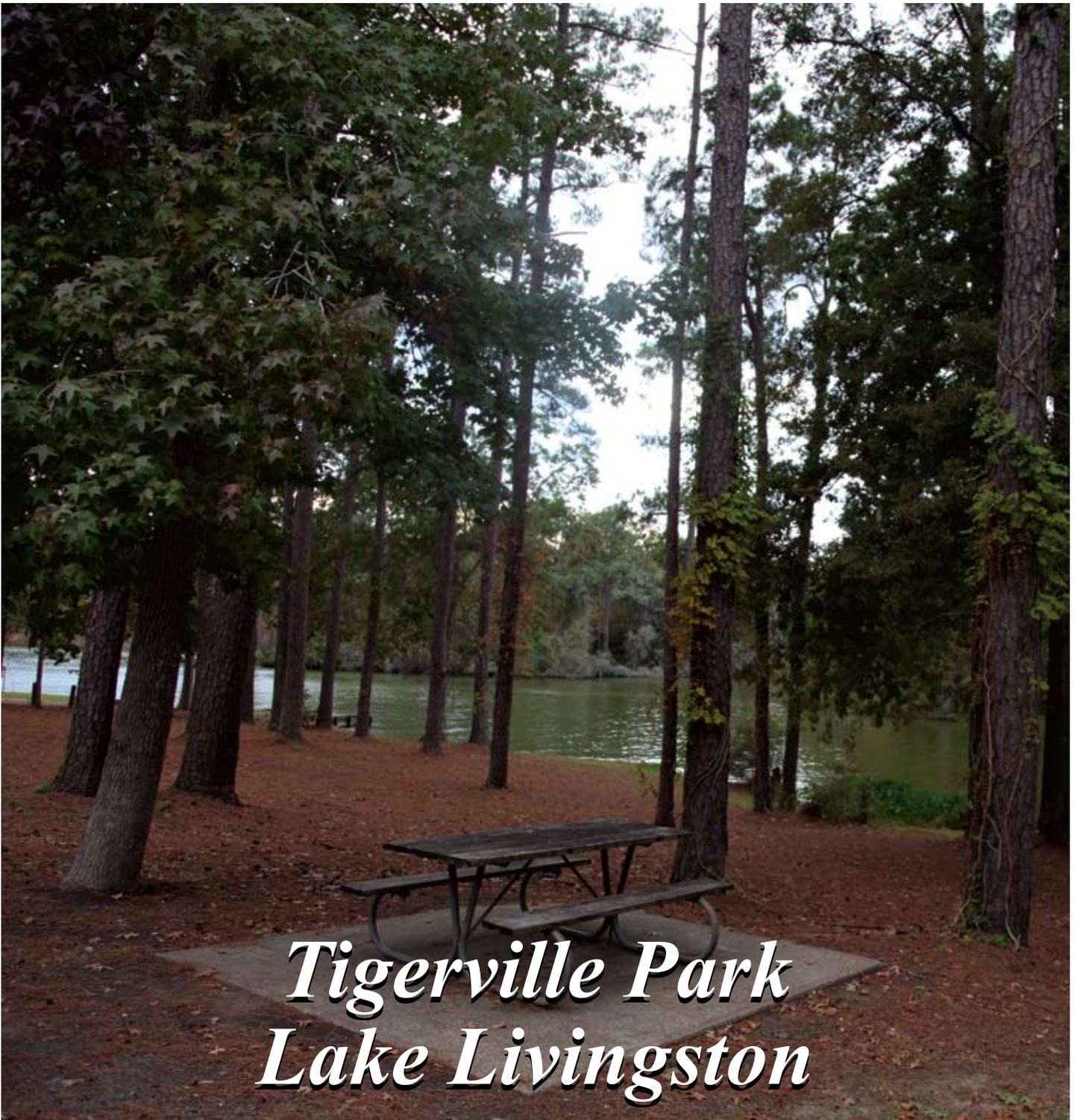


October/November 2010



Newsletter of the Trinity River Authority of Texas



Tigerville Park
Lake Livingston

DCRWS becomes one of most advanced treatment systems in North Texas

With its recent expansion in treatment capacity, the Trinity River Authority's Denton Creek Regional Wastewater System (DCRWS) is now one of the most advanced wastewater treatment systems in North Texas. New treatment processes, added to bring plant capacity from 5.0 million gallons per day to 11.5 MGD, are designed to remove phosphorus through a cost-effective, efficient, biological process that produces a cleaner effluent – a benefit to the environment and the system's customers.

DCRWS provides wastewater treatment services for Fort Worth, Haslet, Roanoke, Southlake, the Circle T Municipal Utility Districts Nos. 1 and 3, Keller, Northlake, Flower Mound, Westlake and Argyle. The Alliance Airport Development Area and the Texas Motor Speedway are located in this area. DCRWS's treatment plant, located near Roanoke, discharges treated effluent into Cade Branch, a tributary of Denton Creek that flows into Lake Grapevine.

Since the system came online in 1990, TRA has expanded treatment capacity at DCRWS almost continuously in response to extensive industrial, commercial and population growth in the geographic area the system serves. In addition, the system has faced increasingly stringent permit requirements from the Texas Commission on Environmental Quality (TCEQ).

Design engineers included biological phosphorus removal processes in the latest DCRWS expansion in anticipation of new regulations limiting phosphorus in wastewater effluent discharges to Lake Grapevine.

"We anticipate future discharges to Lake Grapevine and many other Texas reservoirs to include nutrient limits," said Cynthia Belvin, TRA Manager of Technical Services.

Excess phosphorus and nutrients in natural water bodies are of concern because they can result in abundant algal growth and subsequent blooms. This can have a negative impact on water quality by reducing dissolved oxygen and increasing pH as well as toxic ammonia.

