

December 2010/January 2011



Newsletter of the Trinity River Authority of Texas

*TRA honors longtime leaders,
welcomes new faces*





TRA website reflects Lake Livingston level and flow

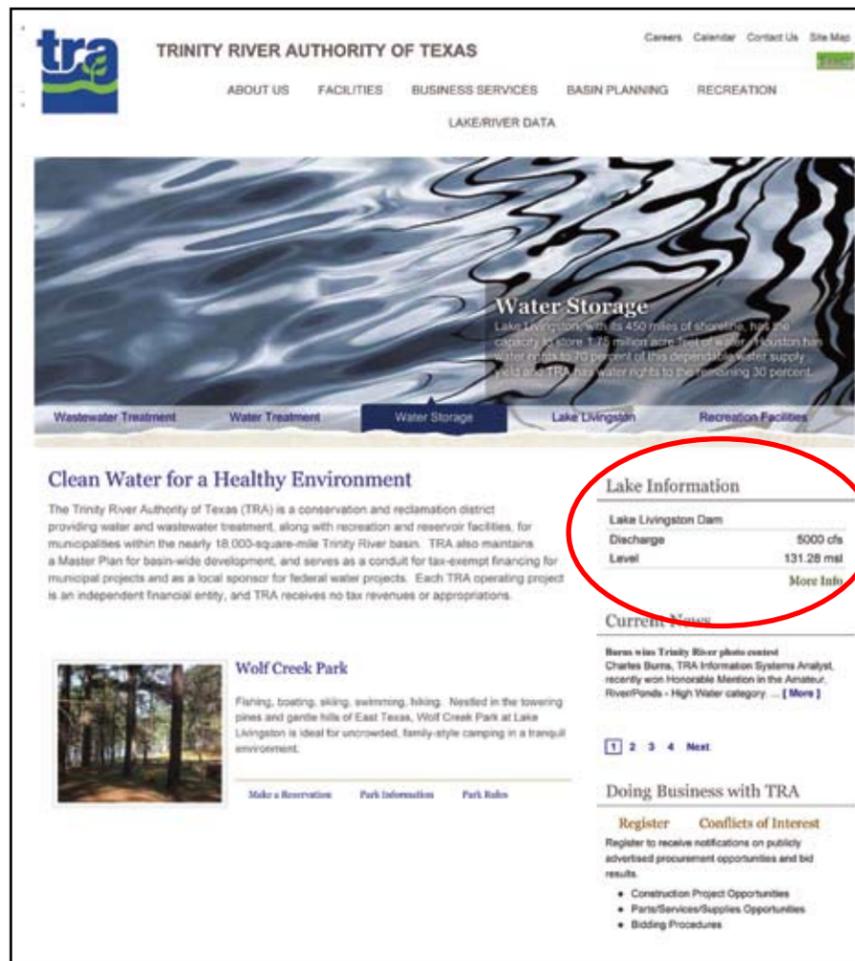
The front page of the Trinity River Authority's new website features continuously updated information reporting the level of water in Lake Livingston and the flow of water through the dam.

"We wanted to make it easier for interested parties to get up-to-date information on the dam's discharge," said William Holder, Lake Livingston Project (LLP) Manager. The discharge line shows the amount of water flowing through the dam in cubic feet per second with one cubic foot equal to 7.48 gallons.

LLP frequently receives requests for information about discharge at the dam near the end of the week when people are making plans for recreation at the lake. Fishing conditions downstream of the dam are impacted by the amount of water flowing through it, and downstream river conditions can be rough if the dam is releasing 20,000 cfs or more. Historically, the highest flow of water through Lake Livingston Dam occurred during a flood in October 1994, when 110,600 cfs, or 827,000 gallons per second, were released.

Water flows through Lake Livingston's dam via 12 tainter gates. When the reservoir is at or near 131 feet above mean sea level, one gate opened one foot allows 1,000 cfs through the dam. If a gate is raised two feet, 2,000 cfs is flowing through that gate. As the lake's level increases during flooding conditions or decreases substantially due to drought, the amount of water released through a particular gate increases or decreases according to hydrologic rating curves of the gate. For example, during the October 1994 flood, the lake elevation reached 134.38 feet above mean sea level and a gate opening of nine feet produced a discharge of 10,300 cubic feet per second for that individual gate.

Dam operation protocol calls for the tainter gates to be opened and closed in a methodical manner. There are occasional exceptions, but the gates near the center of the dam are generally opened first to direct the flow of water into the center of the river channel. During much of the year, when rainfall in the Trinity River basin is low or nonexistent, the dam releases 1,000-2,000 cfs, with one or two gates near the center of the 12 tainter gates opened one



The level of water in Lake Livingston and the flow of water through the dam are continuously updated on the front page of TRA's website. Dam discharge is shown in cubic feet per second. The lake level is reported in feet above mean sea level with normal pool level 131 msl.

Fishing conditions downstream of the dam are impacted by the amount of water flowing through it, and downstream river conditions can be rough if the dam is releasing 20,000 cfs or more.

foot.

As inflow to the lake increases, the gates on either side of center are opened one foot until all 12 gates are open, allowing 12,000 cfs to pass through. If more than 12,000 cfs needs to be released, the gates are opened two feet or wider, starting with the center gates.

The level of water in Lake Livingston is also regularly reported on the front page of TRA's website. The normal pool level of Lake Livingston is 131 feet above mean sea level but can vary with rain and drought in the Trinity River basin. A gauge located at the dam periodically sends the lake's level to TRA's website.

Lake level information is often requested by contractors desiring

updates sent directly to users' cell phones as text messages. Look for more information on this topic in coming months.

Those desiring more information about rainfall around Lake Livingston or water flows in the Trinity River can also access the Lake/River Data page on TRA's website to view a map of the Trinity River basin that reflects data from USGS gauges on the river, as well as 12 gauges that measure rainfall on Lake Livingston.



