Texas Water Resources Institute's E-Newsletter

Breaking news about water resources research and education at Texas universities

October 28, 2008

Director Jones leaving TWRI for Dallas Center

Dr. Allan Jones, director of the Texas Water Resources Institute (TWRI) since 2000, is leaving the institute to take a faculty position at the Texas AgriLife Research and Extension Urban Solutions Center at Dallas. In his Dallas position, Jones will work under Resident Director of Research **Dr. Frank Gilstrap** to focus on the effects of urbanization on water resources.

Jones joined Texas AgriLife Research (then Texas Agricultural Experiment Station) in 1988 as resident director of research at Blackland Research and Extension Center. He has served as assistant vice chancellor of agriculture and life sciences and



associate director of Texas AgriLife Research since 1996. He has also served as a member of AgriLife's Federal Relations team.

In an e-mail announcing Jones' departure, **Dr. Mark Hussey**, Texas AgriLife Research director and interim vice-chancellor for Agriculture and Life Sciences, and **Dr. Ed Smith**, Texas AgriLife Extension Service director, said that the level of funding and impacts of TWRI's water programs have grown substantially under Jones' guidance.

"The institute and faculty it has helped fund have received numerous awards, and in many ways, TWRI is an example of how we believe an Institute should function," Hussey and Smith said. "We appreciate his many contributions, but understand his desire for a change, having served in administrative roles for over 20 years."

Dr. B. L. Harris, associate director of TWRI, said that Jones has gained the respect of many throughout Texas, nationally and internationally because of his leadership, knowledge, and innovative and proactive approaches to solving water resources issues.

"Dr. Jones quickly gains trust and respect and has a unique ability to bring diverse interests together, seek common ground and progress to successful program planning and conclusions," Harris said. "We at TWRI will miss his leadership."

An example of his leadership was his appointment in 2006 by the Texas State Soil and Water Conservation Board and Texas Commission on Environmental Quality as chairman of the Bacteria TMDL (Total Maximum Daily Load) Task Force. This seven-member task force addressed Texas'

number one water quality issue: bacteria pollution. He successfully led the task force to develop a consensus of important guiding principles for addressing bacteria impairments.

Dr. Jones will begin his new position in Dallas in January 2009. Join us in congratulating him and wishing him well as he moves into this new phase of his career.

Texas A&M AgriLife teams acknowledged for excellence

Two teams of Texas AgriLife Research and Texas AgriLife Extension Service staff won awards at the recent American Society of Agronomy (ASA) annual meeting in Houston.

The team of **Dr. Diane Boellstorff**, **Jaclyn Tech**, **Dr. Mark McFarland** and **Dr. Raghavan Srinivasan** won a certificate of excellence for the Southern Region Water Quality Information System Web site: http://srwqis.tamu.edu.

The team of **Jennifer Peterson**, **McFarland**, **Nikki Dictson**, **Matt Berg** and **Boellstorff** won a certificate of excellence for their Texas Watershed Steward Handbook.

ASA is an international scientific society headquartered in Madison, Wisconsin. The education materials award program has judged and provided awards to meritorious Extension materials for nearly 20 years.

Irrigation training program set for Rio Grande Valley, Gulf Coast

The Texas Water Resources Institute (TWRI) is continuing to co-sponsor irrigation training events around the state as part of its Irrigation Training Program (ITP).

The next event, the 7th Rio Grande Valley Irrigation Conference and Trade Show, will be on Wednesday, Oct. 29 in Mercedes. Following the valley program, the Gulf Coast Irrigation Conference and Trade Show is set for Tuesday, Nov. 18 in Sinton.

At each training program, irrigation experts will speak on efficient irrigation systems and their operation and management. Other topics are specific to the location.

