February/March 2006

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Newsletter of the Trinity River Authority of Texas

Trinity County Regional Water Supply System

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The Trinity River Authority Warns of Water Shortage and Potential Loss of Supply for Trinity County Regional Water Supply System Customers

Low Water Level in Lake Livingston Causes Reduction in Water Production

In early April, the Trinity River Authority sent a *Notice of Water Shortage and Potential Loss of Supply* to the customers of its Trinity County Regional Water Supply System, which include the cities of Trinity and Groveton, the Trinity Rural Water Supply Corporation, the Glendale Water Supply Corporation, Riverside Water Supply Corporation and the Westwood Shores Municipal Utility District.

TRA's Trinity County project is currently experiencing a reduction in water production due to the low level of Lake Livingston.

TCRWSS has provided some, or all, of the water supply needs of its six wholesale customers by pumping raw water from Lake Livingston through eighteen shallow wells located in natural sand and gravel deposits at the upper end of the lake. The raw water is then transported to the adjacent treatment plant, where it undergoes additional filtration and disinfection before it is pumped to the six wholesale customers.

The TCRWSS well field is currently experiencing a reduction in production due to the low level of Lake Livingston. The Trinity River Authority lowered the water in the lake last September as Hurricane Rita battered Lake Livingston dam with high winds and powerful wave action. Approximately 80 percent of the large stone riprap and bedding material that protects the earthen embankment was removed, exposing the upper 18 feet of the earthen portion of the dam. Some areas of the earthen embankment were severely eroded.

Lake Livingston's Emergency Action Plan was implemented and the lake level was rapidly lowered by four feet to protect the 2.5-mile long dam from further damage. This was the first emergency drawdown of Lake Livingston since it filled 35 years ago. The lower lake level must be maintained until the earthen embankment is substantially repaired.

In mid-January, TRA's contractor began placing new 8-inch diameter bedding material and 32-inch diameter stone riprap on the upstream slope of the dam. Approximately 70,000 tons of the large riprap needed replacing.

The reduced level of water in Lake Livingston causes a reduction in head pressure around the TCRWSS well field and greatly reduces the amount of water that can be pumped through the sand and gravel deposits. This loss of production has been experienced on a number of occasions over the past 25 years when the lake level dropped significantly due to drought conditions. Typically, with the lake at normal pool elevation of 131 feet above mean sea level, the well field can produce approximately 1,100 gallons per minute. At the lower level of 127 msl, well production has steadily declined over the past few months to the current production capacity of 550 to 600 gallons per minute.

TCRWSS produces water for the system's six wholesale customers by pumping raw water from Lake Livingston through eighteen shallow wells located in natural sand and gravel deposits at the upper end of the lake. The well field, seen here, normally produces 1,100 gallons per minute. Production has been sharply reduced due to reduced water levels in Lake Livingston.

Because Trinity County, like most of the state, has been experiencing drought conditions for quite some time, it is anticipated that demand for water will increase in the coming weeks. Given the loss of approximately 50% of TCRWSS water production capability, a water shortage may occur in the near future.

Blessed with good weather, the repairs to Lake Livingston dam have progressed well and are expected to be substantially complete the last week in April. Progress could be slowed if wet weather or other delays are experienced.

Once the repairs to the dam are substantially complete, TRA will allow the lake to start refilling. How long it will take the lake to reach normal pool elevation is not known since it depends on rainfall in the Trinity River basin upstream from the dam. A few weeks with prolonged heavy spring rains could refill the lake in the next two months. If that does not occur, fall is typically a wet period and it may happen then. A continuation of the current drought conditions may delay re-filling for a longer period. When the lake does refill, it will take some time for the water to re-enter the sand and gravel area of TCRWSS' well field and increase water production.

Given the uncertainties surrounding the level of water in Lake Livingston, TRA will be closely watching TCRWSS' well production and the water demands of its customers to determine the extent water conservation, and drought contingency measures may need to be implemented.

The current situation, considered a *mild water shortage condition*, will rapidly change to a *moderate water shortage condition* if water demands increase. If production from the TCRWSS well field continues to decline, a *severe water shortage condition* could occur.

TRA urges its TCRWSS wholesale customers to notify their customers of the current water conditions, promote water conservation measures and be prepared to implement their drought contingency plans.

On the cover: The Trinity County Regional Water Supply System treatment plant. The Trinity River Authority has warned the wholesale customers of TCRWSS of an impending Water Shortage and Potential Loss of Supply as water production decreases and demands for water increase. The system's customers are urged to conserve water and be prepared to implement their drought contingency plans. See Story, this page.