Nitrogen and phosphorus enter the aquatic environment

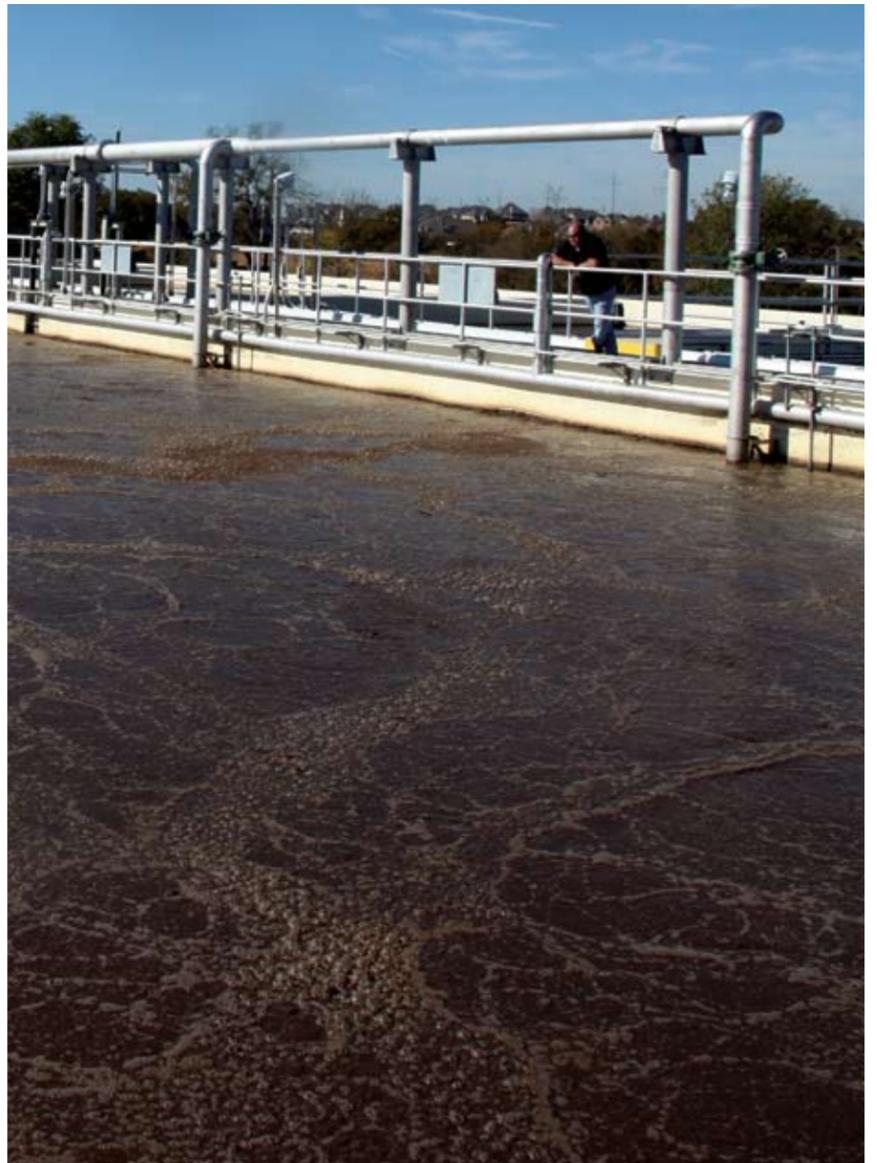
from many sources in addition to wastewater effluent. Erosion scours phosphorus from rocks and soils. Fertilizers, used in agriculture and urban landscaping, are a combination of nitrogen and phosphorus. Stormwater runoff washes fertilizers into streams and lakes. Animal waste from farming and ranching operations, and even pet waste, contribute nutrients to the aquatic environment.

Regulations target wastewater effluent to control pollutants in the aquatic environment because, as a point source, effluent is easier to control than stormwater runoff, a non-point source of such pollutants.

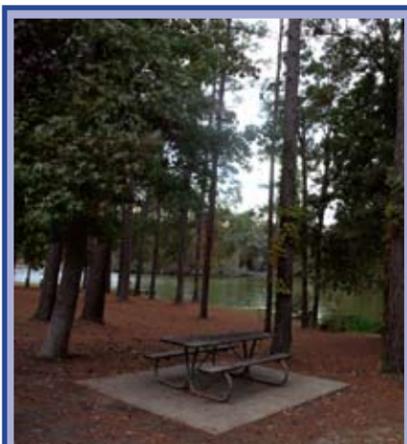
At DCRWS, the method that removes phosphorus is part of the biological process that cleans organic and inorganic compounds from wastewater in the plant's aeration basins. Healthy bacteria are placed in an oxygen-poor, stressful environment that causes the organisms to stop eating and excrete phosphorus. Next, the starved bacteria are treated to oxygen, and they begin to recover and regain their appetites. They ravenously consume most of the available phosphorus. This method is called luxury uptake.

DCRWS is the first of TRA's five regional wastewater treatment systems designed to remove phosphorus.

DCRWS' new design also includes de-nitrification, a biological process that reduces the need to add oxygen into the aeration basins. This, in turn, reduces the electrical costs of wastewater treatment.



John Bennett, DCRWS Project Manager, observes the plant's new aeration basin. Biological processes that take place in the aeration basins remove phosphorus with a cost-effective, efficient, method that produces a cleaner effluent – a benefit to the environment and the system's customers.



On the cover: Tigerville Park on the eastern shore of Lake Livingston features a boat ramp, fishing pier, picnic area and rest rooms. The park is open daily. Call 936-653-4312 for directions.

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Visit Current News on the homepage of TRA's new website at www.trinityra.org for more stories.

Vance through the years

The previous issue of inTRA included photo highlights of Danny F. Vance's leadership of TRA from his appointment as General Manager in 1975 through the early 1990s. We now continue our nostalgic view with previously published photos from inTRA – this group spanning 1996 to the present.

As of press time, the TRA Board of Directors had made no announcements regarding its selection of a successor to the General Manager position. inTRA readers are encouraged to check the TRA website, www.trinityra.org, for any announcements/updates that may follow the Dec. 1 regularly scheduled meeting of the TRA Board of Directors.



1996: Vance makes a donation during a Carter Blood Center blood drive. TRA employees from both the General Office and Central Regional Wastewater System (CRWS) gave a total of 31 pints of blood during this annual summer drive.



1996: Vance, then Secretary and member of the River Legacy Foundation, along with James Reynolds and Graham Schadt, enjoys watching the Seventh Annual Cardboard Boat Regatta at River Legacy Park – an event that broke attendance records and helped raise \$55,000 for park enhancements and programming. TRA's entries won a total of five awards that year, including a Best of Show in the youth Guppy Class for the entry Baywatch.



