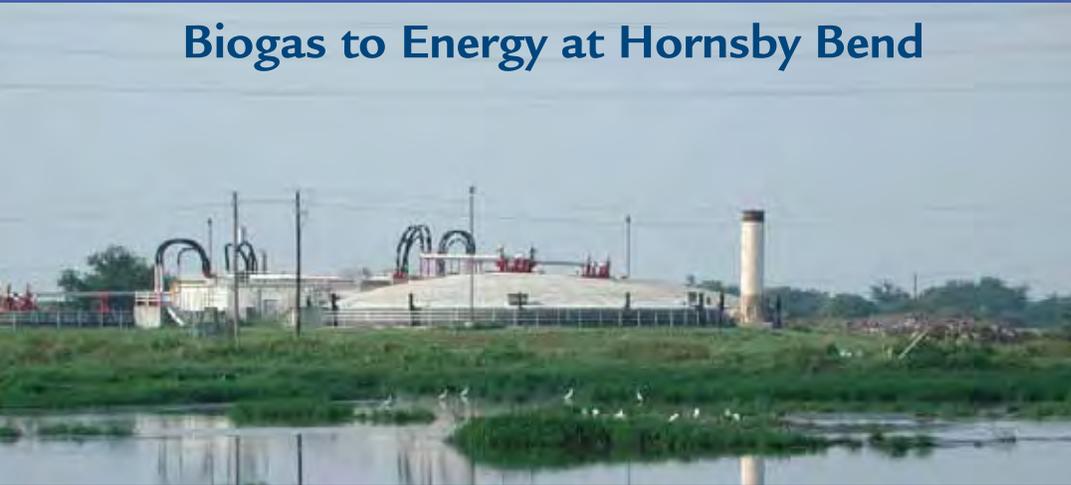


# Texas WET

LEADERSHIP FOR THE WATER ENVIRONMENT IN TEXAS

Official Publication of the Water Environment Association of Texas

## Biogas to Energy at Hornsby Bend

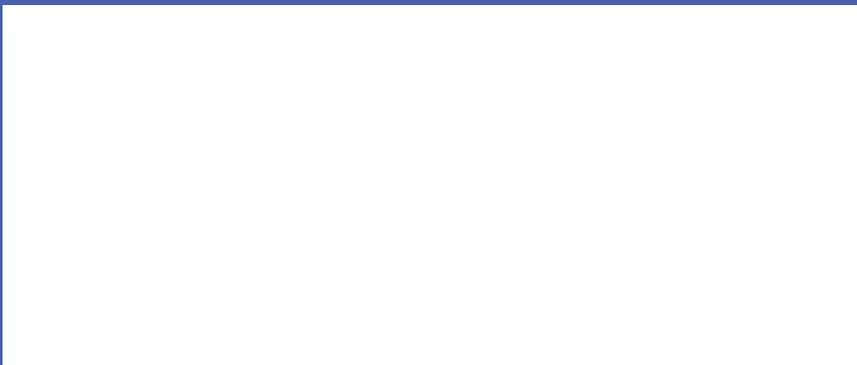


September 2011

Volume 28 Issue 5

### Plus . . .

- *Tech Talk Articles*
  - *Austin Water Utility's Hornsby Bend Biogas to Energy CHP Project*
  - *Watershed Management: The Metroplex Connection*
- *2011 WEAT Scholarships Awarded*
- *San Antonio Seminar: An Overwhelming Success*
- *WEAT's Biosolids and Odor & Corrosion Conference and Expo: An Energized Topic and Aromatic Success*
- *Fundamentals of Asset Management: A "Hands-On" Approach*
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**Leadership for the Water Environment in Texas**

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**On the Cover:** Both as a research center and biosolids treatment facility, Hornsby Bend leads the way in biosolids to energy production. Bluebonnets flourish on a Dillo Dirt compost pile at Hornsby Bend. The Hornsby Bend treatment ponds and river trails are also a popular destination for nature tourism and birdwatching.

**Update Membership Info Online:** Don't miss your mailings. Update your membership information online at [www.weat.org](http://www.weat.org). Go to "My WEAT Information" login page, put in email address and you will be forced to change your password if you have not previously set it up.

## A Message from the President

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By David Briggs, President



Wow....It is still hot. As I am writing this article, I believe that we are on day 51 in a row with temperatures over 100 degrees. Summer has gone by quickly and it is almost over. School has started for some and just around the corner most.

We have had several specialty conferences this summer, three have been in the last few weeks; San Antonio Seminar, Biosolids and Odor and Corrosion and CMOM. The volunteers and staff have worked tirelessly to put on great conferences. While I did not get the chance to attend and participate, I did have the opportunity to hang out with many attendees one evening after the Biosolids and Odor Control Specialty Conference. The feedback was great. Thank you to all the volunteers, staff, sponsors, and attendees that make these specialty conferences possible.

As mentioned in the last article, I was looking forward to taking some time off for vacation and I have been fortunate to be able to do that. We took a short trip to the Frio River that has become a tradition with our family. The drought has taken its toll in this area. The river was down such that even the little kids had to kick their tubes down the river. We still had fun, though. Our next trip was a little farther and we actually left our great state of Texas, which was a first for my family. The good, and sometimes not so good, news was that we saw and

experienced rain every day. It does still exist! We are hoping that we can bring some back with us. The real message is to take the opportunity to spend some quality time with your family, no matter where you are.

Moving back to WEAT, I have had several discussions with folks who are interested in starting and/or reinvigorating their local WEAT chapters. Helping WEAT grow and assisting the local chapters is something I and the rest of the WEAT Board are committed to doing. I have spoken with members from the Bryan/College Station and the Waco/Temple areas. If you are interested in helping get a new local chapter started in these areas or in another, please let me or one of the other WEAT Board members or WEAT office staff know. Helping find speakers, organizational assistance, or if you just have questions, please let me or WEAT know. We would be happy to help.

Keep praying for rain. I will, too. Thank you to the operators for your efforts to protect our water, especially as it becomes a more precious resource. I want to thank all those involved with water and wastewater treatment, collection, distribution, decision making, design, etc. What we do really does matter.

Until next time...Thank You!

Sincerely,  
David

---

## Unlike Our Texas Summertime, WEAT Changes

By Julie Nahrgang

To all of our members and readers, Cheryl Smith has resigned from The Water Environment Association of Texas. Many of you grew to know her personally over the years and her departure will not go unnoticed. She was our Association Manager for over 10 years and WEAT wishes her well on her future endeavors.

As the WEAT office transitions, you might see some changes in your *Texas WET* influenced by a recent survey of our readership. We will soon add sections that bring our operators, Texas utilities and YPs into greater focus. We will continue to offer timely and Texas centered Tech Talk articles. Our additions will be both engaging and representative of our membership base and broaden the views and information in your *Texas WET*. Please let me

know if you have any suggestions or comments as we unfold our new format in the coming issues; and look for an article about you, a coworker or your utility sometime soon!

I would also like to take this opportunity to introduce myself. I am your current Finance and Membership Services Director and will be taking on increasing responsibilities as our office evolves. I've met many of you at past conferences and enjoyed catching up with a number of you at our recent conferences over the summer. All of you have interesting histories and rich industry stories to tell. I would like to thank you for sharing these and offering your talents to our industry. You help make our environment better and are true stewards. I commend you for this and hope to assist and meet your needs with WEAT to help support you and the important work you do!

## Austin Water Utility's Hornsby Bend Biogas to Energy CHP Project

By Richard T. Grubbs, P.E. Chevron Energy Solutions, Ramesh Swaminathan, P.E. Engineering Manager, Austin Water Utility (AWU), and Adam Bogusch, P.E. Lead Process Engineer, Chevron Energy Solutions (CES)

The City of Austin has long been a leader in resource conservation and environmental protection. Subsequent to the initial inception of this project, the City implemented its Austin Climate Protection Plan, which seeks to eliminate impacts from municipal operations on global warming. A key goal of the Plan is to power all City facilities with 100% green power by 2012.

The Hornsby Biosolids Management Plant (HBBMP) receives waste undigested solids from the various wastewater treatment facilities in Austin, anaerobically digests the solids and produces biogas as a biogenic (recently decayed and converted) energy resource. Currently, the resource is used in boilers to heat the anaerobic digesters but because of Austin's southern climate the majority of this resource is flared. This biogas resource can be utilized to generate electricity, offset grid purchased electricity, and use the waste heat generated from production of electricity to heat the anaerobic digesters. Because biogas is a biogenic energy source the energy derived from its use is considered green renewable energy if it offsets grid purchased energy generated from anthropogenic (not in the period of human existence) sources of energy.

The Austin Water HBBMP is using the performance contracting approach to implement this biogas to energy project. Helping utilities generate savings from their facilities through energy performance contracting is a good vehicle for the development and financing of energy related facility upgrades that are funded with project savings. Recognizing that wastewater treatment plants consume large amounts of energy, the Energy Services Performance Contracting (ESPC) approach offers a range of innovative solutions to municipalities to help maximize savings and provide another tool for managers to address utility costs. Due to the number of different processes at work in wastewater treatment plants there often exists a variety of opportunities for energy savings, including aeration optimization, treatment modifications, biosolids handling, and traditional conservation measures. This project focuses on the biogas to energy component at the HBBMP.