These training events are part of six programs being held around the state to help farmers and others learn about efficient tools and techniques of irrigation management. Each event will offer region-specific information about irrigation practices, cropping systems, policy updates and cost-share programs available to local producers. Future programs scheduled are Jan. 14, 2009 in Amarillo, and the final event, the South Texas Irrigation Conference, will be Jan. 20, 2009 in Hondo.

The ITP is a collaborative effort of TWRI, Texas AgriLife Extension Service, Texas State Soil and Water Conservation Board, and USDA's Natural Resources Conservation Service. The Texas Water Development Board provides support funding for the project through its Agricultural Water Conservation Grant program.

For more information about the Rio Grande Valley or Coastal Bend conferences events, visit http://itc.tamu.edu/conferences.php. For more information on the Irrigation Training Program, visit http://twri.tamu.edu/project-info/ITP/.

Burnett receives award for his work on oilfield brine desalination

Texas A&M Engineering's **David Burnett** received the Health, Safety, Environment/Sustainable Development Award at the 7th Annual World Oil Awards Oct. 16 for making significant strides in protecting the environment through technical innovation.

Burnett is the director of technology for the Global Petroleum Research Institute (GPRI), part of the Harold Vance Department of Petroleum Engineering at Texas A&M University and the Texas Engineering Experiment Station (TEES) and a frequent collaborator with TWRI.

To continue reading the "Texas Engineering" story, click here.

Tech researchers receive Ogallala water study grant

Two Texas Tech University researchers are part of a team receiving a \$747,528 grant from the National Science Foundation studying water scarcity in the Ogallala Aquifer.

Researchers **Lucia Barbato**, associate director of the Center for Geospatial Technology, and **Colleen Barry-Goodman**, director of the Earl Survey Research Lab in the Department of Political Science at Texas Tech, will use the three-year grant from the Human and Social Dynamics competition to study changing societal attitudes towards water scarcity as affected by ethanol production and increasing groundwater depletion of the Ogallala Aquifer.

The research team is comprised of four researchers from three different universities. Barbato is responsible for the Geographic Information Systems (GIS) analysis component and Barry-Goodman is responsible for managing the survey.

To continue reading the Texas Tech news release, click here.

TCEQ forms water quality planning division

The Texas Commission on Environmental Quality recently formed a new Water Quality Planning Division dedicated to improving water quality with **Kelly Keel** as director.

This new division consolidates staff from the Monitoring Operations, Office of Compliance and Enforcement and part of the Water Quality Standards Team with the existing water planning and estuary programs in the Chief Engineer's Office. The division has three sections: Planning and Implementation, Monitoring and Assessment and the Houston Laboratory.

"This new team will allow the agency to take a comprehensive, coordinated approach to water quality planning, from identifying sources and addressing impairments to monitoring and wetland restoration efforts," said **Mark Vickery**, TCEQ's executive director. "This organizational change will consolidate and enhance the agency's technical strengths to better assess water quality impairments and help match appropriate approaches to designated uses."

Keel previously led the agency's air quality planning efforts. **Charles Maguire** is the assistant director of the Water Quality Planning division. Maguire was the manager of the Water Quality Assessment Section in the Water Quality Division and he is an expert in Concentrated Animal Feeding Operations (CAFO) permitting.

Laurie Curra, who formerly managed the Clean River, Nonpoint Source and Water Quality Management programs, is the new Monitoring & Assessment Section manager. **Katherine Nelson**, previously section manager of the Industrial and Hazardous Waste Permits section, is the Planning and Implementation Section manager. **Jim Busceme** continues to serve as the section manager of the Houston Laboratory.

The new TCEQ organizational chart can be downloaded at http://www.tceq.state.tx.us/about/organization/orgchart.html

Texas Stream Team "Caring for Our Waters" annual partner meeting

The annual Texas Stream Team Partner meeting is scheduled for 10 a.m. to 3 p.m. **Nov. 13** at the River Systems Institute headquarters in San Marcos, Texas.