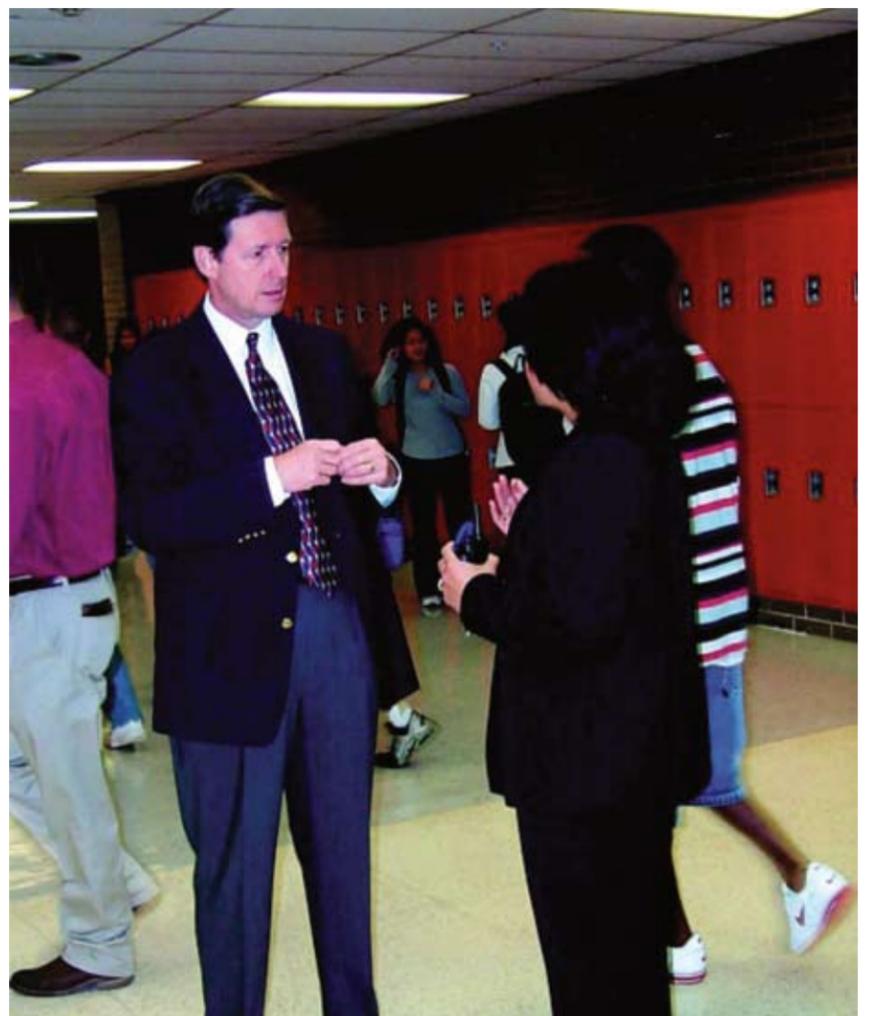
1996: Vance celebrates his 25 years with TRA with (from left) Jim Murphy, Sam Scott, Ramona Winer and Warren Brewer at the General Office, Northern Region and Construction Services Employee Recognition Awards.



1999: Vance recognizes Dianna Watkins, currently the TRA employee with the longest tenure, for her thirty years of service to TRA.



2001: Vance is shown here at an open house for the new Southern Region Office. Around 120 people attended, including several members of the TRA Board of Directors, city officials, members of the Huntsville-Walker County Chamber of Commerce and representatives from other customer entities. The open house featured a walk-through tour of the office, after which refreshments were served.



2001: Vance speaks with Beverly McReynolds, principal of Sam Houston High School, as classes begin. As part of the Principal/CEO For a Day project, Vance accompanied McReynolds as she performed her school duties. In return, McReynolds visited TRA's General Office and the Tarrant County Water Supply Project to learn about the General Manager's responsibilities. At the time, the Principal/CEO For a Day project was sponsored by A+ Arlington, a collaboration between the Arlington Independent School District (AISD) and the Arlington Chamber of Commerce.



2004: Vance looks on while a diver dons a protective suit in preparation for entering a wastewater-filled junction box following the failure of a sluice gate at CRWS. A man-bucket that lowered the diver into the junction box is shown in the upper left corner.



2004: Vance is pictured here with Gary Guadagnolo, a high school student he mentored as part of the AISD's Richard Greene Scholarship Program, designed to support students in their preparation for and pursuit of life goals that include volunteer and/or elected public service.



2005: Vance, along with officials from Grand Prairie, Midlothian and Venus, at the outfall of the Mountain Creek Regional Wastewater System (MCRWS) as the initial flow of treated wastewater is discharged from the plant into a small, unnamed receiving stream. MCRWS began operation in July of 2005.



2005: Vance and John Jenkins, then President of TRA's Board of Directors, unveil a plaque commemorating the 50th anniversary of the Authority. The plaque, featuring a specially designed logo, as well as the names of each of the members of the Board of Directors, was placed on permanent display in the lobby of TRA's General Office.



2006: Vance, along with Hector Escamilla, then President of TRA's Board of Directors, honors the TRA CREWSers for the team's second consecutive national Operations Challenge championship at the Water Environment Federation's national conference. The group was honored with a resolution during the December Board of Directors meeting.



2007: Vance accepts the Pillar of the Profession Award from Adam Zabinski, President-Elect of the Water Environment Federation. Paul Road, President of the Water Environment Association of Texas, is shown on the far left. This award honors an individual who has demonstrated meaningful and substantial contributions toward the improvement of the water environment via a distinguished career in the wastewater or water quality industry.



2008: Vance and Dallas Mayor Tom Leppert (left) speak with Congresswoman Kay Granger before the opening session at the annual WateReuse Symposium. As a member of the House Appropriations Committee and one of the highest ranking women in the House of Representatives, Granger served as opening session keynote speaker.

Continued on page 4. See Vance.

General Manager's Message

Steps remain in determining environmental flows

The necessary amount of water for a given watercourse to maintain healthy ecosystems – also known as environmental flow – has a profound effect on the overall health of Texas' river basins. In 2007, the Texas Legislature passed Senate Bill 3 to determine environmental flows "adequate to support a sound ecological environment and to maintain the productivity, extent and persistence of key aquatic habitats in and along the affected water bodies." In its purest form, SB 3 was designed to assure that the Texas environment has enough water to sustain valuable ecosystems while balancing future water needs of cities, industry, agriculture and the environment. Its goals for environmental flows include basin-specific standards, science-based environmental flow objectives, local stakeholder participation, certainty for water rights permit applicants and strong adaptive management principles – allowing for an allocation process that can evolve over time based on the latest science and stakeholder input. Ideally, environmental flow standards would be adequate to support a sound ecological environment to the maximum extent reasonable after considering other public interests and relevant factors.

This year's April/May edition of *inTRA* specifically discussed the Trinity-San Jacinto Rivers and Galveston Bay Environmental Flow deliberations and their progress. At the time, the highly qualified 15-member Trinity-San Jacinto expert science team had completed discussions without settling on a recommended report to submit to the Environmental Flows Stakeholders Committee and the Texas Commission for Environmental Quality (TCEQ) for rule-making purposes. Instead, two separate reports made their way to the Stakeholders Committee and TCEQ for consideration.