### Existing Plant Description

The Hornsby Bend Biosolids Management Plant is a 1,200-acre facility that processes approximately one million gallons of sludge per day from three separate wastewater treatment plants (WWTPs): the Govalle, Walnut Creek, and South Austin Regional (SAR) WWTPs. On-site liquid treatment is limited to management of supernatants and other recycle streams from solids processing. The plant is located about one

mile northeast of the Austin-Bergstrom International Airport between FM 973 S and the Colorado River.



All residuals received at Hornsby Bend are anaerobically digested in two digester complexes to produce a Class B biosolids product. The digester complexes, known as the "Govalle" and "SAR" complexes, were constructed in the 1980's. Historically, it has been projected that the anaerobic digesters produce an estimated 400-500 SCFM of biogas with a methane content of between 55 and 65 percent.

The existing plant was equipped with a cogeneration facility that used two 400-kW engine generators (Figure 2-1), which

*Continued on page 6*

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are thought to be at least 25 years old. The diesel engines were converted to run on a mixture of approximately 90 percent biogas and 10 percent diesel fuel. Power generated by the units was placed on a local load center. Any excess electricity generated by the generators was sent to the electrical grid and the corresponding kilowatt-hours subtracted from the HBBMP electric bill. A few years ago the engine generator units failed and the plant is currently without power production capabilities. In general, the Biogas Energy Project is a major renovation to the existing co-generation facility.

The plant uses fire-tube boilers that operate on biogas to generate hot water to maintain mesophilic digester temperatures. Siloxanes in the biogas have reportedly contributed to historical operational and maintenance problems for both the engine generators and process boilers.

Improvements at the plant are currently under construction as part of the HBBMP Digester Improvements and Sustainability Project (2009). The work includes:

1. Flow Equalization Basin (FEB)/Blend Tank (BT) Mixing
2. Supervisory Control and Data Acquisition (SCADA) Improvements in the FEB Complex
3. FEB Transfer Pump Wet Well Improvements
4. Relocation of Gravity Belt thickener (GBT) Control Panels
5. Optimization of Oil Based Chemical (Polymer) Feed Systems (GBT and Belt Filter Press (BFP) Polymer Systems)
6. Process Buildings Ventilation Improvements
7. Digester and Sludge Holding Basin Cleanout and Inspections
8. Govalle Digester Complex Improvements
9. SAR Digester Complex Improvements
10. BFP Complex Improvements
11. Process Flow Measurement Improvements
12. Digester Gas Collection and Flare Improvements
13. Iron Feed System for Odor Control

Specifically related to the Digester Improvements project, the work includes improved mixing and heat maintenance in each of the digester complexes. Automation for solids feed and gas storage will be provided. Three floating covers will be replaced on the Govalle complex and one new membrane storage cover with a capacity of 250,000 cf will be installed. Monitoring of various process elements will also be included to better allow plant Staff to operate the facility. Taken together, these improvements should significantly help to improve the consistency, performance and biogas production potential of the plant.

#### **Biogas Production and Use**

The Hornsby Bend facility receives approximately 100,000 lbs per day of volatile solids. The volatile solids content of most municipal sludges range between 70% to 80% of the total solids depending on the level of liquid treatment, the industrial component, and the size of the community. The larger the municipal service area served, the more consistent the influent conditions and less variation is observed in the sludge. Volatile

solids destruction in anaerobic digesters typically ranges between 40% to 50% and is correlated to the volatile and total solids ratio entering the digester. Biogas production rates range between 12 cf to 18 cf per lb of VS destroyed (Metcalf & Eddy, 3rd ed.) and is also correlated to the VS content of the sludge received and the VS destruction rates in the digesters.

For the purposes of sizing the cogeneration system for the average day conditions, the data predicts that the biogas production following the current digester modification activities will average 640,000 cf/day or 26,600 cf/hr.

Digester gas from wastewater treatment operations has certain characteristics and pollutants that must be addressed in a cogeneration project. Typically, digester gas is 55-65% methane by volume, with a corresponding Btu content of around 550-650 Btu/cf High Heating Value (HHV). The remaining biogas is typically carbon dioxide with a small amount of nitrogen and other compounds.

The biogas also contains compounds that can be harmful to a cogeneration system. These include siloxanes and hydrogen sulfides. Siloxanes are polymers used in multiple products, but enter the municipal wastewater influent stream primarily through personal care products. The saturated biogas can transport these products into the combustion processes. Siloxanes under the heat of combustion can form silica oxide which can coat and foul combustion chambers and downstream discharge equipment due to siloxane deposits. Hydrogen sulfide becomes acidic when it comes in contact with water condensed from the saturated gas and can foul and corrode equipment and structures. Additionally, biogas is saturated and moisture can adversely impact combustion processes. Cleaning the biogas to acceptable quality is essential in protecting the longevity of the engine generator.

#### **Meeting Digester Heating Demands from Combined Heat and Power (CHP) System**

Depending on the heat demands of the host facility and the engine size and efficiency, the engine-generator will have waste heat that can be used to meet other heating needs within the facility for a Combined Heat and Power (CHP) system improving the overall system efficiencies.

The digesters are currently heated to maintain mesophilic conditions (~95-105oF) with biogas-fired boilers. The anaerobic digester heat load varies based on the incoming temperature and volume of solids from the various treatment facilities as well as the ambient air temperature and soil temperatures surrounding the digesters. The calculations performed for this project indicate the heat requirements vary from very little heat demand to an average of 4.9 MBH, and all the way up to 7.5 MBH during maximum month conditions.

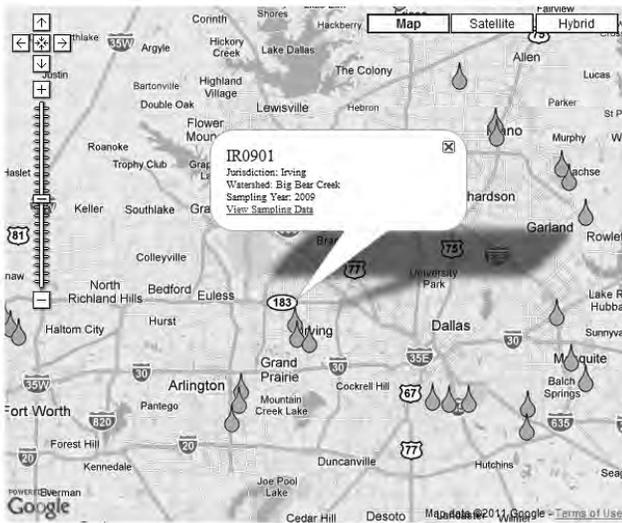
Figure 1 shows the projected heat production of the proposed engine generator heat output for varying biogas production rates when operating at full-load. Also plotted on this curve are the average and maximum heat demands of the digester complexes. What this graph illustrates is that the average heat demands cannot be met by a single engine generator and supplemental boiler heating will be required. Average demand can be met through two engine generators operating under full load.

## 2009 Wet Weather Monitoring Stations

Welcome to the NCTCDG Wet Weather Monitoring online data viewer. To view the sampling data, click on a station in the map and select "View Sampling Data" or use the list below. More information on the program is available [here](#).

View stations for a different year: [2007] [2008]

IE Users: If the monitoring stations do not appear, refresh the page. Click [here](#) for more troubleshooting info.



Click on the magnifying glass to zoom to the station in the map. Click on the Station ID to view the sampling data.

Station ID	Year	Jurisdiction	Watershed	Location Description
AR0901	2009	Arlington	Mountain Creek	North Fish Creek at SH-360
AR0902	2009	Arlington	Mountain Creek	South Cottonwood Creek at Forum Road
AR0903	2009	Arlington	Mountain Creek	North Cottonwood Creek at Timberlake Drive
DL0901	2009	Dallas	Southeast Dallas	Northeast corner of Easter Avenue and E. Kiest

## Implementation of the CHP System

The implementation project includes construction of a single engine generator system, although provisions will be provided to install a second unit. The system will provide generated electrical output to offset current facility electrical consumption, as well as using the waste heat from the engine to meet the base heat demands of the anaerobic digesters. The summary of work includes:

1. Digester Gas Engine Generator
2. Cogeneration, i.e. Heat Recovery, Improvements
3. Integration/Improvements to the Existing Sulfide Removal System
4. Digester Gas Blower/Compressor
5. Digester Gas Moisture Removal (Chiller System)
6. Digester Gas Siloxane Removal (Non-regenerative Activated Carbon)
7. Electrical Integration/Interconnection to Transformer (Generator Switchgear and Interconnection Protection Devices)
8. Instrumentation and Control integration of equipment installed under scope with existing/ proposed system improvements.

The Austin Water Utility's Hornsby Bend Biogas to Energy CHP Project is currently in implementation phase and is due for commissioning and operation in 2012.

*Continued on page 14*

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## Watershed Management: The Metroplex Connection

By Jason Maldonado, Atkin's Storm Water Compliance Program, Chad E. Richards, Atkin's Storm Water Compliance Program, Keith Kennedy, Department of Environment and Development of the North Central Texas Council of Governments (NCTCOG), Erin Blackman, North Central Texas Council of Governments (NCTCOG)

### Establishment of a Regional Monitoring Program

During the application phase of the EPA's National Pollutant Discharge Elimination System (NPDES) large and medium municipal separate storm sewer system (MS4) permitting program in the 1990's, the seven largest cities and two major transportation agencies in the Dallas-Fort Worth (DFW) metropolitan area worked with the North Central Texas Council of Governments (NCTCOG) to form a regional partnership and strategy to conduct wet-weather monitoring activities. During the initial permit term (1996 -2001), seven municipalities (Dallas, Fort Worth, Arlington, Irving, Garland, Plano and Mesquite), and two local districts of the Texas Department of Transportation (TxDOT) received joint approval from U.S. Environmental Protection Agency (EPA) for a regional storm water monitoring program. The NCTCOG role in this regional program was to coordinate the overall program, obtain consultant assistance on behalf of the regional partners, assist participants in sampling site selection, and the development of the monitoring protocol(s); collect and summarize sampling data; and produce annual compliance reports.

