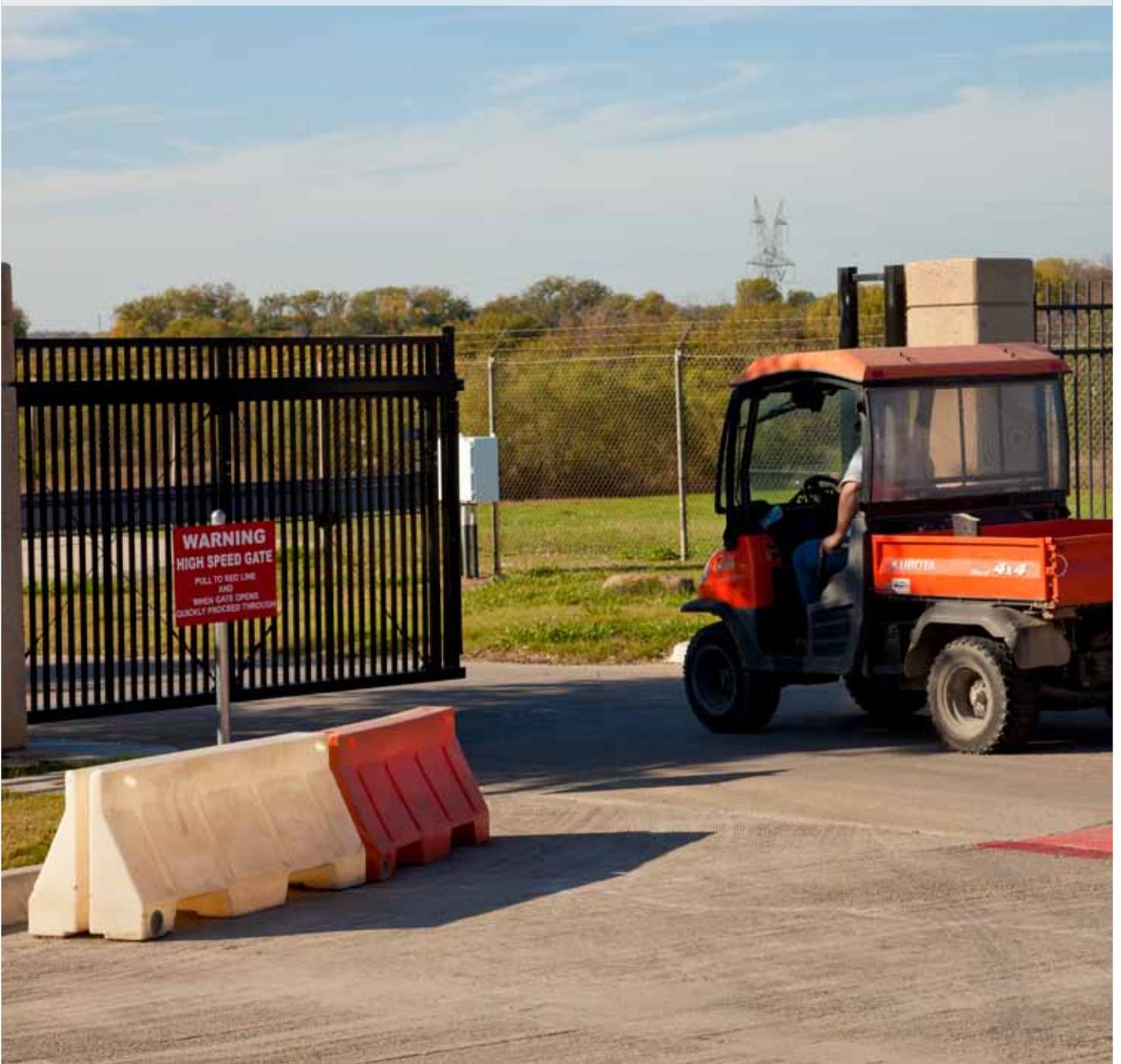


October/November 2013



Newsletter of the Trinity River Authority of Texas

High-speed gates enhance security





GENERAL MANAGER'S MESSAGE

TRA's FY 2014 budget set, Proposition 6 makes future water needs possible



General Manager J. Kevin Ward

October and November were two significant months. I typically cover our budget in this issue, and this time, I am including information about the passage of Proposition 6. Both our budget and Proposition 6 are tied to the good stewardship of funds and to our collective futures.

TRA's BUDGET

TRA's board of directors approved the FY 2014 budget during its regularly scheduled October meeting.

The approved FY 2014 budget is \$242.6 million. This includes a 3.6 percent increase in costs for personal services. However, debt service increased 19.5 percent. TRA was able to tighten its belt and hold down its operating costs, which increased only .7 percent. The approved budget reflects an increase in total revenues of 11 percent from \$223.4 million to \$248.2 million. The increase is related to funding debt service on new capital improvements.