Inside:

General Manager's Message

TWCA Assumes Proactive Stance on Federal Water Issues

General Manager Danny Vance

Texas Water Day 2006 is a new initiative on the part of the diverse membership of the Texas Water Conservation Association to promote a broad array of pending federal legislation with members of Congress and their staff members in Washington, D.C.

The Texas Water Conservation Association (TWCA) is the leading organization in Texas devoted to conserving, developing, protecting, and using the water resources of the state for all beneficial purposes.

The second organized state-wide lobbying effort took place on March 15, 2006 and involved approximately 80 TWCA members. The group was divided into teams based on regions and were assigned specific issues and legislators to visit.

This is a tough time to be pursuing funding in Washington with all of the priorities that are being given to two hurricane recovery efforts and other pressing funding issues, but it is worth while for the precedent that it establishes with members of the Texas water community.

Other states, most notably California, have long practiced similar state-wide lobbying efforts with extremely positive results. It is the intent of TWCA's Federal Affairs Committee to make this lobbying effort an annual event.

In the planning for this trip, two primary issues that all team members were encouraged to promote were identified. The TWCA delegation prioritized its issues so Texas' elected representative could focus on the most urgent needs. The first was the reauthorization of the Water Resources Development Act (WRDA),with the inclusion of a Texas Environmental Infrastructure Program in the WRDA and adequate funding for the U.S. Army Corps of Engineers.

The grass-roots SB 1 water resource planning effort in Texas has identified the projects that need to be developed to provide for the state's future water needs. The estimated cost of the total package is in excess of $17 billion. WRDA would help to establish a local-state-federal partnership to implement, on a priority basis, the SB 1 water projects.

The proposed Texas Environmental Infrastructure Program will help bridge the gap between planning and construction. Critical to Texas water is strengthening the partnership with the Corps of Engineers. A strong, focused partner is needed to help provide solutions for meeting the future water needs of Texas.

The second major initiative the Texas contingent supported in Washington was the restoration of funding for United States Geological Survey's stream and reservoir gaging stations. These stations are strategically located on major rivers and many of their tributaries. These gages produce valuable data for water managers, emergency management personnel, recreational users and environmental monitoring.

The Cooperator Program in which the federal government and local interests share the cost of operating and maintaining these important stations began as a 50/50 cost-sharing arrangement. There has been a progressive shift in the financial burden to the local cooperators and in some cases is as high as 75/25.

The net result is that every year there are fewer gaging stations and less critical data available. TRA is a local cooperator in conjunction with the the cities of Fort Worth and Dallas in funding a series of gages in the upper Trinity River watershed. TRA also sponsors a series of gages in the lower basin upstream, around and down stream of Lake Livingston.

The data made available is invaluable for water quality planning and the operation of Lake Livingston. The fact that there are thousands of users for the data that is publicly available; and that these users do not fund any portion of this gage network is an issue that so far has not slowed the shift of financial responsibility to identified local cooperators, such as TRA.

The Texas contingent made a specific request for an additional $2.5 million for the Cooperative Program earmarked for Texas in order to return to true 50/50 partnerships and an increase of $3.5 million in the USGS National Stream Flow Program earmarked for Texas.

Other issues discussed with legislators and their staff members included private activity bonds, flood control and FEMA funding, water reuse, brackish groundwater and sea water desalination, invasive aquatic and riparian plants, funding for small public water systems, and issues regarding the condemnation of land for economic development purposes.

The effort to educate and influence legislation is hard to gage. There is no question, however, that Texas water interests have much better odds of securing federal funds for Texas water issues by being proactive on the front lines of policy making.

Dr. Browning, TRA's Senior Manager, Planning & Environmental Management, stands next to the Beach Street USGS Gage on the West Fork of the Trinity River. USGS gages produce valuable data for water managers, emergency management personnel, recreational users and environmental monitoring.

CRWS Named Plant of the Year

Trinity River Authority's Central Regional Wastewater System was named Plant of the Year by the Water Environment Association of Texas.

WEAT gives the Plant of the Year award to a wastewater treatment plant in Texas that has consistently exhibited outstanding performance of daily activities beyond the normal call of duty.

According to WEAT, CRWS was considered for the award due to the systems excellent records with safety, permit compliance, water reclamation and reuse, Operations Challenge Team, odor mitigation, and beneficial biosolids land application. A brief look at each of these topics makes clear why the system is deserving of this award.

CRWS maintains a sterling safety record. During the year 2005, CRWS recorded less than one loss-time incident per 100 employees. The system has a multi-faceted safety program which begins with individual training for new employees and continues with a system-wide safety committee and involvement with community safety.

Another area of outstanding performance is CRWS' excellent record of compliance with its National Pollutant Discharge Elimination System Permit. CRWS has maintained 100% permit compliance continuously since 1994.