The program initially focused on the sampling and analysis of storm water runoff from outfalls serving primarily small watersheds of a single land use type. Although these sample collections served to characterize typical urban runoff from the limited land use types, and were useful for estimating general pollutant loadings, they did little to evaluate the contribution of urban storm water on actual receiving streams. In the second permit term, administered by the Texas Commission on Environmental Quality (TCEQ), approval was obtained to utilize in-stream stations for the regional monitoring program to better assess storm water impacts on a watershed scale. The program became known as the Regional Wet Weather Characterization Program (RWWCP). TCEQ added an option in Part IV.A.3 of the Texas Pollutant Discharge Elimination System (TPDES) Municipal Separate Storm Sewer System (MS4) permits specifically for RWWCP participants consisting of Phase I North Central Texas governmental entities.

The RWWCP is an in-stream monitoring program that allows the participants to obtain baseline data

from receiving streams during storm events in the DFW Metroplex. The baseline data is intended to be used to determine long-term water quality trends associated with the contribution of urban storm water to the streams. The RWWCP allows participants flexibility outside of the permit framework to make changes to the program language. The North Texas Tollway Authority (NTTA) joined the regional program during the second permit term, replacing TxDOT-Fort Worth District who became a co-permittee with the cities of Fort Worth and Arlington and were no longer required to conduct wet weather monitoring.

The RWWCP is entering its third permit term and plans to continue in-stream watershed monitoring and the assessment of urban impact on receiving stream water quality as well as document any improvement resulting from local BMP implementation.

### Evolution of the Monitoring Protocol

Initially a network of 30 monitoring sites was negotiated with EPA Region 6. The 30 sites represented single, predominant area land uses. From 1992 through 1994, 210 storm events were sampled for 188 constituents. The data were used for the NPDES storm water permit application process. The initial data were analyzed for improving the program and finding cost effectiveness. The resulting analysis determined that several sites could be discontinued and several of the 188 constituents were never detected and could therefore be dropped from the monitoring list (NCTCOG, 2003). The regional program went forward with a new set of parameters and monitoring locations. From 1997 through 2001, over 330 samples were collected from a 22 site network for 33 constituents.

During the second permit term, the RWWCP protocol was established. Municipal participants collected data from three sampling sites in the watershed (typically upstream, midstream and downstream) and the transportation agencies collected data from two sites (upstream and downstream stations only). Samples were collected quarterly from each site during a qualifying rain event and were analyzed for 18 parameters. From January 1, 2007 through December 31, 2009, 285 storm events were successfully monitored, resulting in the collection of both composite and grab samples (PBS&J, 2010). As an added component, the City of Fort Worth selected the Representative Rapid Bioassessment Monitoring Option (Part IV.A.2) in their permit, which allowed the chemical sampling frequency to be reduced from four times per year per site to once per year per site. In its place, two bioassessments were conducted each year at a minimum of nine sites. These bioassessments were based on protocols developed by the EPA. The second permit term data were analyzed to assess the initial RWWCP three year sampling effort. The resulting analysis identified the need for:

- Obtaining additional data to establish long term, in-stream water quality trends.
- Increasing the frequency of monitoring in watersheds.
- Refining the sampling site selection process.
- Conducting more rapid bioassessments in other jurisdictions.
- Revising the pollutants monitored.

The goal to obtaining baseline data was generally achieved in the second permit term but final analysis indicated that more data was needed to establish actual trends.

The RWWCP plans to continue forward into the third permit term. The proposed plan is to chemically monitor 24 watersheds and perform rapid bioassessments within 12 watersheds across the region, with substantial overlap between the two sampling approaches. Because the program will be calling for fewer watersheds to be monitored but more frequently, the partners will be able to increase the statistical robustness of their previous dataset.

Specific locations of sampling sites in each watershed will be determined prior to each sampling year. Samples will be collected from these sites and analyzed for the parameters listed in the Table 1.

Parameter	Method of Collection
Oil & Grease	Grab
pH	Grab
E. coli	Grab
Total Coliforms	Grab
Total Dissolved Solids	Composite
Total Suspended Solids	Composite
Biochemical Oxygen Demand	Composite
Chemical Oxygen Demand	Composite
Total Nitrogen	Composite
Dissolved Phosphorus	Composite
Total Phosphorus	Composite
Carbaryl	Composite
Total Arsenic	Composite
Total Chromium	Composite
Total Copper	Composite
Total Lead	Composite
Total Zinc	Composite

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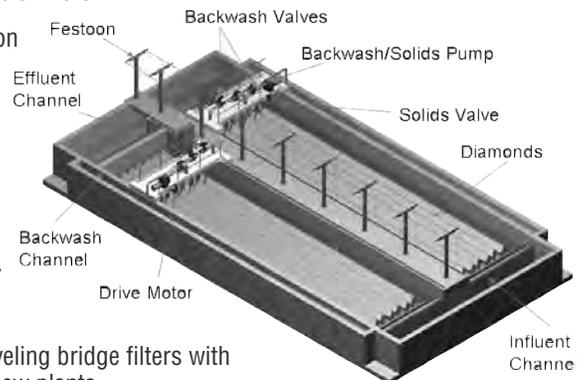
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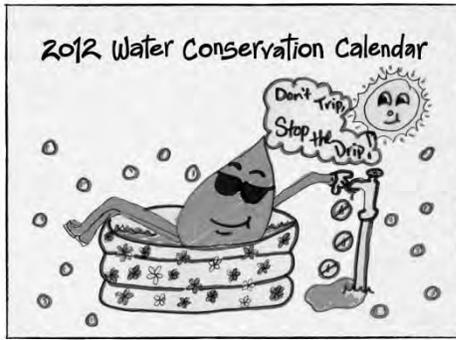
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## 2012 Water for People Calendars For Sale - \$10



WEAT is promoting the sale of the 2012 Water for People Calendars. These calendars were printed by the Dallas Water Utilities that has for many years been involved with the young people in their service area by participating in creative programs as a way to teach younger generations about the importance of conserving water. Children in North Texas created the pictures used in this calendar in the summer of 2010. The City of Dallas Water Utilities invited elementary and middle school students to draw a picture of typical water conservation habits that might take place during their birth month.

Approximately 1,500 children accepted this "challenge", and the pictures chosen for use in this calendar were judged to be among the best.

All proceeds from the sale of this calendar will benefit Water for People. Water For People is a 501(c)(3) nonprofit organization, ID #84-1166148. Gifts are tax-deductible to the extent allowable by law. To purchase a calendar, please submit form below or go to [www.weat.org](http://www.weat.org). Shipping and handling is provided by WEAT.

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Grab samples will be collected during the first flush and analyzed for E. coli, total coliforms, oil and grease, and pH. An additional first flush sample and four subsequent samples collected at equal time intervals will be taken over the first two hours of the event and combined for a composite sample. Samples will be collected for no more than two hours, regardless of storm duration. The grab samples can be obtained either manually or from some type of automated collection device to better address safety concerns. Sampling will be conducted only on qualifying events which are defined as satisfying the following requirements: 1) Antecedent dry period of 72 hours minimum; 2) Rainfall volume of 0.10 inch minimum; and a 3) Quantifiable increase in water surface elevation attributable to storm water runoff. Rain gauges will be deployed in each watershed to support assessment of local wet weather conditions (NCTCOG, 2010).

Samples will be collected with automatic sampling equipment that will allow the collection of storm water through a stainless steel strainer and flexible sampling tubing using a peristaltic pump. Samples will be pumped into four 1-gallon glass containers located in a storm water sampler shelter. The automatic samplers will also be equipped with bubbler flow modules that activate the samplers based on an increase in water surface elevation

in the stream conveyance channel. Upon successful collection, the samples are preserved in ice and shipped immediately to the laboratory for analysis. Each sample is analyzed for 17 parameters which are listed in Table 1.

There are many methods and approaches available for conducting bioassessments including methods developed by the EPA and TCEQ. The EPA manual, Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates, and Fish, 2nd Ed. (1999) states that the protocols are not "intended to be used as a rigid protocol without regional modifications. Instead, they provide options for agencies or groups that wish to implement rapid biological assessment and monitoring techniques." The RWWCP bioassessments will be conducted based upon standardized protocols set forth in applicable EPA and TCEQ manuals. The participants choosing to conduct bioassessments (Dallas, Fort Worth, Garland and Plano) will detail the protocols they used in each annual report. The protocols will generally involve habitat assessment, a measurement of standard field physical conditions, and collection and identification of macroinvertebrates and possibly other biota. A reference stream site will be used to compare watershed parameters to a baseline standard to determine each habitat's health.