The Authority's annual operating budget serves two basic purposes. First, it is a planning device that quantifies the cost of the work that the Authority plans to accomplish during the upcoming fiscal year. Secondly, the budget serves as a fiscal control device that governs the achievement of the Authority's goals.

Regarding improving and maintaining our infrastructure, TRA will undertake a number of Southern and Northern Region projects. In the Southern Region, construction will begin on a hydropower project at Lake Livingston, and we will continue efforts to increase the capacity of two water supply facilities. In the Northern Region, work continues on our solids master plan, and we continue to employ

measures to better capture debris as it enters our wastewater treatment facilities as well as focusing on reuse.

Each fiscal year's budget is a product of many staff hours of data collection, goal setting and interaction with our customers. As part of this process, we hold advisory meetings with 36 customer cities, one to present the budget and one to adopt it. At TRA, we take what we do seriously. Each project that TRA undertakes is financially independent and exclusive to the city or group of cities that are involved. We are fortunate to have the insight and leadership of our board in the preparation and approval processes. When it is all said and done, we are committed to creating positive outcomes for the communities and customers that we serve.

PROPOSITION 6

The passage of Proposition 6 on Nov. 5, by 73 percent of the vote, was historic. The journey to get to this point was born out of years of drought and real and potential economic losses. A solution was needed. During my nearly 24 years at the Texas Water Development Board, I was involved in most of the financial programs there. I witnessed the legislature's efforts over the past few decades to try to find a way to fund much-needed water projects in the state of Texas.

The efforts of water and wastewater purveyors along with the legislature addressed the need for a solution. Most everyone involved in water and wastewater services and planning in the state agreed that something had to be done to address the effects of drought.

In 2011, Texas suffered the worst, single-year drought in our state's history. The drought, which continues today, cost Texans billions of dollars in lost income annually.

In October, I was invited to join our governor as he spoke at the site of the Lake Texoma pipeline extension project in Wylie. He chose this site because it is an excellent example of the type of projects that Proposition 6 can make a reality. As I understand it, the pipeline project will cover 46 miles, and it will allow the North Texas Municipal Water District to tap into the Lake Texoma water supply, which has been inaccessible since 2009.

The governor crossed the state holding gatherings such as the one in Wylie. They proved to be very effective in getting the message to voters.

Now that Proposition 6 has passed, it will help support projects that are outlined in the state water plan, support water conservation efforts, new pipelines and water supplies, our lifestyle, economic growth and – most importantly – our future. People in rural and metropolitan areas stand to benefit. Businesses will have the water that they need to increase and sustain economic growth, and you and I will know that in our lifetime an important action was taken for the future of Texas.

Here are the main components of Proposition 6:

- The 83rd Legislature approved three bills as part of a broad package to provide funding for projects within the State Water Plan. These bills are Senate Joint Resolution 1, House Bill 4, and House Bill 1025.
- These bills proposed an amendment to the Texas Constitution creating the State Water Implementation Fund for Texas (or SWIFT) and the State Water Implementation Revenue Fund for Texas (called the SWIRFT).
- The bills allow the appropriation of \$2 billion from the economic stabilization fund to the SWIFT, and direct the Texas Water Development Board on how the newly created funds may be used.
- The funds will help communities develop and optimize water supplies at cost-effective interest rates.
- The SWIFT provides the economic opportunity for communities to overcome the challenge of upfront costs by providing low-cost, flexible financing options for water projects.
- Water user groups include cities, rural water users, agriculture, livestock, manufacturers, mining, and steam-electric power.

Note: A Proposition 6 FAQ has been included on page 3.



The new high-speed gates at CRWS make entering and exiting the plant faster and more secure.

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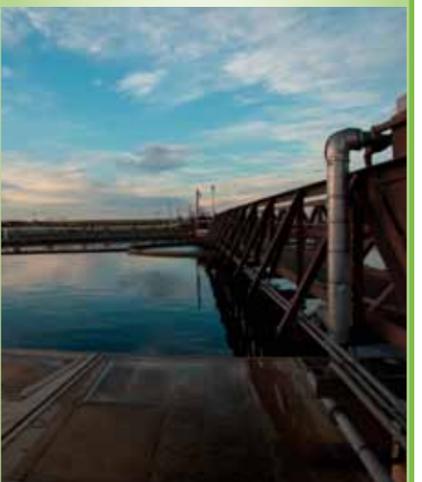
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See more stories online in Current News.