Texas Stream Team "Caring for Our Waters," formerly Texas Watch, will use this year's meeting to focus on bringing resources and capacity to partners and volunteers of water quality monitoring programs in Texas. "Changes in today's climate, business, and growing water demand make now more important than ever to expand volunteer monitoring benefits from Texas Stream Team programs," said Acting Director **Jason Pinchback**.

Pinchback said Texas volunteer monitoring is adapting to water conditions as the number of impaired and threatened water bodies continues to grow. Among other topics, the partner meeting will focus on *E.coli* monitoring and bacteria surveys, as well as sediment and bacteria curricula development.

If planning to attend, individuals should RSVP to Terry Wendland at two5@txstate.edu.

Texas Stream Team is a network of over 1400 partners and volunteers working to gather and make available information about the natural resources of Texas. Established in 1991, Texas Stream Team is administered through Texas State University, the Texas Commission on Environmental Quality, and the U.S. Environmental Protection Agency.

To learn more about the Texas Stream Team visit http://txstreamteam.rivers.txstate.edu.

IBWC names new chiefs

The U.S. and Mexican governments have named new chiefs for their sections of the International Boundary and Water Commission following the deaths of their commissioners in a plane crash last month.

Al Riera, the agency's principal engineer of operations, is the new U.S. acting commissioner for the IBWC in El Paso. Riera's department was responsible for resolving binational issues between Mexico and the U.S., and overseeing 10 field offices located in Texas, New Mexico, Arizona, and California.

The new interim commissioner of the IBWC's Mexican section is **Luis Antonio Rascón Mendoza**, who will oversee the office in Juárez.

The cause of the crash that killed former IBWC Commissioners **Carlos Marin** (U.S. Section) and **Arturo Herrera Solis** (Mexico section) is under investigation by Mexican authorities. (Story from El Paso Times)

Watershed Steward programs offered in Comanche and Weslaco

Texas Watershed Steward training programs aimed at helping citizens improve and protect their water resources are making their way around Texas. Two upcoming workshops are planned for the Leon River and Arroyo Colorado watersheds.

The Leon River Watershed Steward program is **Oct. 30** at the Comanche Community Center in Comanche, Texas and an Arroyo Colorado workshop is set for **Nov. 20** at the Texas A&M University-Kingsville Citrus Center in Weslaco, Texas. Both training events will last from 8 a.m. to 4 p.m. on the scheduled date.

Those who partake in the free, one-day educational workshops will learn about watershed systems, water quality regulation and monitoring, and methods to improve water quality.

Texas AgriLife Extension Service program specialist **Jennifer Peterson** said, "Texas Watershed Stewards is a great way to get involved and make a difference in your watershed."

The training sessions will provide the necessary resources to form a watershed action group, organize local watershed activities, and get involved in community-driven watershed protection and management, Peterson said.

Along with the training, workshop participants will receive a copy of the Texas Watershed Steward Curriculum Handbook and a certificate of completion. Pre-registration for the events is now open and required.

The Texas Watershed Steward program is sponsored by the Texas AgriLife Extension Service and the Texas State Soil and Water Conservation Board. These organizations work to improve water quality by partnering with the Brazos River Authority on the Leon River Watershed project, and the Texas A&M AgriLife Texas Water Resources Institute on the Arroyo Colorado Watershed effort.

For more information about the Texas Watershed Steward program, and to pre-register for workshops, visit http://tws.tamu.edu.

For more information on the Arroyo Colorado Watershed, visit http://www.arroyocolorado.org. (Portions of this story are from AgNews)

News from TWRI Water Resources Training Program

5th International SWAT Conference set

Save the Date! The 2009 5th International SWAT Conference will be **Aug. 5-7**, **2009** at the University of Colorado, Boulder, Colorado.

Workshops will be offered **Aug. 3-4, 2009** and include: Introductory SWAT, Advanced SWAT, SWAT Developers, and Integrated APEX/SWAT.