To be sure, it's a complicated issue. Studies on environmental flows have been conducted in Texas for more than 30 years, and, thus far,

neither a clear answer nor an easy solution has presented itself – largely because of the lack of biological and environmental science identifying flow regimes that will guarantee an ecologically sound system. If we can't pinpoint the "right" amount of water, we face insurmountable difficulty in ensuring it.

The first recommendation from the science team – known as the "conditional" report – recognized this lack of existing science and took a phased approach that would start with two gauge sites on the Trinity River and two on the San Jacinto River at which targets for base flow (low flows occurring during routine dry weather) and subsistence flow (extremely low flows occurring during exceptionally dry weather but still capable of supporting the aquatic habitat until the next rain) would be established. As available science improves, the group advised that additional sites and flow parameters be added – an adaptive management process consistent with the spirit of SB 3. Fifteen of the 23 members of the stakeholder committee who endorsed one of the two recommendations favored this approach.

The second recommendation – known as the "regime" recommendation – produced environmental flow regimes by using the Hydrology-based Environmental Flow Regime (HEFR) flow modeling system developed by the Texas Parks and Wildlife Department. The result is a flow regime that uses historical flows after they have been averaged or subjected to manipulation – which may or may not represent the amount of water that can be reserved for the environment and maintain a sound ecological system. Based solely on historical hydrology, this recommendation was highly specific, including more than 750 flow targets applied at a total of eight gauge locations. The concern from many on the science team is that this "existing science" has no defined relationship to ecology, and therefore cannot accurately predict the response of

the river and bay to various flow regimes.

In addition, this approach could require the release of stored water from existing lakes and compromise the development of new surface water supplies, placing SB 3 in direct conflict with SB 1, Texas' omnibus water planning legislation passed in 1997. This piece of legislation created 16 regional water planning groups to design a roadmap for the water needs of each region for the next 50 years, thus establishing a realistic path toward a secure water supply for the state. While everyone involved in the environmental flow discussion recognizes the need to protect Texas' valuable ecosystems, we also must acknowledge that if this protection reduces water supply for everything from cities to industry and agriculture, our state will face serious consequences as its population and its water needs continue to grow. This is the challenge before TCEQ as it seeks to develop practical rules that support both SB 1 and SB 3.

When TCEQ received both recommendations in May, the Commission faced a timeframe of one year to examine the science, evaluate recommendations and draft appropriate rules for establishing environmental flow standards. Those draft rules became public in mid-October, and in respect to instream flow recommendations, seek to strike a balance between the two suggested courses of action. Both recommendations, and TCEQ's proposed approach, can be divided into four categories: recommended gauge stations; definition of seasons; recommended flow quantities; and recommended flow frequencies.

In its approach to gauge stations, TCEQ proposes a total of four instead of the two recommended by the conditional group or the six recommended by the regime group. Locations include the Trinity River at Grand Prairie, Dallas, Oakwood and Romayor. TCEQ's proposed definition of



General Manager Danny Vance

seasons corresponds closely with the regime group's recommendation.

While the conditional group recommended flow quantities for overbank flows, base flows and subsistence flows, the regime group suggested overbank flows, two high flow pulses and two base flows, plus subsistence flows. Once again seeking balance, the TCEQ proposal recommends pulse flows, base flows and subsistence flows.

The draft rules also allow diversion or impoundment of water only after two pulses have occurred during a given season and/or when flow is above base or subsistence flows. The science team's conditional recommendation focused on determining frequencies in terms of percentages over time, while its regime report prescribed specific and constant flow frequencies.

Though the stakeholder committee and expert science team, along with TCEQ, have made great strides toward a workable approach, several key steps remain in the rulemaking process. An official public comment period regarding the proposed rules will span Nov. 19-Dec. 20, including a public hearing TCEQ will host Dec. 16 in Austin. TCEQ then anticipates final adoption of the rules, including any modifications stemming from public comment, in April 2011. Representatives from TRA will attend December's public hearing, and *inTRA* will keep readers apprised of further developments in the process of balancing ecological sustainability with increasing water demand.

Vance, continued from page 3



2010: Vance addresses the Texas Water Conservation Association (TWCA) 2010 annual convention. The TWCA dedicated the convention to Vance, which is the highest award given at the convention – designed to honor an individual who has given outstanding service to the TWCA membership.



2010: The TRA Board of Directors looks on as Vance cuts the ribbon marking the completion of the Danny F. Vance General Office Annex.

Employee Milestones

New Hires

CRWS welcomes **Christian Garcia** as Maintenance Engineer. GO has two new employees – **Francisco Martinez**, Maintenance Mechanic I, and **Pamela Thomas**, Senior Secretary. **Durant Nelson** joined LLP as Field Inspector. TCWSP welcomes **Ronald McCaffrey** as Maintenance Mechanic II and **Rusty Zent** as Operator I. TMCRWSS has two new employees – **Matthew Roop** and **Keith Stone**, both in the position of Operator 1.

Promotions

Eddie Grant was promoted to Chief

Electronic Technician at CRWS. **Cody King** was promoted to Senior Chemist at CRWS. **Tony Walker** was promoted to Senior Electronics Technician at CRWS. **Steven Hodges** was promoted to Senior Electronics Technician at DCRWS. **James Mallory** was promoted to Operator II at DCRWS. **Kevin Condra** was promoted to Maintenance Mechanic II at TCWSP. **Stephen Honza** was promoted to Maintenance Mechanic II at TMCRWSS.

Current Events

Jake Burwell, Construction Inspector II, played in a national pool tournament in Las Vegas November 4-7. Burwell played 8- and 9-ball in singles and team play in the TAP league.

Valerie Willis, DCRWS Project Secretary, and **Anthony Ramirez** are engaged to be married! Anthony is employed at Amino Chariot Management as a Network Administrator.

Billy Thedford, CRWS Senior Operator, and his wife Mary have a new grandson. **Gauge Dillon Krupovage**, born November 3, weighed 6 pounds and was 19.5 inches long.

2011 Holiday Schedule

Christmas Eve
December 24, 2010

New Year's Eve
December 31, 2010

Martin Luther King, Jr.
January 17, 2011

Texas Independence Day
March 2, 2011

Good Friday
April 22, 2011

Memorial Day
May 30, 2011

Independence Day
July 4, 2011

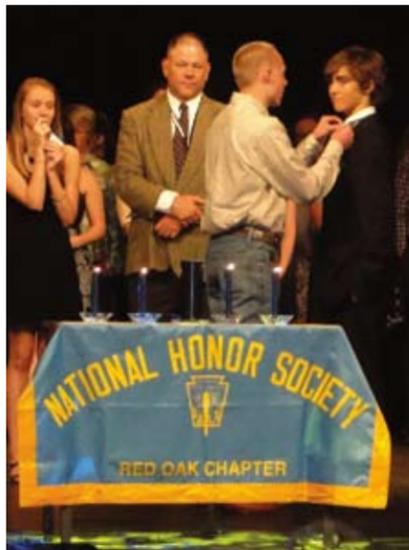
Labor Day
September 5, 2011

Thanksgiving Day
November 24, 2011

Day After Thanksgiving
November 25, 2011



John Bennett, DCRWS Project Manager (left), presents **Chace Price**, son of **Steve Price**, CRWS Chief Operator, with the first ever **Daryl Hall Scholarship** at the Water Environment Association of Texas-North Texas Section Operations Challenge Cook-off. The Daryl Hall scholarship was established to benefit the families of men and women who work for North Texas wastewater utilities in operations, maintenance and laboratory services. Chace is a sophomore studying architectural technology at Tarrant County College.