2011 REGION C WATER PLAN

Among the projects included in Region C water plan, the following water management strategies are recommended for TRA through the year 2060:

- Conservation
- Expansions to the Tarrant County Water Supply Project
- Further development of the Ellis County Water Supply Project
- Additional steam electric supply in Freestone County through existing facilities
- Expansion of the existing Las Colinas reuse project in Dallas County with additional transmission facilities
- Development of indirect reuse for Ennis from Lake Bardwell
- Development of reuse for steam electric power generation in Dallas County
- Development of reuse for steam electric power generation in Ellis County
- Development of reuse for steam electric power generation in Freestone County
- Development of reuse for steam electric power generation in Kaufman County
- Development of a reuse project from the Denton Creek Regional Wastewater Treatment Plant for irrigation in Denton and Tarrant counties and municipal use in Tarrant County
- Development of indirect reuse through Joe Pool Lake

Source: 2011 Region C Water Plan

Proposition 6 FAQ

The 83rd Legislature approved three bills as part of a broad package to provide funding for projects within the State Water Plan. These bills include Senate Joint Resolution 1, House Bill 4, and House Bill 1025. Taken together, these bills comprise an amendment to the Texas Constitution creating the State Water Implementation Fund for Texas (or SWIFT), appropriating \$2 billion from the economic stabilization fund to the SWIFT, and directing the Texas Water Development Board on how the newly created fund may be used.

What is Proposition 6?

Proposition 6 creates and constitutionally dedicates two new funds: the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue Fund for Texas (SWIRFT).

Where will the money come from?

The legislature has authorized a one-time, \$2 billion investment from the Economic Stabilization Fund (also known as the Rainy Day Fund) to the SWIFT. These funds are designed to make the financing of water projects more affordable and to provide consistent, ongoing state financial assistance for water supplies.

What will this program do for Texas?

The funds created through Proposition 6 would help communities develop and optimize water supplies at cost-effective interest rates. The upfront costs on water infrastructure can often make it difficult for some communities to build what they need. The SWIFT provides the economic opportunity for communities to overcome this hurdle by providing low-cost, flexible financing options for water projects. This financial assistance will enable local communities to begin needed water projects.

How will the program be used to ensure adequate water supplies?

The funds will be used to provide low-cost financing for projects in the state water plan—a plan created by local and regional entities, with the assistance of the state, to meet future water demands. Every five years 16 regional water planning groups assess the projected population and water demands and supplies in their areas over the next 50 years. Each region then compiles a regional water plan, and those plans are rolled up into the state water plan. The state water plan also includes important information on statewide trends and policy issues, and it lists the water supply strategies identified to meet the regional water shortages over the next 50 years. The 2012 State Water Plan contains numerous strategies to meet water needs during drought. Those strategies are the water supply projects that will be eligible for funding through the SWIFT and SWIRFT.

Is my community represented in the state water plan?

Yes. Every community and every water user group in Texas is planned for. Water user groups include cities, rural water users, agriculture, livestock, manufacturers, mining, and steam-electric power. The 2012 State Water

Plan addresses the needs of roughly 3,000 water user groups.

How will Proposition 6 help rural communities and Texas farmers?

Rural and agricultural stakeholders serve as part of the water planning process. This process identifies water supply projects that go into the state water plan. Our planning process helps identify water projects that are needed by rural and agricultural interests. Moreover, the legislature made serving these interests a priority: directing the TWDB to undertake applying not less than 10 percent of the funds to projects serving rural communities and Texas farmers.

What water supply projects will be supported by these funds?

Projects in the state water plan will be eligible for support from the SWIFT and SWIRFT. These water projects range from conservation and reuse, to desalting groundwater and seawater, to building new pipelines and developing reservoirs and well fields, and include many other kinds of projects as well. Through the regional water planning process, local and regional water experts recommended these projects as the most efficient and viable ones for their communities.

How will this program support water conservation?

The legislature has recognized the importance of water conservation and reuse strategies in managing and protecting the state's water resources. The legislature directed the TWDB to undertake applying not less than 20 percent of SWIFT financial assistance for water conservation and reuse projects. The TWDB is also directed to undertake applying an additional 10 percent for projects to serve rural areas, including agricultural conservation projects. Emphasizing the importance of conservation will help ensure communities use their water wisely and extend the life of their current supplies.

Could these funds be used to build reservoirs?

Since all water supply projects in the state water plan are eligible, reservoirs will be eligible for support from the SWIFT and SWIRFT if they are strategies in the state water plan. Reservoirs make up approximately 15 percent of the total financial assistance requested in the 2012 State Water Plan.

How will the state ensure these funds are protected?

As required by legislation, the \$2 billion investment in the SWIFT will be protected by the Texas Treasury Safe Keeping Trust Company. An advisory committee will evaluate TWDB's management of the funds. Committee members will include the state comptroller, three state senators, and three state representatives. In addition, a regional and state prioritization process will rank projects for funding. The TWDB will manage the administration and disbursement of funds and ensure they are used to finance needed water supply projects. Since it was created in 1957, the TWDB has loaned \$14.3 billion dollars for water and wastewater infrastructure without a single loan default.

How will the funds be disbursed?

Communities and utilities will apply to TWDB for financial assistance, and funds will be disbursed for projects in the state water plan. The TWDB will evaluate and prioritize projects for assistance based on a state and regional process. Many factors will be considered in this evaluation, including the number of people served, the urgency of the project, the ability of the local and regional sponsors to support the project, and the degree of conservation achieved—just to name a few prioritization criteria.

How will the SWIFT and SWIRFT work?