On the cover: TRA's Board of Directors gather in front of the Christmas tree with honored managers after December's board meeting. See here from left to right on the back row: General Manager Danny F. Vance, David B. Leonard, Jess A. Laird, John W. Jenkins, J. Carol Spillars, Harold L. Barnard, Shirley K. Seale, Herschel S. Brannen III, Keith W. Kidd, Kim C. Wyatt, Steve Cronin, Karl R. Butler, Ronald J. Goldman. Front row, left to right: Incoming General Manager J. Kevin Ward, Ana Laura Saucedo, Michael Cronin, Martha A. Hernandez, Linda D. Timmerman, Amanda B. Davis, Amir A. Rupani, Manny Rachal, Andrew Martinez, Nancy E. Lavinski, Kevin Maxwell, Northern Region Manager Warren N. Brewer.

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Board names J. Kevin Ward as new TRA general manager

During its regularly scheduled meeting in December, the Trinity River Authority Board of Directors approved a motion to appoint J. Kevin Ward as the Authority's new general manager, effective March 1, 2011.

"Our goal was to select a new general manager who will build on the strong foundation that Danny Vance has laid over the past 31 years," said Board President Linda D. Timmerman. "His knowledge of water issues in the state is unparalleled, and his commitment to the Trinity River Authority, its employees and its customer cities has been commendable. After an exhaustive search process, we are very excited to welcome Kevin Ward; the Board of Directors is confident that his experience and background make him an ideal candidate to maintain TRA's solid financial position, along with

preserving our relationships with state and national agencies and our customers."

Ward currently serves as executive administrator of the Texas Water Development Board (TWDB), which is responsible for planning the statewide development of water resources, financing water-related infrastructure and maintaining and disseminating natural resource data for Texas. He has held the position since 2002 and has served in several capacities since joining the TWDB in 1987, including financial analyst, finance section chief and development fund manager. He has also served in various management positions within the agency, specializing in the development and implementation of the financial aspects of the TWDB's State Revolving Fund loan programs. Prior to joining the TWDB, Ward



J. Kevin Ward

served as an officer and controller for two management consulting firms in Austin, both serving a client base of water and wastewater municipal utility districts and water supply corporations. He holds a bachelor's degree in accounting from the University of Texas at Austin.

Allen to join TRA

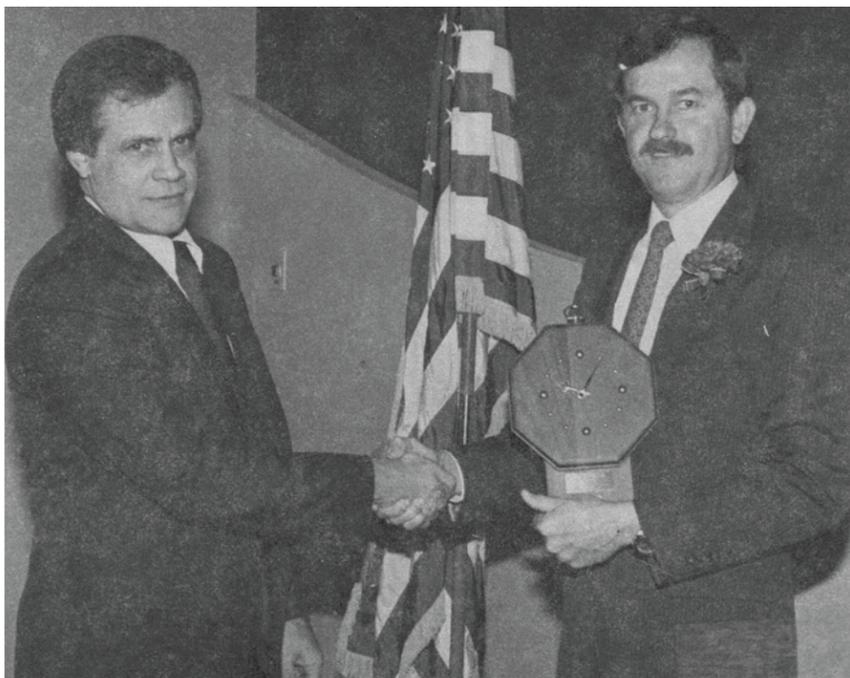
Trinity River Authority General Manager Danny F. Vance has selected Fiona M. Allen, P.E., R.S. as the new Northern Region Manager effective March 1.

Allen, currently the City of Arlington's Deputy City Manager, was the first female water utilities director employed by the city. She served 15 years in the Water Utilities Department, first as assistant director in 1996 and then as director in 2003. In 2005, she was named to her current position.

Allen is a Texas A&M University civil engineering graduate and a Registered Sanitarian.

"We have recently embarked on \$800 million in capital improvement projects in the Northern Region," said Vance. "Fiona's considerable management experience, knowledge of water and wastewater operations and capital projects management will benefit TRA."

Northern Region Manager Retires



Warren Brewer, Regional Manager for TRA's Northern Region (left) is seen here in 1985 with Bill Smith, Northern Region Manager of Development.

Warren N. Brewer, Regional Manager for TRA's Northern Region, recently retired after 33 years with TRA.

Brewer managed six regional operating projects in the upper Trinity River basin and five non-operating projects that serve more than 1.4 million people in more than 40 North Texas cities. Since becoming Northern Region Manager in 1979, he has been responsible for directing the operation, maintenance, and expansion of TRA's regional water and wastewater systems, as well as the development of new projects. He has supervised and directed the planning, design and procurement of funding for more than \$2 billion in water and wastewater treatment plants and conveyance systems.

During his time at TRA, Brewer demonstrated an exceptional talent for creating partnerships among customer cities based on trust and cooperation. He guided the negotiation of contracts for regional systems on an unprecedented

scale to serve multiple cities. In developing regional wastewater systems, Brewer was instrumental in meeting wastewater discharge standards that have resulted in a substantial improvement in water quality in the upper Trinity River and its tributaries.