Please visit the conference Web site http://www.brc.tamus.edu/swat/conf_5th.html for more information, including conference and workshop registration, lodging information, and more.

Floodplain Delineation with HEC-RAS and GIS Course

Register now for the Floodplain Delineation Course with HEC-RAS and GIS course on **Dec. 3-5**, **2008**.

The two and a half-day course will focus on the fundamental concepts of open-channel hydraulics and include hands-on applications of the HEC-RAS and HEC-GeoRAS software packages. Instructors will discuss steady and unsteady flow simulations using HEC-RAS and the delineation and mapping of floodplains using the HEC-GeoRAS tool.

For more information or to register online, visit http://watereducation.tamu.edu. Early registration ends Nov. 19, 2008. Upon course completion, participants will receive Texas A&M University CEUs.

Early registration for watershed planning course ends soon

Don't forget to register for the Texas Watershed Planning Short Course at the Mayan Ranch in Bandera, TX on **Jan. 12-16, 2009**.

This week-long course will familiarize participants with EPA's nine key elements of a watershed protection plan and the general principles of and tools for: Building Partnerships, Assessing Watersheds, Identifying Solutions, and Designing an Implementation Program.

Don't miss out on this excellent opportunity. There are a limited number of seats available, so reserve your seat by registering today. For more information or to register online, visit http://watershedplanning.tamu.edu/. Early registration ends Nov. 11, 2008 and upon course completion, participants will receive CEUs from the National Registry of Environmental Professionals.

First Brackish Groundwater Desalination Conference held in El Paso

The first Brackish Groundwater Desalination Conference, teaching the ends and outs of groundwater desalination, will be held **Nov. 5-6** at the new TecH₂O Center in El Paso, Texas.

The Water Environment Association of Texas, El Paso Water Utilities, Texas Commission on Environmental Quality, American Water Works Association, and Texas Water Development Board are sponsoring the two half-day conference.

Attendees of the conference will tour the Kay Bailey Hutchinson Desalination Plant, the world's largest inland desalination plant. The plant represents a progressive strategy in new water supply by creating a fresh water supply from brackish groundwater.

Additional seminar topics focus on hydrogeological characterization and desalination of brackish groundwater, deep well injection of disposal products, case studies and pilot programs.

Seven certification hours are available to attendees. All participants will receive a certificate of completion.

For information on the conference and to register, call 512-693-0060 or email Cheryl@weat.org.

New Publications

Seymour Aquifer Water Quality Improvement Project, Final Report. J. Sij, C. Morgan, M. Belew, D. Jones, and K. Wagner, Texas Water Resources Institute Report TR-332, 2008

Water Loss Test Results for the Pipeline Units: I-19/I-18, I-7A, and I-22 Hidalgo County Irrigation District No. 2, E. Leigh and G. Fipps, Texas Water Resources Institute Report TR-330, 2008

Water Loss Test Results: West Main Canal United Irrigation District of Hidalgo County, E. Leigh and G. Fipps, Texas Water Resources Institute Report TR-329, 2008

Water Loss Test Results for Lateral A Before and After Lining Hidalgo County Irrigation District No. 2, E. Leigh and G. Fipps, Texas Water Resources Institute Report TR-328, 2008

<u>Water Loss Test Results Main 'J' Canal Delta Lake Irrigation District</u>, E. Leigh and G. Fipps, Texas Water Resources Institute Report TR-327, 2008

<u>Seepage Test Loss Results The Main Canal Valley Municipal Utility District No. 2,</u> E. Leigh and G. Fipps, Texas Water Resources Institute Report TR-326, 2008

Ponding Test Results Seepage and Total Losses Main Canal B Hidalgo County Irrigation District No. 16, E. Leigh and G. Fipps, Texas Water Resources Institute Report TR-325, 2008