Continued on page 14



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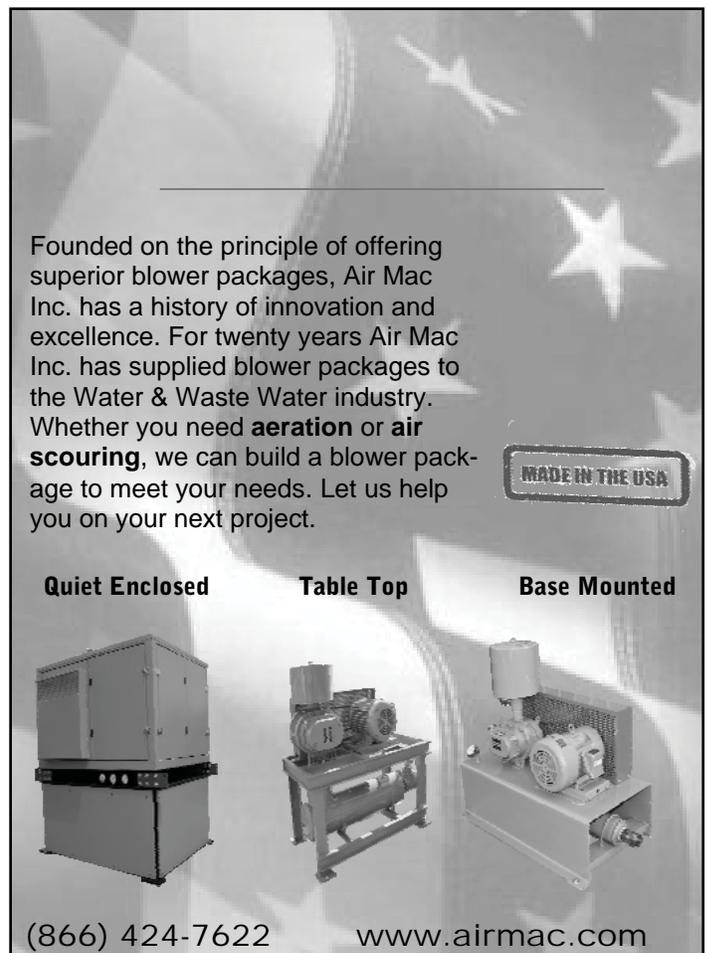
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## 2011 WEAT Scholarships Awarded

By Cathy Sieger, Scholarship Committee Chair

WEAT is proud to announce the winners of the 2011 WEAT Scholarships. The scholarship program was established to assist members and their dependent children in furthering their education in a field of study related to the water utilities profession. The WEAT Scholarship Program has two funds, the Bob Derrington Endowment and the Ronald B. Sieger Memorial Endowment, which are managed by the V. M. Ehlers Foundation.

This year WEAT awarded a total of \$7,211 in scholarships. Each of the seven eligible applicants received a \$1,000 scholarship, which will be distributed over two semesters providing the student maintains the required grades. Additionally, \$211 dollars was donated to complete the funding of a scholarship for an applicant of another endowment pursuing an Environmental Science degree at Tarleton State University.

The applicants receiving full time scholarships from the Ronald B. Sieger Memorial Endowment include:



**Mr. Eric Bolin:** Eric is the son of Jill Bolin, a 22 year employee of the City of Nacogdoches. He is currently attending Ohio State University with a major in biochemistry. Eric was the 2008 valedictorian of Woden High School in Woden, Texas. He is a member of the OSU Biochemistry Club. Eric is also an eagle scout and is a member of the Alpha Phi Omega Scouting Service Fraternity. He has been on the Dean's List for the last four semesters. His plans are to pursue a career in biochemical and genetic research.



**Mr. James T. (Tyler) Georger:** Tyler's father is James Georger. Mr. Georger is a current employee of Kruger, Inc. He is a former employee of Black and Veatch and MWH. Tyler currently attends Texas Tech University. His studies are in the field of Natural Resources Management. He hopes to apply his studies to a career in environmental and wetlands management. Tyler is a member of the Society for Conservation Biology, and is also a member of the Range, Fisheries, and Wildlife Club.



**Mr. Marshall Little:** Marshall is the son of Brian Little, Water Utilities Manager for the City of Carrollton. Mr. Little has been an employee of the City for 28 years. Marshall is planning to study Business at Texas Wesleyan University in Fort Worth, Texas. He is a 2011 graduate of Lake Dallas High School in Corinth, Texas where he was on the varsity baseball team. Marshall was also a member of the National Honor Society.



**Ms. Megan Waldock:** Megan's father is Darryl Waldock. Mr. Waldock has been employed by Aqua Texas, Inc. for the last 13 years of his 29 years in the water/wastewater field. Megan graduated from Azle High School in 2009. She is currently enrolled at Baylor University in Waco where she is studying for a degree in chemistry with a mathematics minor. She plays on the Baylor University Concert Band. She is a member of the Steppin' Out Service Committee and the Alpha Lambda Delta Honor Society.

Students receiving funding from the Bob Derrington Endowment are:



**Mr. Taylor Baker:** Taylor is the son of John Baker, a 27 year veteran with the City of Garland. Taylor is a 2011 graduate of Rockwall High School in Rockwall, Texas. He plans to attend Texas A & M Commerce in pursuit of a degree in biology. Taylor has participated in church mission trips and has worked with the homeless. At Rockwall High School, he was in the band and also on the varsity soccer team.



**Ms. Clarissa Hurn:** Clarissa is the daughter of Cande Hurn, who is the wastewater lab manager for the City of Lubbock. Cande has been with the City of Lubbock for the last 23 years. Clarissa graduated in 2011 from Levelland High School. Her degree field of choice is psychology. Clarissa served as the assistant coach for the Little Dribblers for two years and is active in her church. She was a Girl Scout for seven years and also participated in several charity fundraising events including Relay for Life and March of Dimes.



**Mr. Mason McDonald:** Mason is from Port Arthur, Texas. His father is Thomas McDonald, an eight year employee of the Jefferson County WCID #10. Mason currently attends Lamar University in Port Arthur. Mason plans to pursue a degree in the medical field, specifically physical therapy. He was on the Dean's List in the fall of 2010 and the President's List in the spring semester of 2011. Mason has already contributed more than 100 hours as a physical therapy aide volunteer.

Congratulations to each of these students and to their proud parents as well! We wish them well in their 2011 - 2012 academic year.

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## **Regional Watershed Management Revealed**

The regional watershed approach enables participants to conduct more coordinated and comprehensive water quality sampling and to produce more sound and reliable data at greater cost effectiveness. The approach also allows for a truer assessment of regional impacts on stream water quality. The watershed acts as a natural hydrologic unit for technical efforts to manage water quality on a regional basis.

Scientifically sound and reliable data are critical for decision-making and planning. The RWWCP has focused on the collection of quality baseline in-stream wet weather data. This data will be important for the assessment of in-stream future conditions. The RWWCP establishes a systematic mechanism for storing baseline data and making it available at a later date. Through the increasing use of rapid bioassessments, the RWWCP anticipates a more comprehensive assessment of the biological integrity of the stream. This assessment is fundamental since the primary focus of the program is to assess the impact of urban runoff on receiving stream quality.

One challenge of regional watershed management is the continued participation of communities located within or across watersheds since watersheds rarely correspond to political boundaries. The NCTCOG implemented an on-line data viewer to involve and educate local communities of current RWWCP activities. The data viewer uses an internet browser that allows users to view the data from storm water sampling activities. A Google-based station map allows users to zoom in to sample site locations in their neighborhood and view street and stream crossings against an aerial photography background. Sampling stations are noted with a rain drop symbol. Users may click on these rain drops to retrieve sampling event data such as sampling jurisdiction, station descriptions, watershed, quarterly storm events sampled, field and analytical data

collected, storm summaries and station averages. The Wet Weather Monitoring On-line Data Viewer may be accessed at: <http://www.nctcog.org/envir/SEEclean/stormwater/program-areas/monitoring/data/index.asp>.

## **The Future of the RWWCP**

The RWWCP is expected to continue to produce scientifically sound data through in-stream wet weather monitoring and bio-monitoring to aid with watershed management decisions and action plans as well as to assess the effectiveness of implemented plans. Looking forward into future monitoring terms, the RWWCP hopes to allow the partners to reasonably assess their watersheds while striving to achieve a balance among goals of collecting valid scientific data and meeting permit compliance. It is expected that through continued assessment of urban impacts on receiving stream water quality and the documentation of expected improvements resulting from BMP implementation, partners will have a more holistic understanding of community activities that affect water quality.

## **Acknowledgements**

The authors would like to acknowledge all of the regional participants for their continued leadership. In addition, we would like to acknowledge Krystal Zwinggi, formerly of NCTCOG, for her assistance with the program.

## **References**

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## **Conclusions**

The purpose of performance contracting is to fund needed facility upgrades and improvements through energy and operational savings. Funding through this mechanism can allow municipalities to avoid using general budgets or capital improvements on projects that provide self-funding options. This frees up the use of the capital funding or excess savings to be used for projects that do not have self-funding characteristics.

Electricity savings will occur by offsetting electricity purchased from Austin Energy (AE) with electricity generated on-site using biogas. Additional energy production will be sold back to Austin Energy (AE) based on the agreement between the two City of Austin operating units. On-site electricity will be generated using an engine/generator. Biogas, a byproduct of the anaerobic digestion process, will be used to fuel the engine generator. The amount of electricity generated, and

therefore displaced, is a function of the quality and quantity of the biogas provided to the engine generator.

Austin Energy (AE) and Austin Water Utility (AWU) have collaborated to develop the net metering approach for the biogas to energy project. Historically, the Hornsby Bend facility uses on average 4.38 Million kWh annually to process biosolids. The first 4.38 million kWh generated will offset the annual consumption. Electricity generated in excess of the facility offset will be sold to Austin Energy (AE). Deductions have been made for parasitic loads, operations and maintenance costs and the calculated down time required for these activities. The net positive available for debt service for the first year is \$180,000 after the deductions are subtracted. Austin Energy (AE) applied for and received a USDOE ARRA grant for \$1.25 Million for the project.