Brewer's involvement in state and national water organizations contributed further to improving water quality in the Trinity River and across the state. He was a founding member and chairman of the Texas Association of Metropolitan Sewerage Agencies (now the Texas Association of Clean Water Agencies), an organization that, among other activities, addresses regulatory issues in conjunction with the U.S. Environmental Protection Agency and the Texas Commission on Environmental Quality. Brewer has participated on the North Central Texas Council of Governments' Water Resources Council for 30 years and is its outgoing chairman. This council produces an annual

Farewell to TRA

by Warren Brewer

This will be the last *inTRA* newsletter that I will see published while I am an active TRA employee. Although I am excited about retiring and returning to my hometown of Sulphur Springs, it causes me great sadness to think that I will not see some of you again, and that each day, I will not see many TRA employees and friends that I have seen almost every workday for over 33 years as a TRA employee. I hope I can survive the days without TRA and my TRA friends in my life every day. It is time to try, regardless.

My first exposure to TRA came when I was 25 years old, when I started employment as City Engineer of a customer city of TRA's Central Regional Wastewater System (CRWS) – the City of Farmers Branch – in 1968. As a customer of TRA, I developed a major respect for the way TRA produced efficiency in wastewater treatment performance and operations. When I left Farmers Branch and moved to Forrest and Cotton Consulting Engineers in 1970, I saw TRA from a different perspective. Most of my time over the seven years with F & C was spent on TRA projects, and I met many of you during those years. I observed excellent results accomplished because of dedicated and committed TRA management and employees. I continued to marvel at the cooperative spirit of TRA's customer cities and the economic benefits of regional approaches toward water and wastewater operations.

Having seen TRA from two different directions, it was an easy transition to come to TRA in 1977. I have never regretted that decision, and it has been professionally rewarding, and personally, a good run for the past 33 years. There have been very few days of actual work, because almost every day has been more fun than work. I give my fellow employees all of the credit for that. To my boss, to my staff, to all other TRA employees, to the Board members, to the best friends anyone could ever ask for in customer cities of TRA, and to my friends in other agencies and companies working on TRA's team, I thank you for your support and for being a part of making the environmental improvements we've achieved together because of our cooperative efforts.

I want to thank each one of you for your friendship and for your best wishes, and you must know that you will be in a corner of my heart forever.

water quality management plan for North Texas encouraging cooperative efforts among multiple governmental agencies to improve water quality. He also serves on the Texas Water Conservation Association Board and has served on the Texas Water Research Foundation Board as well. Brewer is an alternate representative to

TRA's General Manager on the state's Region C Water Planning Committee as well as the Tarrant Regional Water District Board of Directors. In addition, he serves on the City of Fort Worth's wholesale water and wastewater committees.

Brewer joined the Trinity River Authority in September

Continued on page 5. See Brewer.

Danny F. Vance honored during several events

Ending a 31-year tenure as General Manager and a 40-year employment history at TRA brings with it a generous amount of nostalgia and public recognition of accomplishments. At least that's been the experience of outgoing General Manager Danny F. Vance as he prepares to begin a new phase in both his personal and professional lives.

In December, the Board of Directors of the Tarrant Regional Water District (TRWD) honored Vance with a resolution recognizing his service and commitment to TRA, along with his thoughtful and discerning leadership. Vance has served as chairman of the TRWD advisory committee for many years, representing TRA, and has worked closely with the water district on a multitude of projects and issues.

During the presentation, TRWD Planning Director Wayne Owen noted that in the 1980s, settlement of a challenge to the District's water rates resulted in establishment of a system rate methodology similar

“Danny always has something to contribute on even the most technical or scientific issue to arise in the state and federal regulatory arena.”

Wayne Owen
TRWD Planning Director

to the model established by TRA for managing regional water and wastewater treatment enterprises. The Amendatory Contract also established a wholesale customer advisory committee akin to the advisory committees TRA employs to support its regional water and wastewater enterprises.

In addition, the TRWD credited Vance with maintaining good communication and relationships with state and local elected officials, cities, counties and regional planning groups throughout the Trinity River basin to make sure that TRA's regional service provider role was understood and appreciated, along with identifying customer needs, improving existing regional enterprises and/or proposing new or enhanced regional enterprises.

“Danny always has something to contribute on even the most technical or scientific issue to arise in the state and federal regulatory arena,” said Owen. “This really is not that difficult to do when, like Danny, you are truly fascinated by the wide array of issues encountered in this business. Danny will be missed.”

Vance also was honored in early January by the Huntsville/Walker County Chamber of Commerce during a reception at the First National Bank in Huntsville. Many with whom Vance established relationships in TRA's southern region were in attendance, including former Board members and former TRA employee Albert Hall.

As of press time, Vance was scheduled to be recognized at the end of January by the Texas Legislature for lifelong contributions to the Texas water environment. Look for coverage of this event in the next issue of *inTRA*.



Vance visits with former TRA Board President Bill Hodges and his wife, Ann, at a reception sponsored by the Huntsville/Walker County Chamber of Commerce.