Brandt Taylor, son of **Dustin Taylor**, CSS Inspector II, was inducted into the **National Honor Society** at **Red Oak High School**.



Ashlyn Giacona, granddaughter of **Steve Lee**, TCRWSS Senior Operator, celebrated her first birthday November 4.



Carol Carver, daughter of **Ann Carver**, Internal Auditor, was married to **Chad Kale** October 23. The couple were married in Savannah, Ga. and honeymooned in Costa Rica. Carol is an Air Battle Manager in the United States Air Force, and Chad is a field auditor for the defense department.



The CRWS Halloween Costume Contest entrants are seen here from left to right; **Jose Avila**, Biologist; **Genie Jones**, Laboratory Supervisor; **Elaine Sambel**, Senior Secretary/Human Resources; **Jennifer Whitaker**, Laboratory Supervisor; **JoAnn Clapper**, Senior Secretary/Accounting; **Leon Baker**, Senior Chemist. Genie Jones won most original for her headless horseman costume. The scariest was Jennifer Whitaker for her ghost costume, and Joann Clapper won funniest costume for her proctologist uniform. But don't overlook Elaine Sambel, who was an adorable Miss Kitty.



Carion Taylor, Southern Region Services Office Coordinator, has a new granddaughter, her seventh grandchild. **Madison Renee Taylor**, born October 31, weighed 7 pounds 4 ounces and was 19 inches long. Madison's parents are **Jeremy and Amy Taylor**, and she has a big brother, **Landry**, who is three years old.



Avery Taylor, daughter of **Dustin Taylor**, CSS Inspector II, showed her goat **Elvis** for the first time October 23 in the **Ellis County Classic** at the **Ellis County Expo Center** in **Waxahachie**. Avery is a Junior Member of the **Red Oak Future Farmers of America**.



Jannette Bowen, daughter of **Jay Bowen**, CRWS Chief Operator, was married to **Kevin Eldridge** November 5. Jannette is an accomplished hairdresser whose work has been recognized and published worldwide. Kevin is pastor at **New Life Covenant Church**. Both travel for children's missionary work with the church. The couple honeymooned in **Moscow** and **Finland** and will live in **Grapevine**.



Brett Munoz, age 8 (number 43 on the right), son of **Kristie Munoz**, LLP Biologist, is celebrating a phenomenal day of racing October 30. First, he competed in, and won, his first ever road race at **Texas Motor Speedway** in **College Station**. He rode a **Yamaha TTR90** in the junior motard class and literally won by a mile. Brett, an experienced motocross racer, enjoyed the road race because he was able to hold the throttle wide open as opposed to motocross, where there is a lot of gear shifting. That night, Brett went on to finish second in a motocross race in **Conroe** on his **KTM 65**.

Embankment slides repaired on Lake Livingston Dam

The Trinity River Authority's Lake Livingston Project (LLP) staff has recently repaired two areas on the dam's earthen embankment where grass and topsoil had begun to slide.

"Embankment slides are a cosmetic issue at the dam, but must be repaired to prevent a more serious condition from developing," said Mark Waters, LLP Assistant Manager. "They may look ugly, but they don't impact the structural integrity of the dam."

Lake Livingston Dam's earthen embankment is 2.6 miles long with a compacted, impervious clay core covered by topsoil. The slope of the dam's earthen embankment is steep, falling one vertical foot every 2.5 horizontal feet.

"The primary purpose of the soil covering is to grow grass to improve the appearance of the dam," said Spencer Karr, LLP Land/Emergency Management Coordinator.

The topsoil and grass layer on the earthen embankment shrinks and swells during periods of drought and rain. This movement causes the occasional crack on the surface, allowing stormwater

to enter and saturate the soil. The heavy, wet soil then slides down the steep embankment, giving a rumpled appearance to that area of the dam.

Since 1982, approximately 5,680 feet of the downstream embankment have experienced these superficial slides. LLP repaired the most extensive of these slides in 1992 – more than 4,700 linear feet of the downstream slope. LLP staff repaired the latest two areas in October, one measuring 75 feet wide and the other measuring 165 feet.

LLP repairs the slides by first moving the soil in and around them to a staging area at the base of the dam. The soil is then mixed with lime and moistened. After curing for 72 hours, the soil-lime mixture is reapplied and leveled.

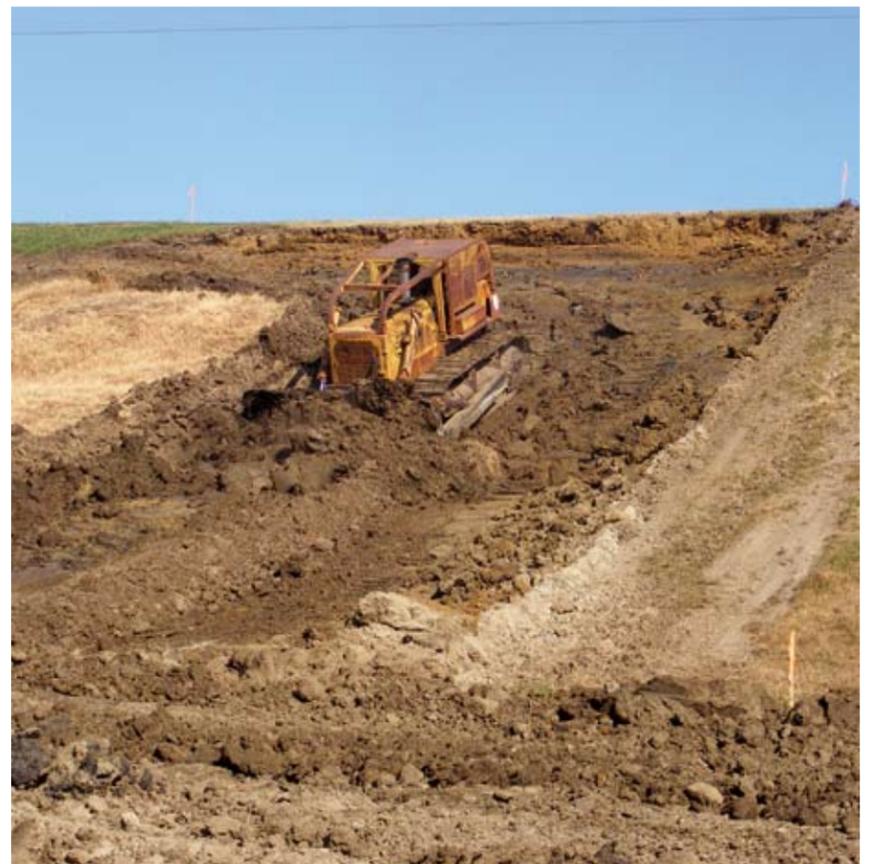
"The addition of the lime changes the chemistry of the soil so that it no longer shrinks and swells," said Karr.