The SWIFT allows for more cost-effective water projects, ultimately saving Texas and Texans money on water. Money in the SWIFT may be used to provide financial assistance for state water plan projects through the following TWDB programs: the Rural Water Assistance Fund, the Water Infrastructure Fund, State Participation, and the Agricultural Water Conservation Fund, as well as the proposed SWIRFT. The SWIFT can support low-cost financing for projects in the form of reduced interest rates, longer repayment terms, and deferred repayment periods of interest and principal.

Can these funds be used to help address the current drought emergencies some communities are facing?

The legislation for these funds outlines several planning requirements and milestone dates. The funds will not be available until March 2015. In the meantime, entities may be eligible for financial assistance through a number of other TWDB programs.

Will this program affect groundwater rights?

No. The SWIFT will not affect groundwater rights or other private property rights in any way. Further, the SWIFT will not affect how groundwater conservation districts manage local groundwater supplies.

Does Proposition 6 require that I install a meter on my groundwater well?

No. There is no provision within Proposition 6 or its enabling legislation that will require landowners to meter their wells.

Will this program change how surface water is regulated?

No. Surface water (water from lakes and rivers) is governed by an entirely separate set of statutes that will not be affected by this program.

Who benefits from this program?

Texas. Cities, counties, water districts, river authorities, irrigation districts, regional water authorities, and nonprofit water supply corporations across this state are all eligible to use TWDB's financial assistance programs to address implementation of state water plan projects.

Source: Texas Water Development Board website

High-speed gates enhance security

Two high-speed security gates have been installed at the Central Regional Wastewater System. One is located at the entry and one at the exit. On average, 700 people come and go through these gates daily. Most of the traffic is contractors and deliveries. That's a lot of vehicles, and the old gates were not up to the task. The new entry gate expedites traffic flow and keeps cars from forming a line as they wait to clear security before being allowed entry.

"During the day when the guard was there, we left the gate open, and the guard just lifted a wooden gate arm from 7 a.m. until almost 6 p.m.," said Bill Tatum, CRWS project manager. "We started researching the replacement gate and found one that was lightweight and durable, allowing one car to enter at a time and operating at speeds up to 8 feet per second."

The new gates are like those in use at military bases and other places where it is important to have a gate that operates quickly. The entry point provides additional security (opening and closing in about four seconds, compared to the 30 seconds it took the older gate system) and helps deter people trying to slip in by tailgating. The gate uses safety sensors to prevent it from closing on anything. However, if it comes in contact with something, it reverses its operation using technology similar to the kind used on most garage doors.

"We knew that we had a problem getting people in and out because the gate could not keep up with the flow of traffic, and we needed a more secure gate that would work and be functional," said Julie Hunt, Northern Region assistant manager of operations.

"Installing the new gates has reduced the manpower that was needed to manage the old ones, and it also has eliminated the need for staff to perform the preventive maintenance that the older gates required. It took six weeks for the new custom gates to arrive, a week per gate for installation, and now entering and exiting CRWS is faster and more secure."

GATE STATS:

- Operates using magnets
- Programmable speed control
- No mechanical moving parts
- No fluids or lubricants, environmentally friendly
- Green technology
- Enhances security and efficiency

Training pays off for the individual, TRA, the community

Like a pebble in a pond, training creates a ripple effect. Sid McCain, project manager at TRA's Tarrant County Water Supply Project, is now a Texas Commission on Environmental Quality certified trainer in Basic Waterworks Operation. Along with his training, McCain also has been approved to teach on the subject. Becoming an approved instructor means that he can teach TRA staff, thereby reducing the cost of training. He recently taught eight employees at his location. In the process, instructors also keep up their own licenses by acquiring renewal hours while teaching.

McCain's training will be particularly valuable when a new Arlington High School intern joins TRA. Next March, McCain is set to teach the 20-hour Basic Waterworks Operation class to about 12 students at Arlington High. "It feels good to be able to offer this class to these students. Once they complete and pass the class, they are eligible for a Class D license, which potentially

can lead to employment at any water utility," said McCain.

"This is TRA's third year to participate in the Arlington Independent School District work study program that promotes water education," added Julie Hunt, Northern Region assistant manager of operations. "TRA has hired a student from this class each year as part of the student's afternoon work requirement for the class. An added benefit to TRA is that we have a chance to show off the opportunities for employment within our organization."

"The level of training that Sid has achieved is only the beginning," stated Cathy Sieger, quality assurance coordinator at Central Regional Wastewater System. CRWS' Raudel Juarez, a senior operator, and David Rosnagel, a chief operator, are also on track to become instructors. "The more approved instructors that TRA has, the more opportunity there will be

to utilize their expertise and to use our facilities and operations as real-world learning labs and examples," said Sieger. "We hope to have approved instructors for the Basic Wastewater Operations, Wastewater Treatment, Collection Systems, Calculations and Utility Safety by the end of November 2014," noted Sieger. "Thanks to the support of our leadership, Wastewater Laboratory and Basic Waterworks Operation are already in our training roster."