RESOLUTION OF THE BOARD OF DIRECTORS OF TARRANT REGIONAL WATER DISTRICT HONORING DANNY VANCE

WHEREAS, Danny Vance has unselfishly given of his time, knowledge and talents in service and commitment to the Trinity River Authority of Texas for a period that has now reached **31** years; and

WHEREAS, Danny Vance now nears completion of his long and distinguished service with the Trinity River Authority of Texas, where he has served the last 31 years as the General Manager; and

WHEREAS, under the leadership of Danny Vance, the Trinity River Authority of Texas became the largest wholesale provider of wastewater treatment in Texas that included five regional wastewater systems in the upper Trinity basin. He maintained superb planning and operations that served more than 40 cities and governmental entities with a population of more than 1.4 million; and

WHEREAS, with tireless commitment, Danny Vance continuously supported innovation in planning for future water supplies. His exceptional leadership with state and regional water planning has cultivated opportunities to partner with water supply agencies throughout Texas. These efforts have greatly improved cooperation between government entities, wholesale water providers and water user groups on critical water resource projects needed to meet Texas' future water needs; and

WHEREAS, in wide recognition of his thoughtful and discerning leadership style, Danny Vance promoted commitment to a strong, open relationship with the Trinity River Authority of Texas' customers, which now includes 63 contracting parties. His focus on meeting customer needs was always his main priority; and

NOW, THEREFORE, BE IT RESOLVED that in recognition of the outstanding service, leadership and career of Danny Vance of the Trinity River Authority of Texas, we direct this resolution to be spread upon the District's permanent minutes and a copy presented to Danny as an expression of the affection and respect of the Tarrant Regional Water District, its Board of Directors and employees.



Tarrant Regional Water District (TRWD) Board President Vic Henderson presents Danny F. Vance with an award. TRWD honored Vance with a resolution recognizing his service and commitment to TRA, along with his thoughtful and discerning leadership.

General Manager's Message

Milestones that shaped the Trinity River Authority

Reflecting on my 40 years at TRA, I realize that TRA and I have both matured a lot. We grew up together. The Authority and I have, over the years, overcome challenges, learned from missteps and established our own identities just as we all must do when striving for maturity. Now, as TRA prepares to begin its next phase of leadership, it seems a fitting time to review some milestones that were important to me and shaped the course of TRA's development.

When I joined the Trinity River Authority of Texas in 1970 as its 88th employee, this organization was gathering momentum and support for one of its initial purposes: developing reliable navigation of the Trinity River. Yes, TRA had developed the first regional wastewater treatment facility in the nation in 1957, and we had also made forays into other water-related projects throughout the basin, but the pursuit of the navigation project was what drove TRA at that time. In fact, reliable navigation of the Trinity River had been an aspiration of citizens and business leaders throughout the entire Trinity River basin for more than 100 years.

That changed on March 13, 1973, when a majority of voters in the 17-county area that comprises TRA's jurisdiction rejected a property tax referendum to help finance a 300-plus-mile, multi-purpose channel to connect the DFW area with the Gulf of Mexico. We lost the popular vote, although a majority of counties approved the referendum. But both had to pass. TRA management recognized the need to refocus its mission in light of the defeat, and for the next few years we embarked on a variety of projects that eventually led us to identify and pursue what are today our core competencies – the water and wastewater services we provide to our customer cities. I was fortunate enough to join TRA during this time of refocusing, early in my career, and to work my way up through the organization by taking on various positions and tackling projects that gave me a chance to push myself – to stretch and mature, even as the organization was doing the same.

The mid-1970s certainly marked the resurgence of TRA's emphasis on the services we could provide our customers. With the beginning of operations at the Central Regional Wastewater System (CRWS) in 1959, we pioneered a completely new way of approaching wastewater treatment business, and we spent much of the 1970s continuing to promote that business model and attract new customers, not only for the CRWS system, but also for the additional regional water and wastewater systems we eventually developed throughout the Trinity River basin. Shortly before I joined

TRA, Lake Livingston construction was completed, even though it did not fill for almost two more years. The Ten Mile Creek Regional Wastewater System (TMCRWS) began operations within two months of my employment, and by the late 1970s, we had also developed the Huntsville Regional Water Supply System. TRA spent a substantial portion of the 1980s developing new facilities and attracting regional customers, but we also attempted certain ventures that we later either revamped or relinquished in the best interests of our customers. We also solidified our commitment to fiscal responsibility.

A case in point is the Devers Canal System, which TRA acquired in December 1969 to provide irrigation water for rice farmers in Liberty and Chambers counties, and as a means of distributing industrial water in what was anticipated to be a large commercial development east of the Houston metropolitan area. When I became General Manager in 1979, the system faced operational and financial difficulties. The supply of water to the rice industry and a very limited industrial base were not generating enough revenue to cover associated debt. We continued to improve operational efficiencies and TRA's working relationship with rice farmers in the area, but despite these improvements, the business model did not lend itself to success. In 1986, we conveyed the project back to the Devers Canal Company, its original owner. I consider this divestiture to be one of the most significant accomplishments during my tenure.

We faced a similar challenge in our southern region with the operation of Wolf Creek Park, which originally remained open for business year-round. As with any park in Texas, the challenge lay in the fact that revenue from entry fees was not consistently high enough to cover operational costs, particularly in the winter months when park attendance is very low, leaving us in a vulnerable cash-flow position. Our solution in this case was to begin operating the park on a seasonal schedule – opening for business from March to November. Within one year of this change to seasonal operation, the park was operating in the black, and subsequent years of seasonal operation have allowed us to build reserves that fund upgrades and renovations during the three-month off-season.

TRA's involvement with Joe Pool Lake also presented a quandary. We had signed the first local sponsor contract in the nation with the U.S. Army Corps of Engineers, which required the local sponsor for the water supply to also assume responsibility for recreation at the lake. There was no example to model or previous sponsor

relationship to emulate. When the lake's parks were opened in the late 1980s, TRA began operating them with no assurance of sufficient revenue. After several years of challenging operations, and when approached by representatives of Grand Prairie seeking participation for a city park in the Joe Pool Lake area, I was able to work with city leadership and management for a successful transfer of all the parks from TRA to the city. We were fortunate that Congressional representatives helped make this happen in a way that was beneficial for both TRA and Grand Prairie. The result is that the transfer removed us from a venture that we were not the best entity to handle, and it gave the City of Grand Prairie more than 3,000 acres of parkland, which has since been maintained and operated to the benefit of many citizens not only in Grand Prairie but throughout the DFW Metroplex.