## **Acknowledgements**

Chevron Energy Solutions would like to acknowledge the City of Austin (COA), Austin Electric (AE) Project Manager, Dennis Lilly, and Austin Water Utility (AWU).



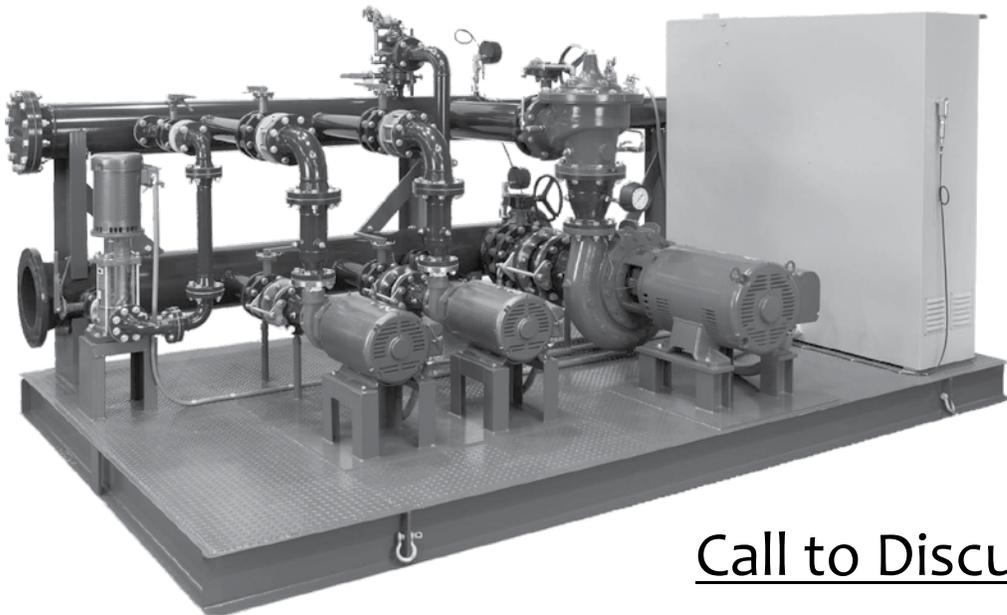
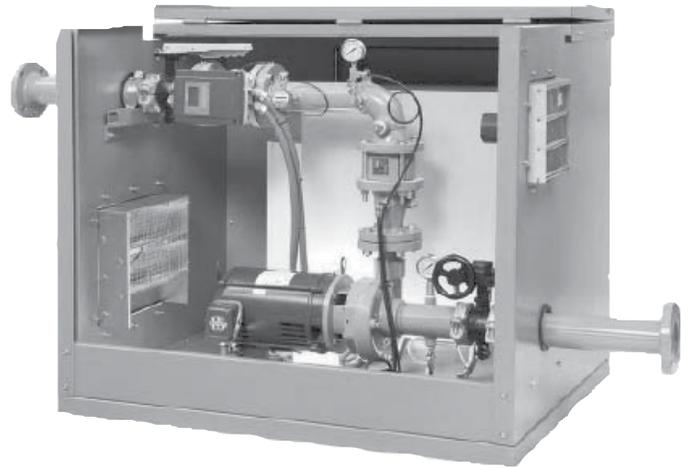
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# A Message from the Executive Director

By Carol Batterton, Executive Director



## Cooperative Federalism Act

Congressman John Mica (R-FL) has filed a H.R. 2108 in Congress known as the Cooperative Federalism Act. This bill amends the Federal Water Pollution Control Act to preserve the authority of each State to make determinations relating to the State's water quality standards. The Congressional Research Service summary of the bill states:

Clean Water Cooperative Federalism Act of 2011 amends the Federal Water Pollution Control Act (commonly known as the Clean Water Act) to prohibit the Administrator of the Environmental Protection Agency (EPA) from:

(1) promulgating a revised or new water quality standard for a pollutant when the Administrator has approved a state water quality standard for such pollutant unless the state concurs with the Administrator's determination that the revised or new standard is necessary to meet the requirements of such Act;

(2) taking action to supersede a state's determination that a discharge will comply with effluent limitations, water quality standards, controls on the discharge of pollutants, and toxic and pretreatment effluent standards under such Act;

(3) withdrawing approval of a state program under the National Pollution Discharge Elimination System (NPDES), limiting federal financial assistance for a state NPDES program, or objecting to the issuance of a NPDES permit by a state on the basis that the Administrator disagrees with the state regarding the implementation of an approved water quality standard or the implementation of any federal guidance that directs the interpretation of such standard; and

(4) prohibiting the specification of any defined area as a disposal site for the discharge of dredged or fill material into navigable waters and denying or restricting the use of such area as a disposal site in a permit if the state where the discharge originates does not concur with the Administrator's determination that the discharge will

result in an unacceptable adverse effect on municipal water supplies, shellfish beds, and fishery areas. The bill also shortens the period in which the Director of the United States Fish and Wildlife Service must submit comments with respect to a general dredge and fill permit application.

This bill has passed the House and is currently being considered in the Senate. Texas sponsors of the bill include Representatives Ron Paul, Blake Farenthold and Pete Olson.

## TCEQ Regulatory Activities

TCEQ has indicated that revised language for sublethal whole effluent toxicity (WET) in the 2010 implementation procedures will be developed and submitted to EPA. As of this writing, a stakeholder meeting was planned for August 16 and the revised IPs are scheduled to be placed on the Commission's December 7, 2011, agenda for approval. TCEQ has also requested preliminary comments in preparation for the next round of revisions of the Surface Water Quality Standards.

TCEQ has also initiated stakeholder meetings and is accepting comment on development of rules to adopt the agency's general enforcement policy in rule as required by HB 2694, TCEQ's Sunset Bill. WEAT will be monitoring and providing comment on these rulemakings.

## Legislative Update Webinar

Please plan to join us for our legislative update webinar scheduled for September 20, 2011. The "82nd Legislative Session: Impacts on the Texas Water Environment" will include an overview of significant water related legislation by Heather Cooke of Austin Water Utilities. Diane Mazuca from TCEQ will review the TCEQ's Sunset Bill and outline important changes for TCEQ included in that bill. Heather Harward, Executive Director of H204Texas, will conclude the webinar with a review of the accomplishments of H204Texas in this session, and a discussion of what to look for in future efforts to get funding for the state water plan.

## Share Your knowledge with the Texas Water community



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# WEAT Section Activities

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## Abilene

Representative needed

## Amarillo

Representative **Dr. Paul T. Baumgardner**, 806-353-7798, paul@ana-lab.net

## Austin

Representative **Trooper Smith**, 512-617-3116, tws@freese.com

The Central Section of WEAT combined forces with the local chapter of TAWWA for the 2011 Summer Meeting. Even though it was hot, WEAT and TAWWA members and their families enjoyed a summer outing at Milburn Park in Cedar Park, TX. Barbeque was provided by the Austin Rodeo Cook-off champs lead by Brian Phenager, and there were numerous activities such as a washer tournament, raffle prizes, swimming and live music by John Emery "The King of Hillbilly and Rock and Roll." All proceeds from the event went to Water for People and the WEAT Operations Challenge Event.

Thank you to the WEAT and TAWWA Planning Committees for this awesome event! Also, thank you to our Summer Outing sponsors: **Bury+Partners, Jose I. Guerra, Inc., Environmental Improvements, Inc. (EI2), HDR, CDM, DCS Engineering, LLC and Hartwell Environmental Corporation.**

In the Young Professionals corner...the Young Professionals previously met for Happy Hour after the Summer Social event and are also planning an exciting tour for YPs and university students. If you are a Young Professional or a Seasoned Professional that would like to be more involved with the YP Outings, please contact **Rebecca Glaser** at reg@freese.com or **William Sarchet** at wsarchet@carollo.com.

If you are currently not receiving our Central Section Newsletter and Meeting Notification emails, please email **Aldo Sotelo** at asotelo@burypartners.com or **Kathy Fretwell** at KathyFretwell@KennedyJenks.com and they will add you to the Master List.

After nominations and elections, the new lineup for the WEAT Central Texas Section Officers is:

President – **Susan Smith**

569-9022, ssmith@lvinc.com

President-Elect – **Joe Hoepken**

972-1168, joe.hoepken@ci.austin.tx.us

Vice-President – **Jason Christensen**

912-5109, jason.christensen@hdrinc.com

Treasurer – **Orren West**

972-1957, orren.west@ci.austin.tx.us

Secretary – **Aldo Sotelo**

328-0011, asotelo@burypartners.com

YP Chairs – **Rebecca Glaser and William Sarchet**

617-3133, reg@freese.com

453-5383, wsarchet@carollo.com

Section Rep. – **Trooper Smith**

617-3116, tws@freese.com

Past-President- **Darren Strozewski**

284-8209, dstrozewski@dcs-engineering.com

## Beaumont/Port Arthur

Representative **Karin Warren**, 409-785-3006

kwarren@ci.beaumont.tx.us

## Bryan/College Station

Representative needed

## Corpus Christi

Representative **Foster Crowell**, 361-857-1801,

fosterc@cctexas.com

## Dallas/Fort Worth

Representative **Amy Robinson**, 817-916-2927,

robinsonar@cdm.com

The North Texas Section is proud to announce that we will be awarding nine candidates with WEAT-NTS scholarships and one candidate will receive the Daryl Hall Scholarship for the 2012 Fall Semester! Congratulations to **Amy Heldenbrand, James Georger, Andres Hernandez, Megha Makanji, Taylor Baker, Megan Waldock, Chirag Makanji, Wesley Fichera, Marissa Fichera, and Debra Wright.**

The NTS is soliciting sponsorships for 2011-2012. Companies and individuals can sponsor dinner meetings, advertise in the NTS newsletter, or donate to scholarship funds all at the WEAT-NTS website, or contact Joe Etchegaray at Joe@miautoinc.com for more information on how to sponsor an event.