"TRA's vision of being an innovative leader includes ensuring that we have technical experts such as trainers on our team. These in-house practitioners who take time out of their normal job duties to train their coworkers are invaluable to us. They are helping TRA develop a competent workforce and meet TCEQ licensing regulations," concluded Hunt.

TRA employees raise the collection system pass rate

Congratulations, metering division staff members! Your pass rate on the Texas Commission on Environmental Quality Class I Collection Systems exam test is noteworthy. It helped push TCEQ's regional school to the highest pass rate in the state, and also well above the previous state average.

"Historically there is a very low pass rate on licensing tests due to the complexity of our business," commented John Durbin, collection system manager at Central Regional Wastewater System. "Because our employees did so well, it helped raise the overall pass rate for the regional school."

The entire metering division staff attended the North Central Texas Regional School last May. The Texas Commission on Environmental Quality offers onsite licensing exams at the school immediately following classes. Five of the seven metering staff members took their test at the school, and they all passed. They are now licensed as Class I Wastewater Collection Operators.

NEWLY LICENSED OPERATORS:

Craig Crowder,
technical services engineer

Mike Miller,
chief electronics tech

Calvin Nguyen,
electronics tech I

Nick Padilla,
electronics tech II

James Thomas,
senior electronics tech

2014 Holiday Schedule

Wed, Jan. 1
Mon, Jan. 20
Fri, April 18
Mon, May 26
Fri, July 4
Mon, Sept. 1
Thur, Nov. 27
Fri, Nov. 28

New Year's Day
Martin Luther King, Jr. Day
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving

More than just holes in the ground

To create a grid that allows for the accurate location of existing structures, Central Regional Wastewater System located long-buried markers and installed new ones.



When a construction project is begun at one of the plants, it is important to know where things are located before anyone goes digging around, especially near things such as pipes, manholes and other underground structures. The reason is obvious. A person might dig something up that did not need to be dug up or he may damage something that is buried. The markers, which can help make the digging process smoother, are typically known as survey monuments or benchmarks. These markers do not always adhere to a set standard when it

comes to design, location, name or appearance. They can be man-made objects or something that occurs in nature such as a large rock. The new survey monuments installed at CRWS follow an implementation standard set by the government.

In the United States, survey monuments have been used since as early as 1791. These monuments make it possible to have construction information that is used on one project interface with subsequent projects. In other words, if a pipe was buried during one construction project, and a later project needed to connect to it, the survey monuments and their coordinate information make it possible to more accurately determine where to start digging.

Regarding the coordinate information that is assigned to a monument, CRWS has historically used a local plant coordinate system. This plant coordinate system was established in 1974, some 16 years after construction on the original plant had begun. However, it was not until 1988 in preparation for the Phase III Earthwork and Slurry Trench Project that six monuments were installed. Over the years, all but two of the six monuments

had been destroyed, and one was replaced around 2006. How these original monuments and the replacement were constructed is unclear, but they appear to consist of a stamped brass disk atop a poured concrete base. Recent efforts at CRWS have made improvements to the installation of monuments.

Following the completion of a recent project, 16 new Primary Control Monuments were installed. The monuments were installed in locations on the plant that were most suitable for accommodating future project needs. Two types of PCMs were used. Nine consisted of an aluminum disk placed in TRA selected structures. The structures were selected for their stability based on the existence of peering, structure depth, overall size and or age. The other seven were aluminum rod-type monuments. They were driven straight down into the ground as far as possible to ensure that they do not move or shift. The 16 monuments were installed to a depth ranging from 24 feet to 68 feet. After each rod was installed, a protective cover with the monument's number and access hatch was placed over the rod. Signs were then placed near each

monument, including the existing three. These signs not only help surveyors locate the monuments, they also provide a means of protecting the monuments from potential damage. Once a monument is set, its location is plotted.

Surveyors evaluated the plant coordinates used by existing structures. As a result, the plant coordinates on the original three monuments were modified slightly so that their positions lined up more closely with the coordinates of existing structures. Updated documentation of the placement of all the monuments now includes photos, a Google earth map, AutoCAD and Global Information System files.

When new projects are undertaken, documentation is provided to engineers and surveyors to help ensure that projects, including the project to accurately map the plant's surrounding levee, do not have the deviations in coordinates found in past projects. The adjustments made to the existing monuments and the placement of new ones put everything on the same grid system and created a new standard of accuracy that saves time and money.