While we were assessing or adjusting business models and developing regional systems, sometimes we had to rely on pure tenacity to see a project through. Such was the case with the Wallisville Saltwater Barrier in Liberty and Chambers counties, the development of which was required by TRA's founding legislation. Designed to protect the lower Trinity River from saltwater intrusion that is detrimental to agriculture and water supply in those areas, this was a long project in the making that required extensive collaboration with the U.S. Army Corps of Engineers. However, it also needed the enthusiastic support of the U.S. Congress to gain authorization, approval and funding. Some of us at TRA developed key congressional relationships who continued to champion the project until funding became available in 1992. The project was completed and dedicated just seven years later in 1999, a full 20 years after I became General Manager and began working on this challenge.

During my years at TRA, we have refined the Authority's purpose of providing water and wastewater treatment services throughout the Trinity River basin at the highest levels of customer service and regulatory compliance. We have worked hard to stay true to that commitment and to responsibly exit projects or business models that did not support that goal. Along the way, we have maintained strong financial health and used the resources at our disposal responsibly and for the best interests of our customers. We have forged long-lasting, vital relationships with our customer cities. I can say with conviction that many of the brightest and most inspiring professionals in our industry have helped drive our business in the direction that offers the most benefit for TRA,



General Manager Danny Vance

its employees, its partners and its customers.

I have been personally honored to work with the men and women of TRA who labor every day in support of our mission and goals. I am profoundly thankful for them, and for the guidance and support of a reliable Board of Directors that has always provided sound policy and then given TRA management the opportunity it needs to execute that policy. Since TRA was created in 1955, the Governors of Texas have appointed 171 members to the Board of Directors. As an employee of TRA, I have personally known 142 of those members, and I have served as General Manager under the leadership of 118 of them. It has been a pleasure to know them and to be afforded the privilege of working for them to achieve TRA's goals. I have had great opportunity to challenge myself and others, and to seek innovation in our industry. Facing these challenges and being tasked with finding their solutions opened doors and helped shape me while I was helping shape TRA.

It would be easy to brag about the "good old days," or about how TRA's most exciting and growth-driven days are behind it, but I do not think that is the case. TRA's next great set of challenges is up to its next General Manager, along with its team of Executive Managers, whom I know are capable of rising to any challenge. I remain confident that water supply, water reuse and emerging technologies in treatment processes will continue to be key drivers as TRA becomes even more economical and environmentally friendly.

TRA will always pursue its core competencies, but opportunities to offer appropriate ancillary services remain as well. We have always been known for our forward thinking, collaborative problem-solving and development of unique solutions, and I see no reason for that to change. TRA remains in the capable hands of a strong Board of Directors, an innovative leadership team and a stable of reliable partners and consultants. Thank you all for your involvement in the good work we do – and thank you for making my time at TRA such a privilege and pleasure.

Employee Milestones

New Hires

CRWS welcomes **William Caylor**, **Joshua Green** and **Michael Mize** as Operator I. DCRWS added **Richard Benavides** as Maintenance Mechanic II. **Gus Rivas** joined TCWSP as Operator I and **Basilio Chavez** has been hired by TMCRRS as Chief Maintenance Mechanic.

Promotions

Patricia (Patty) Cleveland was promoted to Northern Region Assistant Manager. **Glenn Clingenpeel** was promoted to Senior Manager, Planning and Environmental Management Division. **Louis Morrow** was promoted to Senior Operator at CRWS and **Gerald Smith** was promoted to Operator II at ROCRRS.

Current Events

Andrew Moore, DCRWS Operator I, earned his D wastewater license. **Jason Coles**, TCRWSS Operator I, earned his D Water certification.



Wade Sims, son of Jim Sims, Southern Region Manager, graduated Dec. 4 from the University of Texas with a master's degree in communication/advertising. He also holds a bachelor's degree in sports management from Texas A&M University.



Seven ladies from TRA's General Office participated in Jiggle Butt Run 2011 benefitting the Tarrant County Women's Shelter on Jan. 8. Seen here from left to right are Debbie Garrett, Senior Secretary; Taylor Huynh, Human Resources Manager; Julie Wilson, Executive Secretary; Connie Jones, Executive Secretary; Alison Mackey, Executive Assistant to the General Manager; and Ann Carver, Internal Auditor.

Cleveland promoted to Northern Region Assistant Manager

Patricia Cleveland was recently promoted to Assistant Regional Manager of the Trinity River Authority's northern region.

Previously, Cleveland served as Manager of Operations over TRA's northern region operating projects, which include water and wastewater treatment as well as water storage. These projects provide essential utility services to more than 40 cities with a combined population of 1.8 million people.

During her 35-year tenure with TRA, Cleveland has earned a reputation for creative and effective water and wastewater regional systems management as well as long-term facilities master planning. Under her leadership, the northern region projects have earned many state and national awards for environmental compliance and process-management excellence.

"For 35 years, Patty has demonstrated a tremendous dedication and commitment to TRA goals and our customer cities' interests, as well as improving the water quality and environment in the upper Trinity River," said Warren Brewer, TRA's Northern Region Manager.

Throughout her career, Cleveland has shared her extensive knowledge of environmental and

regulatory issues with state and national professional organizations, serving on numerous committees and boards and fulfilling leadership roles. She has served as president of both the Texas Association of Clean Water Agencies (TACWA) and the Water Environment Association of Texas (WEAT).

Currently, Cleveland represents Texas on the National Association of Clean Water Agencies (NACWA) Board of Directors; she then represents NACWA on the Water Sector Coordinating Council for advising the U.S. Environmental Protection Agency and the Department of Homeland Security on national water security issues. She also represents NACWA on the Board of Directors for WaterISAC – an organization that provides a clearinghouse for government and private information to identify risks, prepare for emergencies and secure the nation's critical water infrastructure.