For this reason, slides will not recur in the same location after repair.

Grass slowly grows over the repaired area, restoring the appearance of the dam.



An embankment slide on Lake Livingston Dam. Topsoil and grass have slumped, giving the area a rumpled appearance. Embankment slides must be repaired to prevent more serious issues, but are primarily a cosmetic issue that does not impact the structural integrity of the dam.



A bulldozer moves the soil to a staging area at the base of the dam, where it is mixed with lime. After the soil-lime mixture has cured, it is reapplied to the surface of the embankment.



This embankment slide has been repaired, and grass has begun growing over the repaired area. The addition of lime stabilizes the soil, preventing slides from recurring in the same location.

Wolf Creek Park Rod Run



Trinity River Authority's Wolf Creek Park hosted the 26th Annual Rod Run October 16 and 17. Competitors entered 187 vehicles into the classic car and bike competition.

Campers filled Wolf Creek Park to maximum capacity for the event. In addition, more than 1,000 spectators on Saturday and 500-plus more on Sunday visited the park to eat and shop while checking out the cars and bikes. Entries were judged on specific criteria in several different categories, and awards were given to the best entries in each class.

Folks who want to camp at the park during Rod Run weekend have to plan ahead. Wolf Creek Park takes reservations 60 days in advance. This year, a line began forming at 5 a.m. on the sixtieth day before the Rod Run even though the office doesn't open until 8 a.m.



"It's not unusual to have people start lining up at midnight for a popular event like the Rod Run," said Eddie Knight, Wolf Creek Park Supervisor.

Five sponsors support the Wolf Creek Rod Run, including the Coldspring/San Jacinto County Chamber of Commerce and the Trinity River Authority.

Environmental manager set to retire

“Before there was Google, there was Richard Browning.”

Chuck Tracy
Alan Plummer Associates, Inc.

Dr. Richard Browning has announced his retirement as Senior Manager of TRA’s Planning and Environmental Management Division. Browning joined TRA on March 16, 1972, hired by then-manager Alan Plummer, and accepted the position of manager two years later.

Browning’s contributions to TRA’s success in the ensuing years have been invaluable. He has provided oversight and consistent updating of the Trinity River Basin Master Plan as mandated by TRA’s enabling statute, creating a vision for responsible water use and reclamation to ensure a healthy river basin. A substantial portion of that responsibility has constituted providing and overseeing water quality planning and assessments under various federal and state statutes.

In the early days of his career at TRA, Browning also played a key role in developing and managing the Upper Trinity Basin Water Quality Compact, a cooperative organization of the cities of Dallas and Fort Worth, the North Texas Municipal Water District and the Trinity River Authority. Preceding the federal Clean Water Act and the Texas Clean Rivers Act, this collaborative effort solidified the North Texas region’s commitment to improving the quality of the Trinity River by establishing best-practice standards for wastewater treatment.

And Browning’s diplomatic duties didn’t end there – he also has represented TRA on numerous workgroups and advisory committees on water quality, non-point contamination sources, water quality monitoring, water rights and environmental flows. A statewide and nationally recognized expert on environmental flows and freshwater inflow needs, he often



has been sought for his expertise – most recently as part of the Trinity-San Jacinto Rivers and Galveston Bay Basin and Bay Expert Science Team specified by Senate Bill 3.

No doubt, Browning is a legend. As a veritable walking encyclopedia of the Trinity River, he has made TRA – and the river basin – stronger and healthier over the last 38 years. But as

anyone who knows him will agree, his expertise is surpassed only by his approachability and his knack for making complex issues resonate with audiences of all types.

Born and raised in Houston, Browning holds a bachelor’s degree from Southwestern University and a doctorate from the University of Florida.

2011 budget increases slightly over previous year

During its October meeting, the TRA Board of Directors voted to adopt a Fiscal Year 2011 budget of \$199,294,140. The presentation and adoption of the ensuing year’s formal budget is one of the most significant undertakings the TRA staff and board face each year.

Of particular challenge during this budget cycle is the fact that many of TRA’s customer cities currently face some measure of financial tension, resulting in increased pressure to maintain and/or lower costs wherever possible. As early as April of this year, TRA General Manager Danny F. Vance issued a challenge to his executive managers to sustain or reduce current costs at every opportunity in an effort to assist customers during trying economic times.

TRA is pleased to report that

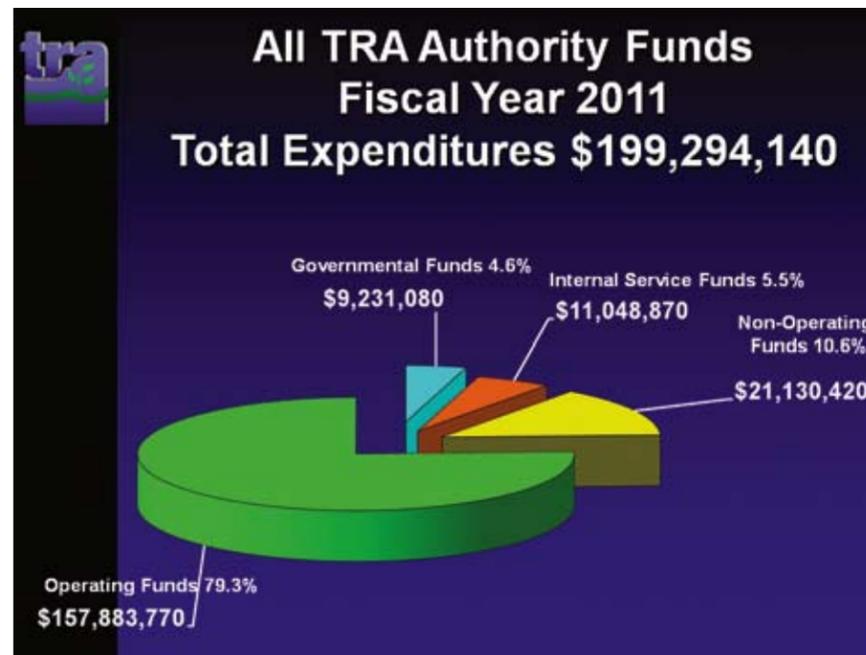
the approved budget varies only slightly from the current operating budget. Its total reflects a \$6.9 million increase – and a remarkable \$6.88 million of that increase stems from previously issued debt that must now be programmed into the budget. In fact, if one were to remove the debt increase, the new budget would show a mere \$17,000 uptake, even with rising costs for raw water and expenditures related to Wallisville Saltwater Barrier repairs.

