



Breaking news about water resources research and education at Texas universities

October 24, 2006

Agreement signed to commercialize desalination technology

Representatives from the Global Petroleum Research Institute (GPRI) of the Texas Engineering Experiment Station, the Harold Vance Department of Petroleum Engineering at Texas A&M University and The Texas A&M University System Office of Technology Commercialization signed an agreement Monday (Oct. 23) to commercialize a desalination process technology with GeoPure Water Technologies LLC.



Signing the agreement are (from left) **Dr. Theresa A. Maldonado**, associate vice chancellor for engineering, associate dean of engineering, research and deputy director, Texas Engineering Experiment Station; **David Crowe**, project manager for GeoPure; **David Burnett**, GPRI director of technology; and **Dr. Stephen A. Holditch, P.E.**, Harold Vance Department of Petroleum Engineering department head and Samuel Roberts Noble Foundation Endowed Chair in Petroleum.

GeoPure has licensed the technology developed by the A&M System researchers to provide quality drinking water from brine produced during petroleum drilling, stimulation and production operations. A joint venture between industry, the federal government and a team of researchers from GPRI, the Texas Water Resources Institute, the Harold Vance Department of Petroleum Engineering and the Institute for Food Science and Engineering at Texas A&M developed the technology.

GeoPure will offer the GPRI Design™ Desalination Technology to the petroleum industry for the effective resource management of produced water in oil and gas operations. This technology addresses several critical needs in the search for new freshwater resources and helps to address environmental concerns on waste management at the well site, a key focus for the energy industry.

(Story from Aggie Engineering Weekly)

Rio Grande Basin Initiative highlighted at Uvalde Water Day

The Texas Water Resources Institute's Rio Grande Basin Initiative was featured at Water Day on Oct. 16 at the Texas A&M University Agricultural Research and Extension Center in Uvalde. **Dr. Bill Holloway**, center resident director of research; **Congressman Henry Bonilla**; **Dr. Elsa**

Murano, vice chancellor, dean of agriculture and life sciences and director of Texas Agricultural Experiment Station for Texas A&M University; and **Dr. Ed Smith**, associate vice chancellor for agriculture and life sciences, spoke at the meeting.

Dr. Leo Sayavedra, vice chancellor for academic and student affairs of Texas A&M University System; **John Bellinger**, chairman of the U.S. Meat Exportation Federation; and **Dr. Wendy Gramm** and **Ida "Weisie" Clement Steen**, both members of the Texas A&M Board of Regents, were also in attendance and said a few words.

To read the AgNews story, visit: <http://agnews.tamu.edu/dailynews/stories/AGPR/Oct1806a.htm>

State agencies establish bacteria task force

The Texas Commission on Environmental Quality and the Texas State Soil and Water Conservation Board established the Task Force on Bacteria TMDLs at a joint meeting Sept. 29 and named **Dr. Allan Jones**, Texas Water Resources Institute's director, as chairman.

Other task force members include **Drs. George Di Giovanni**, Texas Agricultural Experiment Station at El Paso; **Larry Hauck**, Texas Institute for Applied Environmental Research; **Joanna Mott**, Texas A&M University - Corpus Christi; **Hanadi Rifai**, University of Houston; **Raghavan Srinivasan**, Texas A&M University; and **George Ward**, The University of Texas at Austin.

The task force will examine other states' approaches in developing and implementing bacteria TMDLs, recommend cost-effective and efficient methods for developing TMDLs and implementation plans and evaluate the models and bacteria source tracking methods currently available for developing TMDLs and implementation plans. The task force will also develop a roadmap for further scientific research needed to reduce uncertainty about bacteria behavior under different water conditions in Texas.

The Task Force will be assisted by over 40 expert advisors and interested stakeholders. Bacteria accounted for 197 of 416 impairments listed in the 2002 Texas Water Quality Inventory and 303(d) list.

Soil and Crop Sciences assistant professor named "Excellence" award winner

Dr. Kurt Steinke, assistant professor of turfgrass ecology, recently earned the Musser International Foundation's highest honor, the Award of Excellence for 2006 and received a \$20,000 cash award.