Cleveland received NACWA's 2010 President's Award for her participation on these two water-security councils. In addition, the Water Environment Federation (WEF) honored Cleveland in 1996 with the prestigious Arthur Sidney Bedell Award for extraordinary personal service to a WEF Member Association.

Cleveland began her career with the Trinity River Authority in



Patricia Cleveland

1976 as a Biologist in the Central Regional Wastewater System (CRWS) laboratory after graduating from Texas Wesleyan University with a bachelor's degree in biology/chemistry. She was promoted at a rapid pace to progressively more responsible positions and became Manager of Laboratory Services in 1981 and then Manager of Technical Services in 1985.

In 1995, Cleveland took on the role of Manager of Wastewater Services Planning for TRA's northern region wastewater facilities. In 1996, she advanced to Manager of Operations for TRA's northern region.

Lake Livingston plans spring Trash Bash

The Lake Livingston Polk County Chamber of Commerce recently hosted a meeting to organize a Trash Bash event this spring. Business owners, local government officials, master naturalists and others met to discuss when and where the community would come together to pick up trash around the lake.

The Trinity River Authority, through the Clean Rivers Program, pledged financial support for the effort. Bill Holder, Lake Livingston Project Manager, Mark Waters, LLP Assistant Manager, and Debbie Bronson, Public Information Assistant, represented TRA at the meeting.

Pro-Star Waste will provide trash bags and dumpsters for the effort.

The committee divided the lake into sections and appointed a representative to organize clean-up and designate dump sites for each section. Eddie Knight, Park Supervisor for TRA's Wolf Creek Park, was appointed to represent the Wolf Creek area.

The committee plans to reach out to local school districts, 4-H clubs and boy scout and girl scout troops in an effort to involve and educate children about the importance of a clean watershed.

The date for the event was tentatively set for Saturday, April 2. The committee will meet again on February 2 and 16 at 2:00 p.m. at the Chamber Office. Contact Sydney Murphy at the Livingston/ Polk County Chamber of Commerce (936) 327-4929 to get involved.

Brewer, continued from page 2.

1977 as Operations Chief of the Central Regional Wastewater System (CRWS) and was subsequently promoted to Manager of Administrative and Technical Services for the northern region. From there he was promoted to Assistant Northern Region Manager, and then Northern Region Manager in 1979.

Before joining the Trinity River Authority, Brewer was employed with Forrest and Cotton, Inc., a

consulting engineering firm, where he was principally involved in planning, design and operational assistance for TRA projects.

In addition, he previously served as City Engineer and City Planner for the City of Farmers Branch, and as City Engineer and Director of Public Works for the City of Sulphur Springs. Brewer attended East Texas State University and the University of Texas at Arlington, majoring in engineering and business.

TMCRWS solids-handling facility comes online with new team

The Trinity River Authority's Ten Mile Creek Regional Wastewater System (TMCRWS) improved processes in 2010 with the completion of a new \$22 million sludge dewatering facility. Donald Thompson, a 35-year TRA veteran, who previously served as Chief Maintenance Mechanic for the system, was promoted to Solids Chief Operator to run the facility. Donald is assisted by Martin Madaras, Senior Maintenance Mechanic, and Matthew Roop, Operator I.

Before this new equipment came online, TMCRWS temporarily stored and dewatered waste biosolids in the sewage sludge surface disposal site, commonly referred to as lagoons.

With the new facility, sludge from the plant's final clarifiers is fed to a Waste Activated Sludge (WAS) tank and then joins sludge from the primary clarifiers as they mix together in the new blending tank.

If the mixture is too watery, less than 1.75 percent solid, it is sent to one of two gravity belt thickeners. From there, the sludge is pumped to one of three centrifuges, which remove approximately 73 percent more of the moisture. The final

product is homogenous and nearly dry, with very little odor.

"Isn't it a beautiful cake?" asks TMCRWS Project Manager Ed Mach.

The biosolids are then transported via covered conveyor belts to a bin, which is subsequently taken by truck for disposal.

Odorous gases from all areas of the waste-handling system are neutralized in a biofilter filled with bacteria-coated lava rock. The bacteria consume the odorous compounds in the gas.

A new blower building was included in the recently completed construction. Aeration basins that had been aerated with paddle-type equipment are now aerated with fine bubble diffusers. This process change has improved the quality of the sludge.

TMCRWS provides wastewater treatment and transportation services to Cedar Hill, DeSoto, Duncanville, Lancaster and Ferris. The plant treats an average of 17 million gallons per day and is rated to treat 24 MGD.

Construction to convert the sludge lagoons to wet weather storage will begin in early 2011.



The solids blending tank seen here in the center is the most prominent structure in the solids dewatering complex at TMCRWS. Centrifuges coupled with gravity belt thickeners, if necessary, remove 73 percent of the moisture from the solids.



The TMCRWS solids operations team from left to right: Martin Madaras, Senior Maintenance Mechanic; Donald Thompson, Solids Chief Operator; and Matthew Roop, Operator I.

TMCRWS maintenance mechanic earns Medal of Valor

Eli Ruiz, Maintenance Mechanic II at Ten Mile Creek Regional Wastewater System, recently earned a United States Army Commendation with Valor during heavy and prolonged combat in the Ghazni Province in southeast Afghanistan. He has also been nominated for the prestigious Bronze Star Medal.

Ruiz is a former Army Ranger with four previous deployments to combat zones including the 1993 conflict in Mogadishu publicized by the book *Black Hawk Down* and the movie by the same name. He has also served in Haiti and completed a tour of duty in Iraq.

Ruiz recently returned to Texas after a year-long deployment with the Texas Army National Guard. He originally went to Afghanistan in October of 2009 to fulfill a humanitarian mission with the Army's agribusiness development team (ADT). ADTs work side-by-side with Afghan citizens to develop sustainable farming and ranching practices necessary to feed the country and provide economic stability.