The source of the increased debt is twofold: first, the growing services that TRA customers need require the building or expansion of facilities, which are funded through TRA-issued municipal revenue bonds. Second, costs for treatment of both drinking water and wastewater continue to rise as

a result of increased regulations and more stringent requirements for compliance.

Despite these realities, TRA staff successfully found ways to offset additional costs and keep the overall budget as close to flat

as possible. As is its custom, TRA presented the budget to its Board of Directors for approval with the full endorsement of all customer cities, who reviewed and accepted budget numbers earlier this fall.



TRA’s Central Regional Wastewater System shows strong financial health

Standard & Poor’s has confirmed the AAA rating for TRA’s Central Regional Wastewater System (CRWS) revenue bonds. Analogous to credit ratings for individuals and countries, bond ratings are financial indicators for potential investors of debt securities. AAA is the highest credit rating awarded to entities that issue tax-exempt revenue bonds and indicates a strong capacity to meet financial commitments.

Clingenpeel named environmental manager



Glenn C. Clingenpeel has been promoted to Senior Manager, Planning and Environmental Management Division.

He holds six degrees including a bachelor's degree in biology from the University of Texas at Austin, a master's degree in environmental sciences from the University of North Texas and an MBA from the University of Texas at Arlington.

Clingenpeel joined the Authority in April of 1998 as the Clean Rivers Program Coordinator and was promoted to the position of Manager of Special Studies and Assessments in 2000. In 2005 he was promoted to the position of Executive Assistant to the General Manager.

During his time at TRA, Clingenpeel has become a leading authority on water quality and

quantity issues in the Trinity River basin. He has presented dozens of papers and serves on several local, state and federal committees including the North Central Texas Council of Governments' Water Resources Council, the Texas Commission on Environmental Quality's Surface Water Stream Standards Workgroup, the EPA's Region 6 Technical Advisory Committee and the University of North Texas' Professional Science Master's Degree Advisory Panel.

Clingenpeel succeeds Dr. Richard Browning, who has held the position since 1974.

"I am fortunate to join a

department that has made massive contributions to TRA and the Trinity River basin," said Clingenpeel. "And the people are excellent – an absolute dream team of experienced environmental professionals. Our team collects and analyzes data, manages databases and performs environmental modeling. We can offer our colleagues at TRA environmental assistance with everything from permitting issues and assessments to water quality and quantity issues. We're here to help in any way we can."

For more information on TRA's basin planning activities, visit www.trinityra.org/basin-planning.htm.

Trinity River Authority launches new website

The Trinity River Authority recently launched a new, easy-to-use interactive website with a fresh look, helpful features and updated content.

The homepage provides direct access to several vital areas of interest, and the Current News section features up-to-date information about the Authority and its projects. Features are added and updated on an ongoing basis.

The homepage also features a quick link to Wolf Creek Park reservations and information, plus a campsite map, directions to the park, park fees and rules.

The Lake Information section shows Lake Livingston's current discharge, lake level information and links to current stream flow with a map of the Trinity River basin that provides river flow information from the United States Geological Survey and TRA data sensors.

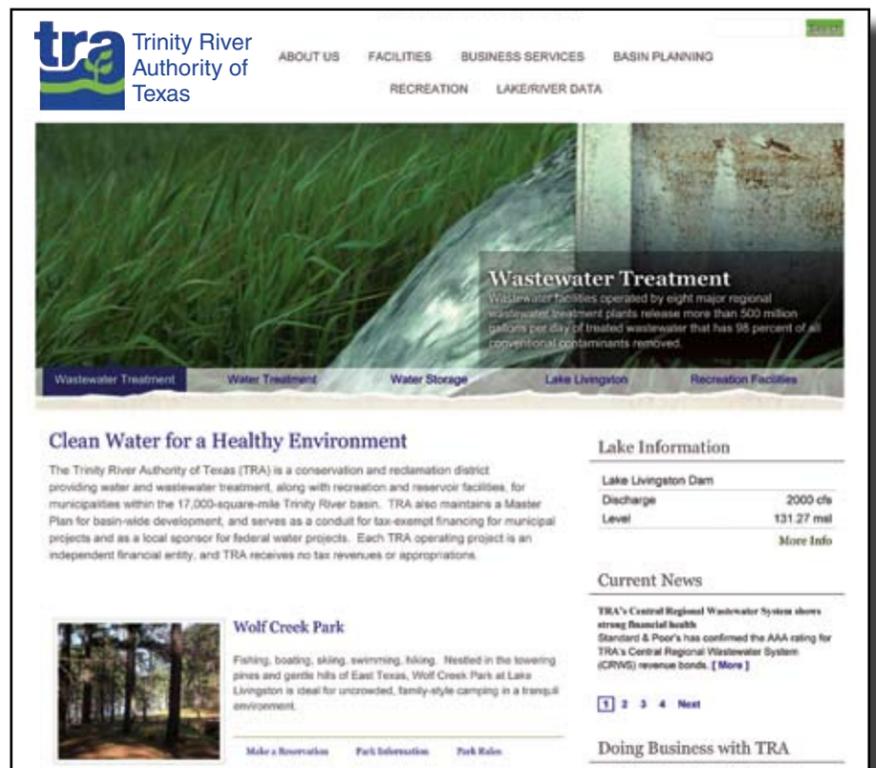
Those wishing to do business with TRA have a quick link to get started from the homepage.

Major links on the homepage also take users to in-depth information about TRA, its Board of Directors and its projects. Viewers can find the *inTRA* newsletter under the About Us link and access water quality documents in Basin Planning.

The calendar link on the homepage takes visitors to special proceedings and community events throughout the Trinity River basin.

An interactive Careers page will soon deploy with an improved job search feature. Users will be able to submit online applications, attach resumes and apply for multiple jobs simultaneously.