This annual Award of Excellence is presented to the most outstanding Ph.D. candidate in his or her last year of graduate study in turfgrass management. Applications are submitted from turfgrass programs in the United States and Canada.

The Musser International Turfgrass Foundation is a nonprofit organization that raises money to support excellence in turfgrass research through graduate student awards. The Foundation was established in 1969 after Penn State turfgrass researcher H. Burton Musser.

WaterSmart Landscaping for Professionals

The WaterSmart Landscape Program of the Texas Cooperative Extension and Sea Grant Program will host "WaterSmart Landscaping for Professionals" on Nov. 15, 8 a.m.–3 p.m. at the Sheraton Brookhollow Hotel in Houston.

"From storm water management to water conservation, Texas landscapes are under stress," said project coordinator, **Chris LaChance**. "Learn how to meet these challenges and keep costs down."

Tickets are \$55 and include landscape workshops, a continental breakfast, lunch and exhibits. Landscape workshops will include: Getting Smart with Water: The Case for Landscapes; Building Healthy Soils Saves Money Now; and the Right Plant in the Right Place.

Storm water specialist, **Dr. Michael Dietz** from the University of Connecticut, will speak on rain gardens and green roofs in the urban landscape.

For more information, visit the Web site at <http://www.watersmart.cc>, or contact Chris LaChance, (281) 218.0721, or at c-lachance@tamu.edu.

Spatial Sciences lab schedules courses

The Spatial Sciences Laboratory will conduct a Combined Introductory and Advanced ArcGIS course Nov. 14–16.

The Combined Introductory and Advanced ArcGIS course will train beginners on the ESRI ArcGIS software and the use of advanced tools and extensions. Cost for the training is \$450 per person or \$225 per student.

For registration forms or for more information on other training course, visit the lab's Web site at <http://ssl.tamu.edu> or contact **Lesli Gomez** at (979) 862.7956.

Groundwater seminars scheduled

Texas A&M University's departments of Biological and Agricultural Engineering, Civil Engineering and Water Management and Hydrologic Sciences will be hosting the following Groundwater Management Seminars in October and November on Wednesdays from 4–5 p.m. in room 110 of the Civil Engineering Building:

Dr. David Maidment, The University of Texas civil, architectural and environmental engineering professor, will talk on the "Application of an ArcGIS Groundwater Data Model" on **Oct. 25**.

Dr. Jennifer McGuire, assistant professor in Texas A&M's Department of Geology and Geophysics, will present "Biogeochemical Cycling at Natural System Interfaces: Living on the Edge" on **Nov. 8**.

Dr. W. Douglass Shaw, professor in Texas A&M's Department of Agricultural Economics, will speak on "Willingness to Pay to Reduce the Perceived Mortality Risks of Arsenic in Drinking Water" on **Nov. 15**.

Dr. Yavuz Corapcioglu, professor in Texas A&M's Department of Civil Engineering, will talk on the "Pore Scale Analysis of NAPL Blob Dissolution and Mobilization in Porous Media" on **Nov. 29**.

Upcoming University Conferences

Environmental Sustainability Conference: U.S.-Mexico Issues

Various organizations and agencies including The Center for Research Excellence in Science and Technology-Research on Environmental Sustainability of Semi-Arid Coastal Areas (CREST-RESSACA) and the South Texas Environmental Institute at Texas A&M University-Kingsville, will host the Environmental Sustainability Conference: U.S.-Mexico Issues, Nov. 15–17 at the Sheraton Ambassador Hotel and Towers in Monterrey, Mexico.

The conference will address new and emerging technologies for environmental sustainability along the region of the United States and Mexico border. Topics will include economic development, air quality, water quality, environmental justice, solid waste, environmental sustainability and more.

For more information, visit the conference Web site at <http://crest.tamuk.edu> or contact Rose Rodriquez at crestconf@even.tamuk.edu or at (361) 593-5556.

International Conference on Water in Arid and Semiarid Lands

The International Conference on Water in Arid and Semiarid Lands will be on Nov. 15–17 at Texas Tech University.