## Past Events

The North Texas Section held their dinner meeting July 21st at Texas Star Conference Center in Euless, Texas with 38 people in attendance. **Kevin Patel**, an automation engineer with CDM, gave a presentation on "Managing the Alarms that Manage You" which included an overview of the standards history for alarm management, what the current alarming problems are and what causes them, how an alarm is defined, regulatory concerns in relation to SCADA alarming, and the alarm management lifecycle as defined by the ISA 18.2 standard. Special thanks to our Gold Sponsors: **Alan Plummer Associates Inc, Black & Veatch, CDM, CP&Y, Freese & Nichols, Hartwell Environmental, and HDR; and our Classic Sponsor Carollo Engineers.**

Our Electrical & Instrumentation Committee held a technical seminar on July 13th about Large Motors. Presenters were **Teco-Westinghouse, Hyundai-Ideal and GE.** The topics varied from motor design and construction to operational considerations. Copies of each of the presentations are available for download from the WEAT-NTS website.

# WEAT's Biosolids and Odor & Corrosion Conference and Expo: An Energized Topic and Aromatic Success

By Julie Nahrgang

WEAT held its biennial Biosolids and Odor & Corrosion Conference and Expo in San Marcos, TX, August 3-4. The Conference was a two-track, one and a half day conference spanning subjects from lessons learned to new technologies in biosolids and odor and corrosion. We heard from attendees and exhibitors that it was both highly successful and informative. The WEAT Biosolids Committee, led by Chair Lynne Moss of CDM, and the Odor and Corrosion Committee, led by Chair Mark Perkins of Perkins Engineering Consultants, did an outstanding job of selecting relevant and interesting presentation topics that were well received by attendees.



## Biosolids and Odor & Corrosion Conference Attendees

The keynote speaker, Dr. John Novak of Virginia Tech began the conference with a detailed presentation on odor generation and biosolids, focusing on how processing can impact odor, odorous compounds emitted from biosolids, and how odors change over time. The conference featured several other national speakers including Dr. Bob Bastian of US EPA, and Dr. Dan Woltering of Water Environment Research Federation (WERF). But our WEAT members contributed valuable knowledge as well - for example, John Bennett of Trinity River Authority and Jeff Sober of Carollo Engineers, gave a much lauded presentation titled *Lessons Learned from Past Designs or Oh My, Did I Really Approve That? (Biosolids Edition)*.



**Dr. John Novak**



**L-R: Jeff Sober  
and John Bennett**

The attendees also enjoyed twenty seven outstanding exhibits from local and national vendors and manufacturer representatives. Many thanks to our exhibitors: Ashbrook Simon-Hartley, Bio Air Solutions, BioCOPE, Inc., Daniel Company, Detection Instruments Corporation, ECS, Enduro, Evergreen Southwest, Fuquay Inc., Hartwell Environmental, Inland Environmental Resources, IPEX USA, LLC, Lime Association of Texas, Met-Pro Environmental Air Solutions, Newman Regency Group, Odotech/Krüger, Pencco Inc., Premier Magnesia, LLC, Pure Air Filtration, Siemens Water Technologies, SWEET, Ultraflote Corp., Uretech ICR Gulf Coast and US Composite Pipe, Inc. for their presence and information on their products at the conference and expo. To add to the excitement in the exhibit hall, WEAT set up a Plinko Board, compliments of Ashbrook Simon-Hartley, where attendees practiced their Plinko skills to win an iPad. Congratulations go out to our iPad winner and newly minted WEF Life Member, G.A. Harutunian (rumors have it that the iPad made a well received anniversary gift). And thanks to CDM and Carollo Engineers for their generous sponsorship of our iPad give-away!

We look forward to our next Biosolids and Odor and Corrosion Conference in August of 2013 and another biosolids conference (potentially focusing on bioenergy) tentatively scheduled in September of 2012. Check out the WEAT calendar [www.weat.org/calendar.html](http://www.weat.org/calendar.html) for upcoming information!

WEAT thanks all of our sponsors for helping to make the conference successful!

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## Young Professionals Committee – A Few New Faces in the Bunch



By Jason Crawley, YP Committee Chair

As people continue to move on and around in the YP leadership, there have been several changes to the current lineup. As we move forward, we will be looking for an interested and enthusiastic member to help fill the Section Representative vacancy in Dallas. Here is the current YP Section Representative lineup:

Austin – **Rebecca Glaser** and **William Sarchet**

Dallas – **Jessica Vassar**

Fort Worth – **Richard Shaffer** and **Lauren Plunk**

Houston – **Richard Weatherly** and **Benji Addo**

San Antonio – **Kris Kneese** and **Heather Lindner**

At the WEAT July Board Meeting, **Corinne Kluge** was appointed to fill the Vice-Chair position. Corinne is excited to work in her new role on the YP committee.

**Corinne Kluge** graduated from Calvin College in 2008 with her Bachelor of Science in Engineering. During her senior year, she joined in a collaboration with Water for People and HCJB to work on a water and wastewater treatment design for the village of Cajabamba, Ecuador.

She continued her studies at University of Illinois to graduate in 2010 with her Master of Science in Civil and Environmental Engineering. During her graduate studies, she performed research on the control of viruses in drinking water using a visible-light activated photocatalyst. Corinne is currently employed by Carollo Engineers, Inc.

Corinne would love to continue her work in developing countries by working with Engineers without Borders. While originally from St. Louis, Missouri she is finding that she likes the Texas life and has been adjusting quite nicely. She loves watching movies, reading anything she can get her hands on, and being outside (even in a Texas summer)!

With the summer heating up, the YPs have had plenty of cool things to do. Check out your section's happenings below:

Austin – The Central Texas section recently had happy hours at the Hula Hut on Lake Austin and at Third Base to watch the College World Series.

Dallas/Ft. Worth - The DFW Young Professionals provided the volunteer force for the Trinity River Vision Authority's June 9th Rockin' the River tubing event in Fort Worth. Rockin' the River occurs every other Thursday during the summer months in Trinity Uptown and includes live performances from area bands. YPs Tania Ho, Lauren Plunk, Sarah Seamands, Julie Shaffer and Rick Shaffer passed out tubes and greeted tubers on the shuttle bus. For more information on Rockin'the River, visit <http://trinityrivervision.org/tubing>.



*L-R Tania Ho and Julie Shaffer passing out tubes*

Houston – On July 25, 2011 there was a social organized by WEAT and TAWWA. Watch out soon for a newsletter for the upcoming YP activities!

San Antonio - The San Antonio YP section sponsored a tour of the San Antonio Water System (SAWS) Leon Creek WRC on June 10th, 2011 to view the recently installed diamond cloth filters and turbo blowers. Refreshments were provided by **Carollo Engineers** and **Pepper-Lawson Construction**. An upcoming tour of the San Antonio River Authority (SARA) Martinez II WWTP is planned in September. A happy hour for San Antonio YPs (and young at heart!) was held at Tomatillo's Café and Cantina on July 28, 2011 and sponsored by **Environmental Treatment Technologies, Inc.** Congratulations to two YP members who were recently elected as officers of the San Antonio WEAT chapter – **David Bennett**, P.E. as Vice President, and **Cale Underberg**, P.E. as Treasurer!

Please see the WEAT website for an up-to-date committee contact information roster. If you are in a section that does not currently have a YP Section Representative, we would love to have someone fill that role. Additionally, if you have any questions about being part of the WEAT Young Professionals, please feel free to contact **Jason Crawley** ([jkc@freese.com](mailto:jkc@freese.com)) or **Corinne Kluge** ([cckluge@carollo.com](mailto:cckluge@carollo.com)).

**Don't forget to submit your abstract for the YP technical session. Submission deadline is September 19th!**

# San Antonio Summer Seminar: An Overwhelming Success

By Jonathan Vorheis, CH2M HILL

With almost 150 attendees, the inaugural San Antonio Summer Seminar was a overwhelming success. The July 28, 2011 seminar was titled "Emerging Issues in the Water / Wastewater Industry". The breadth of technical and informational subjects covered was a significant draw for most attendees throughout South and Central Texas. Topics covered in the full-day seminar ranged from Regulatory Updates to Biosolid Management and Endocrine Disruptors to Online Water Quality Monitoring. The Seminar was honored to have an Opening Session given by Robert Puente, the CEO of the San Antonio Water System (SAWS). He accepted a check for \$500 on behalf of Project Agua, a program at the San Antonio Water System that provides water bill payment assistance to customers who are having difficulty paying their water bill. The check was issued in appreciation to SAWS for providing the facilities for the Seminar free of charge. Other benefactors of the seminar included the scholarship fund for both the San Antonio Area Chapter of the American Water Works Association (AWWA) and the Water Environment Association of Texas (WEAT). The audience was enamored with a very thought-provoking

closing session from Kelley Neumann, Sr. Vice President at SAWS, who provided a public perception of infrastructure engineering. Check out the San Antonio WEAT website [www.weat.org/sanantonio/main/index.php](http://www.weat.org/sanantonio/main/index.php) for the Summer Seminar presentations. Stay tuned to WEAT for upcoming information on the 2012 San Antonio Summer Seminar!