"We're very excited about the new look and feel of the TRA website, but even more so about its improved usability," said Danny F. Vance, TRA General Manager. "We hope that visitors to the new site find it both interesting and informative, and that it helps them further appreciate the importance of wisely developing, using and consuming



our most precious natural resource."

Visit the new website at www.trinityra.org, and feel free to use the Contact Us link to let us

know what you think about the new functionality and design.

TRA recognized for contributions to Trinity Basin educational software

The Center for Global Environmental Education (CGEE) of Hamline University's School of Education in St. Paul, Minn. recently recognized the Trinity River Authority for supporting *Waters to the Sea: Trinity River™*. An interactive learning program for teachers and students in grades 4-8, the software highlights relationships between human activities and water resources within the Trinity watershed from the river's source in North Texas to Trinity Bay at the Gulf of Mexico.

Debbie Bronson, TRA Public Information Assistant, accepted a plaque on behalf of TRA at the recent premiere celebration for the launch of *Waters to the Sea: Trinity River* at Colonial Country Club in Fort Worth.

The program has been well-received throughout the Trinity River basin. Two in-service teacher training sessions prepared science teachers in Grand Prairie and Fort Worth schools to integrate *Waters to the Sea* into their classrooms. Ron Tamada, Manager of Engineering

Services, represented TRA at the Fort Worth session, while Bronson and Tracy Owens, Training Coordinator at TRA's Central Regional Wastewater System, attended the Grand Prairie session.

In addition, thousands of students and teachers participating in field trips to the Trinity River Audubon Center in Dallas will receive *Waters to the Sea* as a pre- and post-visit resource to enrich their onsite experiences. Copies of the program will also be distributed via public education events and school tours.

The development of *Waters to the Sea: Trinity River* represents a major collaboration between 18 regional sponsors, including TRA, and the CGEE.

TRA has supported *Waters to the Sea: Trinity River* with funding and by contributing information and photography. In addition, Bronson serves on the advisory committee helping with program development and distribution.



Ron Tamada, Manager of Engineering Services, historical figure Sam Houston and Debbie Bronson, Public Information Assistant.

TRA CReWSers win second place in three events at nationals

The Trinity River Authority's Operations Challenge Team from Central Regional Wastewater System won second place in the laboratory, process control and pump maintenance events at the national competition in New Orleans in October. The CReWSers, four-time national champions, went on to finish fifth overall after placing lower in the collections and safety events.

Operations Challenge showcases the diverse skills required for the operation and maintenance of wastewater treatment facilities and their collection systems and laboratories. Wastewater operations and maintenance professionals, competing in five fast-paced events, are judged on a combination of precision, speed and safety.

While winning second place in any event at the national competition is no small feat, the CReWSers have been perennially strong in the laboratory and pump maintenance events. However, they were proud to finish second in process control – the paper-and-pencil event requiring advanced mathematical and cognitive skills. The team finished seventh in safety in the face of questionable issues and tenth in collections after earning harsh penalties for a blowout leak.

TRA's team has been a mainstay in Division I competition, rarely finishing out of the top three since 1998, with four first-place, two second-place and five third-place wins. The last time the CReWSers competed in New Orleans they narrowly missed a

first-place overall win, ending up third even though they took first in three events. Then, too, the team suffered substantial penalties in the collections event after a devastating leak. Could it be that old New Orleans voodoo at work?

The CReWSers have enjoyed the spotlight as national champions for four of the last five years and couldn't help feeling disappointed by this year's fifth-place showing. Even so, the CReWSers remain one of only two teams to win back-to-back championships in the 23-year history of Operations Challenge, and they have done it twice.

The CReWSers will compete next at the state competition at Texas Water 2011 in Fort Worth in April. TRA's team has reigned as state champions for 13 consecutive years. They won the 2010 state competition with first place in two of the five competition events and second in the remaining three. This year, more than ever, the CReWSers will need your support at Texas Water 2011. Stop by the Operations Challenge competition to see the exciting physical events and cheer for the CReWSers.

CReWSers team members are as follows:

- Dale Burrow**, CRWS Interceptor System Specialist, Team Captain
- Steve Price**, CRWS Chief Operator
- David Brown**, CRWS Senior Maintenance Mechanic
- Jake Burwell**, CSS Construction Inspector II
- Patrick Lynn**, CRWS Operator II, Team Coach.



The CReWSers compete in the pump maintenance event at WEFTEC.10 in New Orleans, La. The team won second place in laboratory, process control and pump maintenance at the national competition in October. Photo by Evert Cowdin, CRWS Maintenance Mechanic II.

TRA Mud Run Warriors



Photo by Alexander Clingenpeel.

Seen in the top photo, Glenn Clingenpeel, Senior Manager, Planning and Environmental Management Division (left), Webster Mangham, Planning and Environmental Management Assistant (center), and Chris Tutor, Network Administrator (right), competed in the DFW Mud Run, a 10K with 20 military-style obstacles, most of which are kept secret from the participants prior to the race. Clingenpeel's son, Alexander, 8 (front center), participated in the Kids' Run, a junior version of the event.

"We crossed the Trinity River four times, swimming it once," said Clingenpeel.

The Mud Run benefits various local charities and provides volunteer support to the Tarrant Regional Water District's Trinity River Trash Bash.

Mangham participated in the five-person team division. Clingenpeel and Tutor finished the course in one hour and eight minutes, taking top honors in the T2, two-person team division.

Anniversaries

35 years

Sid McCain, Operations and Maintenance Chief, TCWSP

25 years

Rick Brashear, Senior Operator, LRWSS
Sheila Murphy, Executive Secretary, GO

10 years

Lauro Garza, Senior Operator, CRWS
Joseph Key, Senior Operator, CRWS
Billy Thedford, Senior Operator, CRWS
Valerie Willis, Senior Secretary, DCRWS

5 years

Steve Conway, Operator II, CRWS
Eugene Gines, Operator II, CRWS
Gary Shreve, Pilot/Mechanic, GO

3 years

George Bacon, Inspector II, CSS
William Hines, Assist. Manager of Development, NR
Patrick S. Lynn, Operator I, CRWS
Tina Nguyen, Senior Secretary, GO
Tracy Owens, Training Coordinator, CRWS
Claudine Rank, AP/Procurement Coordinator, GO



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Burns wins Trinity River photo contest



Charles Burns, TRA Information Systems Analyst, won Honorable Mention in the Amateur, River/Ponds - High Water category of the Trinity River photo contest sponsored by the City of Dallas. His photo was chosen from 850 entries by a panel of five judges, and he was honored during a special award presentation at a recent Dallas City Council meeting. Burns snapped the photo near McCommas Bluff in southeast Dallas with a Canon EOS Digital Rebel XSi.