Conference themes include information about soils, crops and irrigation; water resources; water law and policy; and climate, ecology, remote sensing and GIS applications and more. For more information about the conference visit <http://www.iaff.ttu.edu/home/icasals/conference/>.

Charting the Course, a water planning and policy conference

"Charting the Course," a Texas water planning and policy development conference, is set for Nov. 15–17 at the State Capitol Extension in Austin. It is sponsored by the River Systems Institute and co-sponsored by the Guadalupe-Blanco River Authority, Texas Parks and Wildlife Department, Texas Water Resources Institute and U.S. Geological Survey.

State Sen. Kip Averitt and **State Rep. Robert Puente** will speak as well as **Phil Wilson**, deputy chief of staff with Governor Perry's office and **Dr. Allan Jones**, Texas Water Resources Institute's director, will discuss the Trinity River Basin Environmental Restoration Initiative.

More information is available at <http://www.rivers.txstate.edu> or contact chart.the.course@grandecom.net.

2006 Texas Water Law Institute

The University of Texas School of Law will sponsor the 2006 Texas Water Law Institute, Dec. 7–8, 2006 at the Radisson Hotel and Suites in Austin. The conference opens with an optional water law primer, designed for practitioners unfamiliar with the subject area, as well as non-lawyers, governmental officials, and engineers. The conference has sessions on upcoming legislative issues, groundwater, buying and marketing/selling water, reservoir and stocktank issues, valuing water rights, and more.

For more information or to register, visit

<http://conferences.utcle.org/law/cle/conferences/fall2006/WL06/index.html>

New Publications/ Papers

The following new publication is available from the Texas Water Resources Web site at

<http://twri.tamu.edu/reports.php>

Technical Report-294: *Update of Estimated Agricultural Benefits Attributable to Drainage and Flood Control in Willacy County, Texas*, **Ronald D. Lacewell, Roger Freeman, David Petit, Ed Rister, Allen Sturdivant, Luis Ribera and Michele Zinn.**

This report represents an update on the 2001 evaluation of benefits attributable to the South Main Drain in Willacy County. The results are limited to agricultural benefits due to reduced flood damages and improved drainage. The 2006 Texas Cooperative Extension crop enterprise budgets were used to update the crop budgets in the ABE model. Since 2001, the costs have increased and normalized prices are dramatically less. The means that the expected benefits of the Raymondville Drain are substantially lower.

Special Report 2006-04: *Validating the Estimated Cost of Saving Water Through Infrastructure Rehabilitation in the Texas Lower Rio Grande Valley: A Case Study Using Actual Construction Costs for the Interconnect and Pumping Plant Project, Cameron County Irrigation District No. 2 (San Benito)*, **Allen W. Sturdivant, M. Edward Rister, Ronald D. Lacewell and Callie S. Rogers.**

The following book is available from the Texas A&M University Press at

<http://www.tamu.edu/upress/>.

The San Marcos: A River's Story, **Jim Kimmel.**

The San Marcos springs have flowed for around ten million years. In this ode to the river they form, Jim Kimmel brings a picture of a watercourse brimming with life, past and present. Native, non-native, prehistoric and modern-day plants, animals and people have inhabited the river and its banks. Kimmel touches on them all with the affectionate and knowledgeable voice of one whose own life has been closely linked to the San Marcos.

The following new publications are available from the Texas Cooperative Extension bookstore at

<http://tcebookstore.org/>

Questions about Groundwater Conservation Districts in Texas, **Bruce J. Lesikar, Ronald Kaiser and Valeen Silvy**

Groundwater conservation districts (GCDs) are being created in many parts of Texas to allow local citizens to manage and protect their groundwater. This publication answers frequently asked questions about groundwater and GCDs.

Priority Groundwater Management Areas: Overview and Frequently Asked Questions, **Valeen Silvy, Bruce J. Lesikar and Russell A. Persyn**

Water shortages and water quality problems in Texas are prompting the state to address the security of its water supplies. One approach being taken is to create priority groundwater management areas (PGMA) in critical regions. This publication explains the process for creating a PGMA in Texas.

If you would like your publication listed, please e-mail kwythe@tamu.edu with your information.

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