Ponding Test Results Seepage and Total Losses, North Alamo Main Canal Hidalgo County Irrigation District No. 2, E. Leigh and G. Fipps, Texas Water Resources Institute Report TR-324, 2008

Ponding Test Results Seepage and Total Losses, Secondary Canals 13, 16, and 29

Donna Irrigation District Hidalgo County No. 1, E. Leigh and G. Fipps, Texas Water

Resources Institute Report TR-323, 2008

Water Loss Test Results for the West Main Pipeline United Irrigation District of Hidalgo County, E. Leigh and G. Fipps, Texas Water Resources Institute Report TR-322, 2008

Installation of River and Drain Instrumentation Stations to Monitor Flow and Water Quality and Internet Data Sharing, Z. Sheng, C. Brown, B. Creel, R. Srinivasan, A. Michelsen and M. P. Fahy, Texas Water Resources Institute Report TR-320, 2008 This report presents major components of the Paso del Norte Watershed Council's Coordinated Water Resources Database and GIS Project developed from August of 2005 through July of 2007.

Effects of Salinity and Specific Ions on Seedling Emergence and Growth of Onions, S. Miyamoto, I. Martinez and G. Niu, Texas Water Resources Institute Report TR-319, 2008. It was hypothesized that the disposal of nanofiltration concentrate to irrigation water may not be deleterious, especially for growing crops sensitive to specific effects of Na and/or Cl. This study examined the above hypothesis by observing the effect of salinity and ion composition of irrigation water on seedling emergence, survival and growth of onions.

<u>Bacterial Monitoring for the Buck Creek Watershed</u>, Texas Water Resources Institute Report TR-318, 2008

Results from this study indicate that elevated *E. coli* levels periodically exist in Buck Creek. Implementing proper management measures in the watershed will aid in decreasing the impacts of E. coli on the creek.

<u>Salt Tolerance of Landscape Plants Common to the Southwest</u>, **S. Miyamoto**, Texas Water Resources Institute Report TR-316, 2008

This publication provides the information related to salt effects on growth and leaf injury of various landscaping plants common to the arid areas of the Southwest. The information presented would be useful to landscape planners, managers, and horticulturists.

Hydrology, Salinity, and Salinity Control Possibilities of the Middle Pecos River: A Reconnaissance Report, S. Miyamoto, S. Anand and W. Hatler, Texas Water Resources Institute Report TR-315, 2008

This report outlines the hydrology, geochemistry, and water management practices of the Middle Pecos River in order to explain the reasons for the high salinity, and to discuss the potential for salinity control.

<u>Potential Impacts of Desalination Concentrate on Salinity of Irrigation Water: A Case Study in the El Paso Valley</u>, **S. Miyamoto**, Texas Water Resources Institute Report TR-314, 2008

This study examined the potential impact of concentrate discharge on salinity, sodicity, and ionic composition of irrigation water supply, using historical or published records.

Texas Legislative and Irrigation Districts of the Rio Grande River Basin: A Map Series, E. Leigh and G. Fipps, Texas Water Resources Institute Educational Material EM-102, 2008

The series consists of 9 maps showing the boundaries of legislative districts and 32 water districts that deliver irrigation water. County boundaries are also shown.

<u>Questions about Groundwater Conservation Districts in Texas</u>, B.L. Lesikar and V. Silvy, Texas AgriLife Extension Service publication B-1620 (reprint)

Groundwater Conservation Districts 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.

"New Waves," an email newsletter of Texas Water Resources Institute of Texas A&M AgriLife, publishes timely information about water resources news, results of projects and programs, and new water-related research projects, publications, papers and faculty, at universities in Texas. If you have information for possible inclusion in "New Waves" please email Kathy Wythe or call 979.845.1862 and include your contact information. All submissions may be edited for grammar and style.

If you have difficulty with any links, please copy and paste the full URL into your web browser.

To subscribe, unsubscribe or manage your personal membership options to the "New Waves" mailing list, <u>click here</u>.