542>.

Mukhtar said training modules in the curriculum were developed by the Texas A&M University System to because the Texas Commission on Environmental Quality requires people who have operational responsibilities of CAFOS in certain counties to complete similar training courses in animal waste management. Contents of this on-line curriculum may also be suitable for the professional development of Technical Service Providers and others needing similar training.

The Texas Commission on Environmental Quality requires the person who has operational responsibilities of a concentrated animal feeding operation in the dairy outreach program area to:

- Complete an initial eight-hour training course on animal waste management within 12 months of receiving a permit or authorization; and
- Receive an additional eight hours of continuing education in animal waste management for each subsequent 24-month period.

Course participants can learn about the animal waste handling, storage, treatment and utilization processes and systems, and management practices and technologies that reduce air and water pollution, Mukhtar said.

The \$40 enrollment fee entitles the registrant to take any one of the 10 one-hour modules; each subsequent module costs \$30.

A certificate will be issued by Extension for successful completion of each module.

All required teaching and testing can be completed from a home or office computer, so no travel is required.

The dairy outreach program area includes Bosque, Comanche, Erath, Hamilton, Hopkins, Johnson, Rains and Wood counties, Mukhtar said.

Further information is available by contacting Mukhtar at (979) 458-1019, [mukhtar@tamu.edu](mailto:mukhtar@tamu.edu) , or Dr. Brent Auvermann, Extension agricultural engineer in Amarillo, (806) 677-5600, or [b-auvermann@tamu.edu](mailto:b-auvermann@tamu.edu)

## **6. Watershed Management Training Set**

Texas Cooperative Extension in cooperation with the Texas Water Resources Institute is sponsoring a "Watershed Management Training Conference," Nov. 17-18 at the Fort Work Plaza Hotel. The workshop is part of the North Central Texas Water Quality project.

The workshop will feature presentations on managing urban and agricultural nonpoint source pollution as well as informative discussions of the roles of local, state and federal agencies in watershed planning.

For more information, visit [http://nctx-water.tamu.edu/watershed\\_training\\_agenda.pdf](http://nctx-water.tamu.edu/watershed_training_agenda.pdf) or contact Russell Persyn at [rap@tamu.edu](mailto:rap@tamu.edu) or Clint Wolfe at [cwolfe@ag.tamu.edu](mailto:cwolfe@ag.tamu.edu).

## **7. ET Network For High Plains Updated**

New improvements to the Texas High Plains Evapotranspiration Network (TXHPET) that provides daily weather data, including evapotranspiration-based crop water use, should make it easier for High Plains farmers and others to use the network to schedule irrigation of their crops and conserve the limited supplies of water

The improvements, developed by Thomas Marek, research agricultural engineer at the Texas A&M University System Agricultural Research and Extension Center – Amarillo; Dr. Dana Porter, Extension Agricultural Engineer, the Texas A&M University System Agricultural Research and Extension Center – Lubbock; and Terry Howell, research leader, U.S. Department of Agriculture's Agricultural Research Service, Bushland; include a new database system, listserv and more user-friendly Web site.

The new Web site for the TXHPET is <http://txhighplainset.tamu.edu> and provides convenient access to data sets, background information of data applications, networks structure, as well as other information and tools, representing significant improvements.

The new TXHPET network listserv allows users to select individual or multiple station files regarding crop water use and meteorological data. The selection profile for users is then used to automatically e-mail the selected files daily to the irrigators. Currently the sign-up site is located at <http://amarillo2.tamu.edu/nppet/listserv> .

The TXHPET is comprised of the North Plains ET and South Plains ET networks containing 18 weather stations in 15 Texas counties. These networks were established in the 1990s to provide convenient and timely access to agriculturally based weather data for use by producers, agricultural researchers, and others interested in agriculturally relevant meteorological data. This precision information helps farmers know when and how much irrigation water to apply to their various crops which, in turn, results in better water management and water savings for the future.

The TXHPET network covers approximately four million acres on the Texas High Plains and currently disseminates more than 800 pages of irrigation information daily to producers through delivery of more than 400 faxes each morning and 400 web-based downloads a day.

The TXHPET Network is the product of excellent collaboration between engineers and scientists of the North Plains ET (NPET) Network, based at Amarillo, and the South Plains ET (SPET) Network, based at Lubbock. The network depends upon agricultural research and Extension personnel to provide the best estimates of water use for reference and crops grown within the region.

## 8. TCE Sponsors Fifth Annual Soil Testing Campaign

Texas Cooperative Extension is sponsoring its fifth year of a soil-testing program to help Lower Rio Grande Valley farmers and ranchers know the nutrient makeup of their soils.

The free program is a project of the water quality component of the Rio Grande Basin Initiative, led by the Texas Water Resources Institute and funded by the U.S. Department of Agriculture's Cooperative State Research, Education and Extension Service.

For more information, see AgNews' story at <http://twri.tamu.edu/newsarticles.php?view=2005-11-07-05>.

## 9. Endangered and Threatened Species Studied in the Rio Grande Basin

Researchers in the Texas A&M Wildlife and Fisheries Sciences department have studied the habits of aquatic birds in an attempt to predict the changes in the abundance and richness of wildlife in the Rio Grande Basin, relative to water availability.

An *Endangered and Threatened Species in the Rio Grande* database CD provides a list and description of invertebrates, amphibians, reptiles, fish, birds, mammals and plants endemic to the Basin. A simulation model assesses how different actual or potential water availability scenarios might alter the distribution and abundance of aquatic birds in the Lower Rio Grande Valley.

Dr. Neal Wilkins, associate department head, Dr. Enrique Weir, visiting scientist from Venezuela, and Karine Gil de Weir, a doctoral candidate, developed the project.

For more information, visit the Rio Grande Basin Initiative's web site at [http://riogrande.tamu.edu/news\\_2005-10-17.php](http://riogrande.tamu.edu/news_2005-10-17.php).

## New Publications/ Papers/ Projects

**Food service wastewater characteristics as influenced by management practice and primary cuisine type**, O. A. Garza, B. J. Lesikar, R. A. Persyn, A. L. Kenimer, M. T. Anderson Transactions of the ASAE, Vol. 48(4): 1389–1394.

Please email information about new publications, papers, or projects to Kathy Wythe at [kwythe@tamu.edu](mailto:kwythe@tamu.edu) for inclusion in "New Waves."

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**"News Waves"** is an email newsletter about brief, timely information about university-based water resources news, results of projects and programs, and new water-related research projects, publications, papers and faculty. If you have information for possible inclusion in "New Waves" please e-mail items to [kwythe@tamu.edu](mailto:kwythe@tamu.edu) or 979.845.1862 and include your contact information. All submissions may be edited for grammar and style.