The 60-member Texas ADT was stationed at a Polish forward operating base in the Ghazni Province. The Polish Army, part of the Afghan coalition forces, occupies and is responsible for security in the area. Ruiz was one of 33 members of the Texas ADT tasked with providing security when

they left the base to perform their mission – a highly dangerous job in an area where Taliban fighters were allowed to congregate and stockpile weapons and ammunition. Travelers frequently encounter improvised explosive devices (IEDs) on the local roadways, and the fields are thick with mines left by Russian forces that occupied the area in the 1980s.

"A favorite tactic of the Taliban was to detonate an IED and damage a vehicle. Then they would pin down the men in the vehicle with gunfire and move in," said Ruiz. It was the security team's job to summon help and then fend off the Taliban until backup arrived. On one harrowing day, Ruiz and five members of his team were traveling in a mine-resistant, ambush-protected vehicle (MRAP) when an IED exploded under the front driver-side tire. Ruiz was not hurt, but all five of the others required medical evacuation for serious injuries. By the end of the year, the 33-member security team was reduced to 22, with 14 purple hearts awarded for injuries including lost limbs, gunshot wounds and brain damage. One young soldier was nominated for a Silver Star, one of the highest honors bestowed on members of the military, for continuing to man the gun on a disabled vehicle while under heavy fire from the Taliban.

Security in the Ghazni Province deteriorated further after April 10,



Eli Ruiz in Afghanistan.

2009, when Polish president Lech Kaczynski and 96 others, including the country's top military officials, died in a plane crash. With their leadership in disarray, Polish Army officials were reluctant to use resources, engage in combat or even share intelligence. ADT missions were no longer possible.

With increasing frequency, Polish Army officials began to look to ADT security teams to perform offensive excursions such as hunting for important enemy leaders, searching for weapons caches and rescuing captured coalition forces or those under siege by the enemy.

The ADT security team fought their toughest battle Sept. 18, 2010, the day Afghan national elections were held. The team formed a blocking position near the polls in

Khogyhani where Taliban fighters were amassing. The ensuing 18-hour firefight, known as The Battle to Save Ghazni, took out between 150 and 200 Taliban fighters with no civilian casualties.

Ruiz received the U.S. Army Commendation with Valor for his actions on Sept. 18, specifically for halting enemy advancement and holding his position while under fire. This medal is awarded for sustained acts of heroism and valorous actions in direct contact with an enemy force.

Ruiz has also been nominated to receive a Bronze Star Medal from the U.S. Armed Forces for heroic service. Results of the nomination will be reported in future issues of *inTRA* and on TRA's website.

TRA makes environmental flow recommendations

As the next step toward defining environmental flows for the Trinity River basin “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 December, TRA made formal recommendations to the Texas Commission on Environmental Quality (TCEQ) at a public hearing in Austin. The hearing was a key step in soliciting public comment as TCEQ finalizes its environmental flow rules.

As previous issues of *inTRA* have discussed, in early 2010 a highly qualified 15-member Trinity-San Jacinto expert science team completed discussions without settling on a recommended report to submit to the Environmental Flows Stakeholders Committee and TCEQ for rule-making purposes. Instead, two separate reports made their way to the Stakeholders Committee and TCEQ for consideration, and TCEQ’s proposed rules, released in October of 2010, represent a balance between the two.

During December’s hearing, TRA – consistent with the majority

of the Stakeholders Committee and roughly half of the expert science team appointed to study environmental flows – publicly supported TCEQ’s proposed rules, with some technical exceptions that are outlined in its written comments, which can be found at www.trinityra.org/downloads/TRAEFlowComments121610.pdf.

While everyone involved in the environmental flow discussion recognizes the need to protect Texas’ valuable ecosystems, it is essential to 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. TRA is confident that the proposed TCEQ rules are a good-faith effort to equitably pursue human and environmental needs, despite the lack of science necessary to achieve a true balance.

The official public comment period regarding the proposed rules concluded Dec. 20, and TCEQ anticipates final adoption of the rules in April of this year. TRA will continue to keep the public apprised of its participation in the process.

Wolf Creek Park makes improvements for 2011 season

Trinity River Authority’s Wolf Creek Park on Lake Livingston will reopen March 1 with improvements to campsites and park operations as well as new communications tools.

“We are preparing a Facebook page for our guests at Wolf Creek Park to keep everyone informed and help them enjoy the park as much as possible,” said Eddie Knight, WCP Supervisor.

WCP’s Facebook wall will feature up-to-date information about conditions and activities at the park. Regular wall posts will notify guests when the park is full or when burn bans are in place and will also let folks know about special events and activities at the park.

Information about the park and individual campsites, as well as the park’s history, will be included on the page. Facebook visitors will have access to photos and videos of the park.

In addition, those visiting Wolf Creek Park’s page on TRA’s website will soon be able to see a photo of each campsite when they roll over that campsite’s number on the map of the park.

Knight and his staff have been hard at work this winter making improvements to campsites as well as public areas at the park. Campsites 81-99 will be upgraded from limestone parking pads to blacktop paving. Staff cleared away thick underbrush below these same sites so that guests can enjoy a better view of the lake.

Along the shoreline bulkhead, cement-stabilized sand will be



extended to include the area near the group shelter and playground. The sand hardens similar to concrete to prevent topsoil erosion and forms a walkway next to the lake.

New this year, the park office will have a generator available to maintain electrical power during occasional power outages.

“Thunderstorms cause occasional power outages and that can interfere with reservations,” said Knight. “We want to make sure our guests are able to register quickly and get the campsite they reserved.”

Wolf Creek Park is a 110-acre overnight camping and day-use park on the western shore of Lake Livingston. The park has 39 campsites for RVs requiring full hookups and 64 sites with water and electricity. All sites have picnic tables, fire rings and grills. Park visitors have access to a boat ramp and fishing pier, three restroom/shower facilities, a group shelter, playground equipment and a marina store.