Rod monument cover



Rod monument

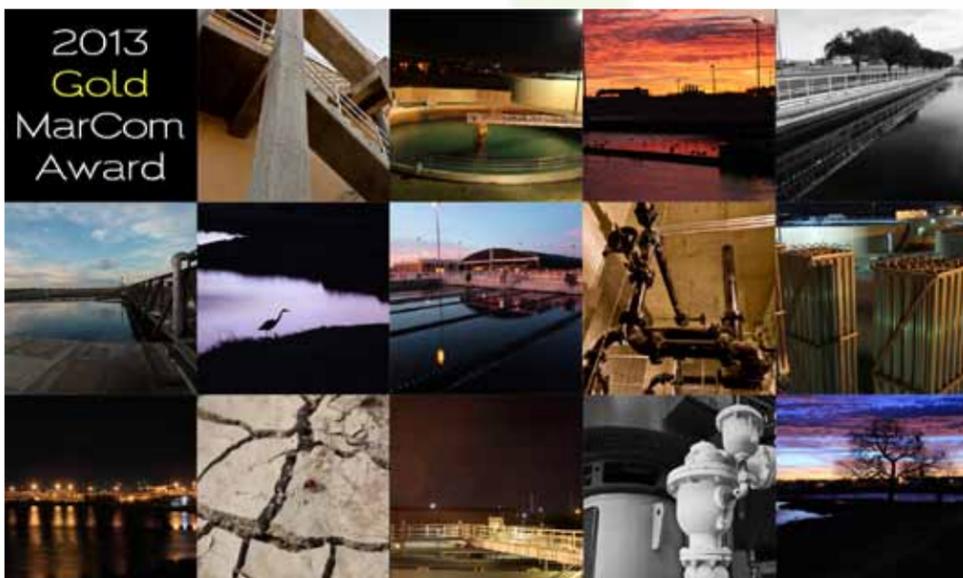


Aluminum disk monument



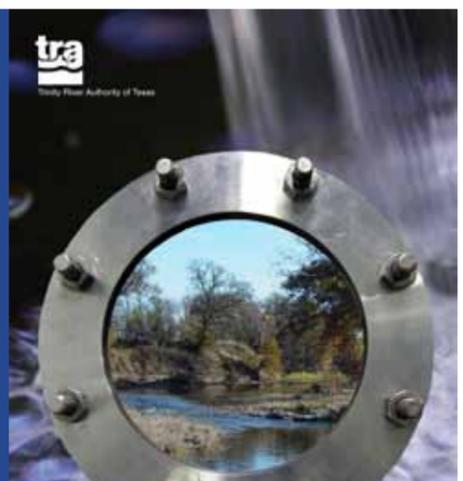
Original monument

TRA's communications division receives two MarCom awards



2013 Gold MarCom Award

Congratulations to Brenna Witt; she won a Gold Award for industrial photography. Brenna would like to thank everyone at each of the Northern Region facilities who took the time to show her around each project and help her set up for each photoshoot.



The TRA general brochure also was recognized with a Gold Award.



2013 Project of the Year – Rehab Runner Up

Trinity River Authority large-diameter CIPP

The Trinity River Authority of Texas (TRA) is the largest wholesale provider of wastewater treatment services in Texas. The conservation and reclamation district provides water-related services throughout the 18,000-sq. mile Trinity River basin to 60 cities and millions of residents.

In April 2012, TRA awarded a contract to rehabilitate more than 17,200 ft. of 96-in. sewer pipelines in the City of Irving. This is one of the single largest projects completed to date for cured-in-place-pipe (CIPP) in the world. The project consisted of nine segments of the 96-in. diameter TRA Elm Fork Interceptor (CAC-11) that needed rehabilitation due to concrete degradation from exposure to hydrogen sulfide (H₂S). The nine segments averaged approximately 2,000 ft. each and were separated into 18 separate installations over the course of the project.

The CIPP portion of the project was designed to meet the criteria of ASTM-1216 in accordance with the depth, diameter and flow requirements of the system. Notice to proceed for the project was issued on May 29, 2012, with a contract completion date of spring 2014. As of June 2013, all nine segments have been completed, almost one full year ahead of the original anticipated completion date.

Four types of rehabilitation were originally specified, including reinforced CIPP, non-reinforced CIPP, and two different types of spiral wound rehabilitation. Fiber reinforced composite was selected for the project. Depths of the inversions ranged from 13 to 26 ft. With full-depth groundwater assumed for design, the resulting thickness requirement was 35 mm, approximately 40 percent thinner

than traditional CIPP due to the use of fiber-reinforced felt tubing. A traditional CIPP project of this length and size would have required nearly 5 million lbs. of resin. Despite this 40 percent reduction in resin, the project still required more than 3 million lbs. of resin.

There was a limited window of opportunity for completion for portions of the project. While undeveloped park land allowed for continual access during the project construction period, a public golf course and two developed, heavily used park areas only allowed for a three-month window for rehabilitation work to minimize socioeconomic impact. If not completed in the restricted window, the contractor would have to wait for the same limited months the following year. In addition, pipeline cleaning in heavy recreational areas was limited to nighttime cleaning only.

There were a host of other project challenges. Access to the project involved crossing concrete hiking and bike trails, which required heavy steel plating for trail protection, as well as flag personnel when trails were in use. In addition, limitations on the maximum length of CIPP installations could not exceed 1,200 ft. due to a study of past U.S. projects. This required two insertions from opposite directions for each 2,000-ft. pipeline segment, with overlapping sections of spliced CIPP. Sound and visual barrier walls were also required at a height of 30 ft. to keep noise below 65 decibels at all installation points in and near park and golf course areas.