**Summer Seminar Attendees**

**L-R, Speaker Glen Daigger with attendees Raj Bhattarai and Walter Chiang**



**L-R, Jonathan Vorheis, Ana Julia Pena Tejerina, Roberto Macias, Jana Cezeaux, Lizanne Douglas,**

**Marissa Vegara, Andrew Hunt, Josh Marazinni and Kery Averyt, the San Antonio Summer Seminar Planning Committee**

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The North Texas YPs volunteered at the Trinity River Vision Authority's Rockin' the River tubing event in Fort Worth. Thanks again to Tania Ho, Lauren Plunk, Sarah Seamands, Julie Shaffer and Rick Shaffer for volunteering at this event! For more information on Rockin' the River, visit <http://trinityrivervision.org/tubing>.



### Upcoming Events

The North Texas Section will hold their annual Picnic and Ops Challenge BBQ Cook-Off on October 7th, location to be determined. For more details on dinner meetings, you may access [www.weat-nts.org](http://www.weat-nts.org). Sponsors and dinner meeting attendees can now pay with PayPal at [www.weat-nts.org](http://www.weat-nts.org).

### Del Rio/Uvalde

Representative, **Rusty Brown**, 210-404-1330, [brown2@bv.com](mailto:brown2@bv.com)

### Harlingen/Brownsville

Representative **Bill Lewis**, 956-664-0286, [blewis@halff.com](mailto:blewis@halff.com)

### Houston/Galveston

Representative **Kim Chanslor**, P.E., 713-423-7353, [chanslorkim@cdm.com](mailto:chanslorkim@cdm.com)

### Laredo

Representative needed

### Longview/Tyler/Texarkana/Lufkin

Representative **Gary Sober**, 903-849-4165, [gary@byogon.com](mailto:gary@byogon.com)

### Lubbock

Representative **Dr. Andrew Jackson**, 806-742-2801, [andrew.jackson@coe.ttu.edu](mailto:andrew.jackson@coe.ttu.edu)

### Midland/Odessa

Representative needed

### Port Lavaca

Representative needed

### San Angelo

Representative needed

### San Antonio

Representative **Dennis Laskowski**, P.E. 210-233-3682, [dlaskowski@saws.org](mailto:dlaskowski@saws.org)

The San Antonio Section once again provided a great monthly meeting on August 18th at the San Antonio Water Systems' Headquarters with approximately 50 affiliated members in attendance. Speakers included Ms. **Sharon Surra** from SAWS and Mr. **Felix Belanger** from Tetra

*Continued on page 29*

## CALENDAR OF EVENTS

### 2011

- September 16 Daryl Hall Memorial Golf Tournament, Waterchase Golf Course, Fort Worth, TX
- September 20 Central Texas Section Meeting, Austin, TX
- September 20 WEAT Webinar – 82nd Legislative Session Wrap Up
- September 21 Longview/Tyler/Texarkana Section Meeting Ore City, Texas
- September 21 Electrical and Instrumentation Meeting, Topic: PMCS
- September 21 Northeast Texas Section Meeting, Ore City, Texas
- October 7 North Texas Section Annual Picnic & Ops BBQ
- October 15-19 WEFTEC, Los Angeles, CA
- October 29 Basura Bash, San Antonio, TX
- November 2-3 EPA and WEAT Asset Management Workshop, Austin, TX

- November 15 Central Texas Section Meeting, Austin, TX
- November 16 WEF Webcast – Perspectives on Pump/Lift Station Rehabilitation
- November 16 Electrical and Instrumentation Meeting, Topic: Facility Maintenance
- December 1 Renewable Energy, Energy Efficiency and Best Practices Seminar, Hornsby Bend Bisolds Management Plant, Austin, TX

### 2012

- February 7 North Texas Section Annual Conference
- April 10-13 Texas Water 2012, San Antonio, TX
- May Northeast Texas Section Biannual Conference, Longview TX
- June 6-7 Laboratory Conference, Austin, TX
- July 20 Water Reuse Conference, Fort Worth TX
- August CMOM Workshop, Austin, TX



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**Baycor Fibre Tech, Inc.** - Drum Fine Screens, Enclosed Rotary Sludge Thickeners

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**Duperon Corporation** - Flex-Rake Mechanical Bar Screens

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# The Fundamentals of Asset Management: A “Hands-On” Approach

November 2 & 3, 2011 – Austin, TX

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Our existing infrastructure is severely stressed from overuse, under funding of maintenance and renewal and aging. It is critical that our service providers know how to utilize the tools and techniques of Asset Management to decide upon priority work and select least life cycle cost ways to accomplish tasks and objectives. Join us for this how-to approach in Asset Management that offers a way of thinking and body of management practices to help today’s providers minimize the total cost of the organization’s assets while delivering the service required at an acceptable level of risk.

**Register on line at [www.weat.org](http://www.weat.org).**

**Early Registration Deadline – October 21, 2011**

<p style="text-align: center;">Please register me for: <b><i>The Fundamentals of Asset Management: A “Hands-on” Approach</i></b></p> <p>Name _____</p> <p>Title/Position _____</p> <p>Organization _____</p> <p>Billing Address _____</p> <p>City _____ State _____ Zip _____</p> <p>Email Address _____</p> <p>Area Code _____ Telephone _____</p> <p>Area Code _____ Fax _____</p> <p>Member of WEAT/WEF:     \$175 ..... \$ _____</p> <p>Member – Government/City: \$125 ..... \$ _____</p> <p>Student:                     \$30 ..... \$ _____</p> <p>*Non-Member:             \$215 ..... \$ _____</p> <p>*Non-Member – Gov/City: \$165 ..... \$ _____</p> <p>*(includes WEAT Only Membership)</p> <p style="text-align: right;">Total = ..... \$ _____</p> <p style="text-align: center;"><b>AFTER OCTOBER 21– ADD \$25 TO FEE.</b> <i>Please duplicate form for additional registration</i></p>	<p style="text-align: center;"><b>Method of Payment:</b></p> <p><input type="checkbox"/> Check    <input type="checkbox"/> Credit Card- Visa/MC/AMEX/Discover</p> <p>Card# _____</p> <p>Expiration Date: _____</p> <p>Name on Card _____</p> <p>Card Holder Signature _____</p> <p>Amount: _____</p> <p><b>Registration Fee Includes:</b> CD Rom, Wednesday evening reception, continental breakfast, lunch, and breaks. <b>Space is limited, so register early.</b></p> <p>Please mail or fax registration form with check or credit card payment to:</p> <p style="text-align: center;">WEAT 1825 Fort View Road, Suite 102 Austin, Texas 78704 Phone: (512) 693-0060 Fax: (512) 693-0062</p> <p style="text-align: center;">Register on line at <a href="http://www.weat.org">www.weat.org</a> or Email registration forms to <a href="mailto:julie@weat.org">julie@weat.org</a></p> <p>WEAT has reserved a block of rooms at the Holiday Inn, 6000 Middle Fiskville Road, Austin, TX 78752.</p> <p>WEAT has obtained discounted single or double rate of \$99. The reservation deadline is <b>October 21, 2011</b>. After this date, reservations will be accepted on an availability basis.</p> <p>To make your reservation, call 512.206.3069. Be sure to mention WEAT and the group code “FAM” when making your reservation.</p>
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## Remembering Agnes Mary Gloyna



Agnes Mary (Lehman) Gloyna passed away June 22, 2011, completing a long life filled with love of family, friends, and students, a multitude of both interesting and worthwhile accomplishments, and the adoration of Dr. Earnest F. Gloyna, her husband of 66 years. Agnes attended Five-In-One High School, Wilbarger County--graduating in 1938. She continued her education at Our Lady-of-the-Lake University, San Antonio, Texas. She earned a B.A. in Sociology, 1942. The same year, she received the honor of "Who's Who in American Colleges and Universities." She entered graduate school in social work at Catholic University in Washington D.C., 1944. In addition, on February 17, 1945, Agnes and Major Earnest F. Gloyna married in Vernon, Texas. It was a relationship that began in infancy as their mothers were best friends. The wedding was described by friends as "The Kids Finally Did It!!!" The Vernon Times announced the "nuptial rites of the popular Five-In-One couple!" This married couple went on to create an outstanding and successful life

together. Agnes was a very active community volunteer, a family business partner, and an airplane pilot. Her charm, talent and drive carried the family through the years. During the ten years of 1942-1952, Agnes served as a social worker throughout the State of Texas, with the Catholic Church in Texas and in Baltimore, MD, and with the U.S. Veterans Administration in Austin, TX. Her involvement at The University of Texas at Austin included The T-Squares, the University of Texas Ladies Club, The College of Engineering Foundation, and the Huntington Art Advisory Council. Her quiet sophistication permeated all her endeavors, ranging from get-togethers with her friends and the activities of her children to the academic and professional life she shared with her husband. Special achievements of Agnes and of which both she and Earnest are especially proud include a Pilot License, May 22, 1967, Radio-telephone Operator Permit, June 7, 1966--and most importantly, keeping her lifelong companion, husband, and the Dean out of trouble. Agnes is survived by her husband, her two children, and three grandchildren. She is also survived by her sister, Margueritte Lehman Miller, her brothers-in-law, Robert R. Gloyna and wife, Edna; and Emmett Gloyna and wife, Deborah.