For more information visit www.trinityra.org/wolf-creek-park.

Anniversaries

35 years

William Thornton, Chief, Operations Division, CRWS
Don Tucker, Manager, General Services, GO

20 years

Scott Hill, Inspector Supervisor, CSS
Marion Kendall, Operator II, HRWSS
David Luther, Senior Operator, ROCRWS
Juan Roman, Senior Maintenance Mechanic, CRWS
Edward Smotek, Senior Operator, TMCRWS

10 years

Elaine Sambel, Senior Secretary, CRWS
Jason Smith, Operator II, LRWSS
James Watson, Operator II, ROCRWS

5 years

Arthur Brownlow, Process Control Systems Coord., CRWS
Paul Hopkins, Operator II, CRWS
Raudel Juarez, Senior Operator, CRWS
James Pointer, Operator II, TCWSP
Jeremy Patterson, Inspector II, CSS
Vincent Lim, Manager, ITSS

3 years

John Ackerman, Operator II, HRWSS
Jose Avila, Biologist, CRWS
Robert Britton, Inspector I, CSS
Wayne Chen, Information Tech Supervisor, ITSS
Craig Crowder, Engineering Services Manager, GO
Joshua Guinn, Operator I, CRWS
Steven Hodges, Electronic Technician II, DCRWS
Johnny Hooks, Maintenance Mechanic II, LLP
Agnes Marfo, Biologist, CRWS
Clem Mensch, Lab Technician I, LLP
Jimmy Snowden, Maintenance Mechanic II, CRWS
Karen Stafford-Brown, Engineering Services Manager, GO
Rusty Thompson, Inspector I, CSS
Matthew White, Maintenance Mechanic II, CRWS
Michael Wilson, Park Ranger, LRF

Contract awarded for CRWS on-site stormwater storage basin

The Trinity River Authority Board of Directors recently awarded a \$41,854,699 contract to construct a 125-million-gallon stormwater storage basin at TRA’s Central Regional Wastewater System (CRWS).

CRWS cleans wastewater for 20 DFW Metroplex cities, along with the Dallas/Fort Worth International Airport. CRWS is currently permitted to treat an average of 162 million gallons per day with a peak two-hour flow of 405 MGD during wet weather. The CRWS plant is undergoing construction to improve processes and expand treatment capacity to 189 MGD with a peak two-hour flow of 623 MGD.

The stormwater basin is needed to manage peak flows during wet-weather events at the plant. During heavy rain events, peak flows in excess of 375 MGD will be routed to the basin, where two high-rate clarification units will partially treat 27 million gallons of stormwater. The clarified water will then be used to flush out the new storage basin once the storm event has passed.

Support structures for the basin, also covered in the construction

contract, include a 50-MGD pump station, a 200-MGD screening structure, a junction box and a sluice gate isolation structure.

Engineers encountered challenging soil conditions at the site where the massive new stormwater basin will be constructed. According to David Terrill, Manager of Engineering Services, geotechnical soil tests have determined that the underlying soils are a poor grade of shale.

“This type of soil has good vertical strength but questionable horizontal strength,” said Terrill. “That can result in the shifting layers of soil and possible basin wall failure.”

Consequently, the basin’s design calls for large anchors to be installed diagonally through the soil layers to prevent slippage.

In spite of the unforeseen geotechnical issues, construction of the stormwater basin was not significantly delayed, and the bid was within budget. Construction began in early January and is expected to be complete by the fall of 2013.



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Progress on hydroelectric project at Lake Livingston

The East Texas Electric Cooperative (ETEC) has cleared a significant hurdle in its efforts to obtain a license to generate hydroelectric power at Lake Livingston Dam.

ETEC filed an application with the Federal Energy Regulatory Commission in 2009 and expected to be granted the license by late 2010. The process was delayed in July 2010 when the U.S. Fish and Wildlife Service (FWS) requested an eel ladder be included in the design of the project to allow upstream and downstream movement of the American river eel. The FWS retracted the request after ETEC was able to prove that eel ladders are not necessary given the slight number and movement of eels in the Trinity River.

ETEC has secured most of the funding for the project and expects to begin construction in approximately one year, with completion anticipated by the end of 2013.

Hydroelectric power will be generated at Lake Livingston Dam using run-of-the-river flows released to meet downstream commitments and to pass flood waters through the dam.

The proposed 24 megawatt hydroelectric plant will generate, on average, approximately 124 million kilowatt-hours of electricity per year. This is enough energy to serve approximately 12,000 households. The hydroelectric plant will annually offset approximately 64,000 tons of carbon dioxide emissions from fossil-fuel power-generating plants

TRA helps family after Christmas burglary



TRA employees deliver Christmas gifts to the Woods' home. Seen here from left to right are John Bennett, DCRWS Project Manager; Robert Ray, DCRWS Chief Maintenance Mechanic; Valerie Willis, DCRWS Senior Secretary; Clifford Woods, DCRWS Operator I; Eric Blackmon, DCRWS Operator II; and Michelle Orbeck, CRWS Assistant Buyer.

TRA employees reacted with generosity and compassion to the plight of Clifford Woods, Denton Creek Regional Wastewater System (DCRWS) Operator I, his wife and children after burglars broke into the family's home and stole all of its Christmas gifts shortly before the big day.

The Woods family, including five children under age 11, was heartbroken by the loss but thankful that everyone was away from home at the time of the burglary.

Employees at DCRWS, Central Regional Wastewater System (CRWS) and TRA's General Office donated \$1,945 in cash and gift cards, as well as numerous toys, to restore the family's Christmas.

Woods expressed profound gratitude for his co-worker's generosity, saying, "I feel so blessed to work with people who truly do care. I cannot express how much it means to know that we are not alone, especially during hard times."