Large-diameter CIPP installations present a variety of challenges, including an increase in wall thickness proportionate to diameter, more weight due to the

amount of resin needed, extended cure time, large installation equipment and the need for an onsite wetout facility. The CAC-11 project is one of the largest CIPP projects ever completed, requiring 3.24 million lbs. of resin delivered to the job site in 72 tanker trucks.

Manufacturing, handling, logistics, wetout and installation were all challenging due to the size of the 96-in. tubes. The use of fiber-reinforced CIPP, relatively new technology in the industry, saved nearly 1.8 million lbs. of resin. Beyond the project size, major challenges include the project's location beneath environmentally sensitive areas containing wetlands, an active flood plain with regular flooding during wet weather, and several public areas in the City of Irving, including a golf course, recreational area with playing fields and concrete trail system required to be kept in service.

Nearly half of the project was subject to constraints to protect surface usage during construction. The golf course, for instance, stipulated a three-month winter window to complete six insertions. If the time frame could not be met, the contractor was required to come back in 12 months within that same time period. Further constraints included odor control, 30-ft. high visual screening, sound containment, and noise monitoring to minimize community impact.

From an environmental perspective, wetland and tree clustered areas were cordoned off from construction, resulting in strict access limits enforced with protective fencing prior to construction and temporary roads for access. The floodplain of the Elm Fork of the Trinity River, which

encompasses the majority of the project, was analyzed to predict flood levels during several wet weather events. A real-time weather monitoring system was developed to reduce impacts particularly during the contractor's non-interruptible construction, such as the five-to-six-day insertion and curing process. This weather monitoring system has since been recognized by the National Hydrologic Warning Council for its innovation and was credited with early warning of two flood events during the project. In addition to external flooding potential, the pipeline was subjected to periodic wet weather flow surges internally that could not be diverted, interrupting construction and requiring coordination with system operations throughout the project.

Due to extreme concrete loss (more than 50 percent of the pipe wall) in portions of the project, designs included installation of new reinforced concrete prior to rehabilitation, a technique for adding strength with minimal CIPP wall thickness while eliminating the possibility for resin fins due to large variations in the host pipe inside diameter. At completion, the project was deemed successful at a cost of \$16.5 million, nearly \$3 million below engineer's estimate and \$800,000 below the low conventional CIPP bid, with several accomplishments given the linear footage and diameter, including a 40 percent reduction in resin usage, completion time nearly one year ahead of schedule, and an increase of the total U.S. footage of 96-in.-plus CIPP by over 350 percent.

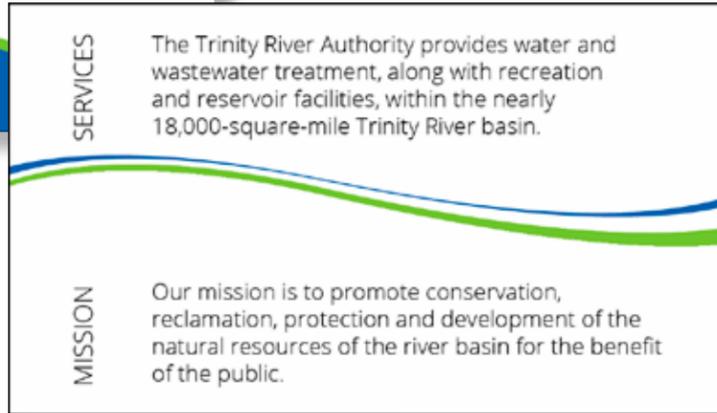
Reprinted with permission from Trenchless Technology

NEW HIRES



Front

TRA is pleased to announce a new design for our official business card.



Back

- LLP is glad to have **Douglas Morris** as maintenance mechanic II.
- PEMD welcomes **Bob Ayensu** as GIS manager.
- SRSS is happy to have **Sherry Allen** as accounting clerk.
- GO welcomes **Kim Probasco** as operations financial administrator and **Sandrine Hacheu** as internal auditor.
- DCRWS welcomes **Matthew Moriak** as operator I and **James Fox** as maintenance mechanic I.
- CSS is happy to have **Amanda Clark** as clerk/typist.
- TCWSP is excited to welcome **Kevin Burks** as O&M chief, **Susannah Hicks** as electrician II, and **James Swords** as senior maintenance mechanic.
- CRWS welcomes the following new team members: **Barron Hall**, maintenance mechanic II; **Christopher Patton**, maintenance mechanic II; **Marcus Martin**, operator I; **Fannyben Patel**, chemist; **Christopher Patin**, technical services engineer.



Worth knowing: tips for a healthier you

With the holiday season behind us, the new year offers an opportunity to start fresh or stay on track by incorporating healthy habits into your daily lifestyle. Consider these reminders and guidelines.