## Remembering Kenny D. Dodson

By Keith Vierra, Treatment Equipment Company



The TEC family is sad to announce the passing of Kenny D. Dodson. Kenny will be missed by us and by the many people he touched in his personal and business life.

Upon graduation from Grundy, VA High School in 1974, Kenny enlisted in the United States Army and served from 1975 through 1981. In 1976 he was awarded the

Army Commendation Medal and was recognized as the "best redeye gunner" in the United States Army.

Kenny went to work alongside his father at Jewell Smokeless Coal Corporation in Virginia. As a young enthusiastic machine mechanic, Kenny found his place learning from senior mechanics as to how things are to be done the right way. These traits served Kenny throughout his career and carried through to his caring for those learning under him. It wasn't long before Kenny's talents and dedication were recognized by one of Jewell's equipment vendors and then began his 25 year career with Andritz. Kenny's initial training began in Graz, Austria, to learn the art of true German craftsmanship. He also served time in their Service and Sales departments before eventually rising to become Andritz's National Sales Manager.

Kenny spent his last five years with Treatment Equipment where he focused on helping to educate the Young Professionals during equipment demonstrations, spec writing, presentations, etc. Kenny's focus on the Young Professionals grew as they are typically tasked with research, identifying & developing new ideas of process and equipment evaluations. He chose to focus on the youth of our industry to mold them into successful team players for the future. The Dodson's Drive Benefit Foundation will serve to provide the same focus for future Young Professionals in our industry.

Please keep Kenny and his family in your thoughts and prayers.



## CMOM Workshop a Big Success

By Raj Bhattarai

The 8th Annual EPA Region 6 Capacity, Management, Operation and Maintenance (CMOM) Workshop held at the Austin Convention Center on August 11-12, 2011 was considered highly informative and successful according to many of the 360 water quality professionals in attendance. The workshop was sponsored by the United States Environmental Protection Agency (EPA) Region 6, Texas Commission on Environmental Quality (TCEQ), City of Austin Water Utility, and WEAT. WEAT handled all the registrations, food and audio-visual arrangements for the workshop and will distribute the conference proceedings and certificates.

WEAT Vice President Curtis Smalley welcomed all attendees to the workshop and thanked the speakers and the organizers for their contributions to such a successful event eight years in a row. Presenters included Brian Joffe of the EPA Headquarters, Jerry Saunders of EPA Region 6, and June Ella Martinez of TCEQ who presented the regulatory aspects of sanitary sewer overflows from the federal, regional and state perspectives, respectively. There were presentations on all aspects of collection system management from municipalities, consulting engineers and equipment service providers. The presentations ranged from Jeff Plymale's highly entertaining, "Validating Relationships ... Hydraulically" to Joseph Becker's informative and stirring, "Sewerage and Water Board of New Orleans and Katrina Recovery." Becker received a standing ovation, a first at the CMOM Workshop, from the audience for his moving presentation about the heroic work performed by him and his staff in 2005 when New Orleans was ravaged by hurricane Katrina.

Plans are already underway for the 9th Annual CMOM Workshop to be held in Austin in August 2012. Watch for announcements in Texas WET and also for e-mail reminders from WEAT. If you are interested in making a presentation at the 2012 workshop, please contact me, Raj Bhattarai at Raj.

Bhattarai@austintexas.gov or call 512-972-0075. Previous attendees will be thrilled to know that I am also gathering new material for my annual lunch time stand-up routine!



*L-R; Joaquine Ordonez, Ravi Kaleyatodi, P.S. Arora, Joseph Becker, John D'Antoni and Steven S. Line*



*CMOM Attendees*



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# WEAT Welcomes New Members for June and July 2011

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Stafford, TX

**Jim Briggs**

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Georgetown, TX

**Julianne Camacho**

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Montgomery, TX

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Kennedale, TX

**Richard Macchi**

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**Tony Mardam**

Stanley Consultants  
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**Rodney McDaniel**

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**Mohammad Najafi**

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**Andrew Nance**

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**Katherine Quarfordt-Stanley**

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**Kevin Sattler**

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San Antonio Water System  
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**Grace Stillman**

JACOBS Engineering  
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**Kyle Tejashri**

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**David Terrill**

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**William Williams**

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**Patrick Wootton**

Hazen & Sawyer  
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**Eddie Ybarra**

New Braunfels Utilities  
New Braunfels, TX

**Juan Zamora**

City of Uvalde  
Uvalde, TX

**Observations from the Publication Committee**

As we put this issue out for publication we're expecting another day of oppressive heat here in Texas. We invite you to stay in air-conditioned indoors a little longer and spend that time by sending us your comments about Texas WET. We are considering changes to our beloved publication and want to hear from you.

We're continuing our tradition by including some very interesting technical articles submitted by our Knowledge Committees. We do some amazing, cool things here in our endeavors to preserve and enhance the water environment of Texas. Help keep us informed of the amazing work you're doing. Check out [weat.org](http://weat.org) and find a Knowledge Committee in which you would like to participate. We look forward to hearing from you.

Please send your comments to Stephen H. Jeffus, PE, WEAT Publications Committee Chair and Texas WET Technical Editor. Stephen can be reached at [sjeffus@rjn.com](mailto:sjeffus@rjn.com) or 214.240.4412.

Tech. Ms. Surra gave a presentation titled "Harvesting the Fruits of Wastewater Treatment" while Mr. Belanger spoke on "Impact of Dynamic Design Storm Events on Wastewater Collection System CIP Cost." Both were excellent presentations which kept the audience in tune with their respective topics of discussion. Both speakers can be seen in the below illustrations.

Prior to the meeting Section President, Josh Marazzini, presented Past President Roberto Macias with a plaque acknowledging his great dedication and leadership as last year's Section President of the San Antonio Section. Below is a picture of Roberto with his plaque. Thanks Roberto!



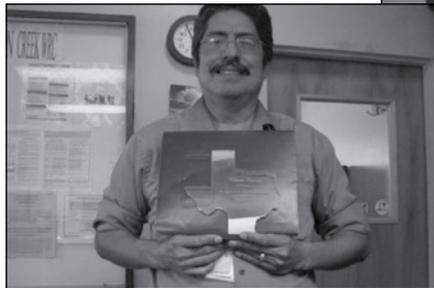
**Speaker Sharon Sura**

such as the September 9th YP Happy Hour or the October 29th Basura Bash. Look for e-mails in the near future on these and other great outings, events or monthly meetings.



**Speaker Felix Belanger**

Thanks for being a part of a great organization and a collection of great individuals!



**Past President Roberto Macias**

**Waco**

Representative **Michael Jupe**, 254-662-1500, mjupe@ci.waco.tx.us

**Wichita Falls**

Representative **Russell Schreiber**, 817-645-0942, russell.schreiber@wichitafallstx.gov



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*The 82nd Legislative Session and Impacts  
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**Tuesday, September 20, 2011**  
**1:30 pm - 3:30 pm**

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**Be sure to follow the directions after registering yourself with WEAT to ensure you receive the unique webinar link with GotoWebinar!**



What impacts will the 82nd session activities have on utilities, TCEQ and the future of the State Water Plan? Hear from leaders in the Texas water environment profession who tracked water-related bills first hand, as they offer their perspective on the 82nd Legislative session.

*Webinar Agenda*

**Webinar Moderator: Glenn Clingenpeel, Senior Manager, Trinity River Authority**

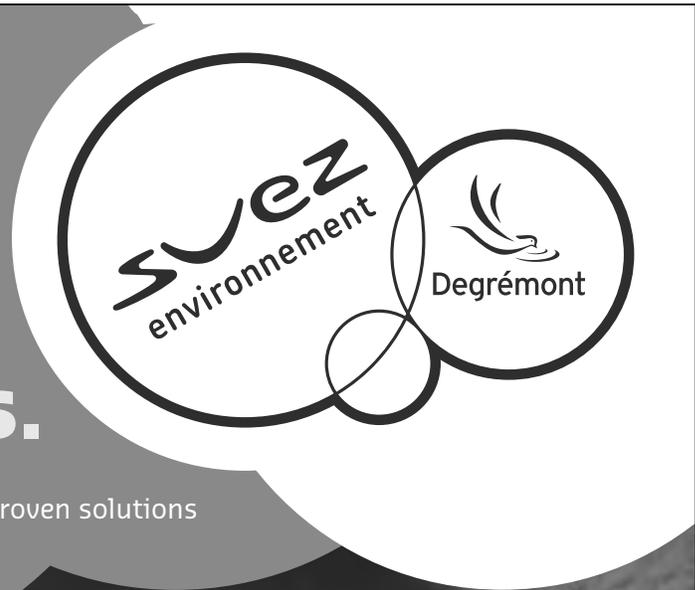
- **Overview of Water Related Legislation**  
Carol Batterton, Executive Director, WEAT
- **Important Changes from the TCEQ Sunset Legislation**  
Diane Mazuca, Special Assistant, Office of Executive Director, TCEQ
- **Future Funding Efforts for the State Water Plan**  
Heather Harward, Executive Director, H2O4Texas

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<small>CANCELLATION POLICY: Refunds will be given, minus \$2 handling fee, if registrant cancels in writing 3 days before program date.</small>			

*If you have any questions you would like addressed during the webinar, you can send them to [ClingenpeelG@trinityra.org](mailto:ClingenpeelG@trinityra.org) prior to the meeting.*

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- 1 Meet the needs of its members for professional growth and development;
- 2 Educate the public on water environmental issues;
- 3 Benefit society through protection and enhancement of the water environment.

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