5 HEALTHY TIPS FOR 2014

Whatever your situation, see your health care provider and find out how you can live a safer and healthier life. Here are a few general tips for a safe and healthy life:

- Find health resources to help you achieve your New Year's goals.
- Protect yourself from injury or disease by wearing a helmet, sunscreen, or insect repellent when necessary.
- Make an appointment for a check-up, vaccination, or screening.
- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand sanitizer.
- Learn health tips that take five minutes or less.

A HEALTHY YOU

- Make healthy food choices. Grab a healthy snack such as fruit, nuts, or low-fat cheese.
- Be active. Try simple things such as taking the stairs instead of the elevator. Be active for at least 2½ hours a week. Children and adolescents should get at least one hour of physical activity each day.
- Find out more about the benefits of regular physical activity. Sometimes getting started is the hardest part. Learn what counts as aerobic exercise.
- Be smoke-free. If you are ready to quit, call 1-800-QUIT-NOW for free counseling. Need inspiration? Check out Tips from Former Smokers.
- Get enough sleep. Remember that sleep is a necessity, not a luxury.
- Learn more about healthy living.

A HEALTHY FAMILY

- Learn how to be healthy before, during, and after pregnancy.

- Reduce auto-related injuries by using seat belts, child safety seats, and booster seats that are appropriate for your child's age and weight.
- Learn positive parenting tips to keep teens safe on the road.
- Develop and enforce rules about acceptable and safe behaviors using electronic media.
- Lower the risk of foodborne illness as you prepare meals for your family.
- Serve healthy meals and snacks.
- Encourage and support physical activity.
- Gather and share family health history.
- Be a healthy caregiver.
- Encourage family members to get check-ups and screenings. Make sure they know where to go for care if they do not have health insurance.
- Get pets vaccinated and keep pets healthy.

Source: *The Centers for Disease Control and Prevention*

PROMOTIONS

- **Thomas Baker** was promoted to maintenance mechanic II at TMCRRS.

EMPLOYEE MILESTONES



Bailee Reed, granddaughter of Johnny Hooks, field inspector at LLP, recently took a 10-point buck during the youth-only opening weekend in October. The deer field dressed at 190 pounds.



Brooke and her brother Brett Muñoz, children of LLP office coordinator Kristie Muñoz, compete in dance and Karate. Kristie is so proud of all their accomplishments.



Carion Taylor's great nephew, Abel Rose, a precious 2 year old with a winning smile, recently took part in the San Diego Triathlon Challenge. Abel was the youngest of 250 competitors with physical challenges. The event is hosted by the Challenged Athletes Foundation and works to raise money for children and adults with physical challenges to help them meet their athletic goals.



Billy Hill, MCRWS/ROCRWS project manager, and his wife Vicky celebrated 40 years of marriage on Nov. 15, 2013. Their daughter Theresa Meares and her husband Chris Meares became adoptive parents to Benjamin, 4, and Niya, 2, in November.



Marci Kilgore, buyer at CRWS, recently returned from her dream vacation in Italy. She took over 300 pictures during the 10-day tour and greatly enjoyed her stay overseas.



Billy Lewis, operator II, LLP, is the proud father of Zane Lewis, born Sept. 26.

ANNIVERSARIES

30 YEARS

Barbara Shaw, accounting services supervisor, GO

25 YEARS

Dale Burrow, interceptor system specialist, CRWS

20 YEARS

Julie Hoppe, human resource supervisor, GO
 Ronnie Ellington, operator II, HRWSS
 Cynthia Belvin, technical resources manager, GO

15 YEARS

Jimmie Morgan, field technician II, CRWS
 Joy Varughese, senior maintenance mechanic, CRWS
 Anthony Chavarria, maintenance mechanic II, CRWS

10 YEARS

Miguel Nava, operator I, CRWS

5 YEARS

Jessie Borries, environmental inspector, CRWS
 Ernest Fink, inspector II, CSS
 Dr. Hong Wu, environmental scientist II, GO

3 YEARS

Ron McCaffrey, senior maintenance mechanic, TCWSP
 Keith Stone, operator I, TMCWWS
 Pam Thomas, senior secretary, GO
 Basilio M. Chavez, maintenance mechanic chief, TMCWWS

Awards & Accolades



Angela Kilpatrick, (standing above), environmental scientist I, graduated in December 2013 from the University of Texas at Arlington with a Master of Science in environmental science.

Julie Hunt has been selected to serve on the Board of Directors of the Water Environment Research Foundation. Her term starts Jan. 1, 2014.

There are **10 "A" licensed operators** among the Huntsville Regional Water Supply System, Livingston Regional Water Supply System, Trinity County Regional Water Supply System, and Southern Region Support Services, which manages the three water systems.



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CReWSers Raudel Juarez, Dale Burrow, and Jake Burwell compete in the collection event at Nationals in Chicago, Ill. This event simulates a crack in a service line. Team members work together to repair and replace the section of pipe. The CReWSers finished in first place at Texas Water in April 2013 and won third place overall at Nationals.