CRWS operates the largest urban water reclamation and reuse program in Texas capable of providing 17 MGD of recycled water to the Los Colinas canals and irrigation of several golf courses.

The CReWSers, CRWS' highly competitive Operations Challenge Team, are the 2005 National Champions and have won the state championship for the last nine consecutive years.

CRWS pursues a pro-active odor mitigation program, the cost of which totals more than $15 million since 1980.

Finally, CRWS produces Class A biosolids, 100% of which is beneficially reused in a land application program.

CRWS has a long history of outstanding performance starting in 1957 when the Trinity River Authority (TRA) pioneered the concept of regional wastewater treatment by establishing the Central Regional Wastewater System. Now the third largest plant in the state, the CRWS facility has over 200 miles of pipeline serving all or part of 21 contracting parties with approximately 1.2 million people being served in the Dallas/Fort Worth geographical area.

Employee Milestones

New Hires

Sue C. Beard joined the NR as Secretary. GO welcomes **Brenda L. Porter** as Clerk/Messenger. **David E. Terrill** joined the NR as Manager, Development Engineering. GO welcomes **Arthur G. Encinas** as Maintenance Mechanic I. **Prentice A. Powell** joined CRWS as Maintenance Mechanic I. CRWS welcomes **Eric M. Palmer** as Lab Technician II.

Promotions

CRWS promoted **Paul Carter** to Senior Maintenance Mechanic.

Current Events

David Mickelson, Instrument Tech II at TCWSP, and his wife Jami, are celebrating the birth of their first child. Isabella Frances Mickelson was born on February 20, 2006 weighing 6 pounds, 10 ounces and was 20.5 inches long.

Tom Seimet, Senior Maintenance Mechanic at TCWSP, and his wife Dori, celebrated the birth of their first grandchild. Leah Mae Bashwiner was born to their daughter, Darla Bashwiner on February 20, 2006. Leah weighed 6 pounds, 5 ounces and was 18 and 3/4 inches long.

David Hatley, Lab Supervisor at CRWS, and his wife, Susan celebrated their 30th wedding anniversary on February 28, 2006. Congratulations David and Susan!

Sam Scott, Executive Services Manager, and his wife Linda welcomed their fourth grandchild on March 29. Lauren Elizabeth Hearne was born to Cristin and Steve Hearne of Austin. Lauren has two older brothers.

Carl R. Naumann, Operator II at DCRWS, and his wife LeeAnne, have a new son. Jaxson Ryan Naumann was born on March 15, weighing 7 pounds, 14 ounces and was 18-1/2 inches long.

Corley Call, age 17 years, granddaughter of Betty Call, Southern Region Services Coordinator, won Grand Champion with her lamb at the Montgomery County Fair in March 2006. Her lamb brought $11,000 at the auction. She recently showed a pig and a lamb at the Houston Livestock Show, placing in each of those classes. She also showed a pig at the Denver Western National Livestock Show this year where she won her class and breed. Corley received a nice check at the sale at both Denver and Houston. Corley is a junior at Splendora High School and has been showing animals since she was 4 yrs old.

Anniversaries

20 years

Stacy Rosetta, Accounting Clerk, LLP

10 years

David Dupuy, Chief Electrical Technician, CRWS

Katrina Kirkendall, Secretary/Bookkeeper, DCRWS

Richard Postma, Assistant Manager, CSS

5 years

Marina Shepelev, Chemist, CRWS

Joe Adams, Operator II, CRWS

Greg Hester, Operator II, CRWS

William Taylor, Electrician II, CRWS

CReWSers Seize Ninth Consecutive State Win

The Trinity River Authority's Operation Challenge Team from Central Regional Wastewater System, the CReWSers, won their ninth consecutive State Championship at Texas Water 2006 in early April in Austin, Texas.

TRA's team won four of the five competition events, easily taking the State Championship.

Last year proved to be the CReWSers most successful year when they won the 2005 National Operations Challenge competition in late October in Washington, D.C.

"This team is phenomenal. They beat the national record in the Collection event at this state competition," notes Bill Tatum, CRWS Project Manager.

In an ironic turn of events, the CReWSers lost the Pump Maintenance event to the Dallas Aqua-Techs. TRA's team had taken the Dallas team under their wing, helping them to train in the days before state competition. The CReWSers finished 45 seconds faster than the Dallas team but suffered penalties. Even with penalties, TRA's final score was better than they did at the competition last fall: when they won the National Championship. The Dallas Aqua-Techs put in an excellent performance finishing just 2.78 seconds faster and managing to steal the event from the CReWSers.

Luck was with the CReWSers on the Laboratory event. They finished nearly seven minutes behind their national time but still managed to win by a tiny margin of 12.9 seconds over the Aqua-Techs.

The CReWSers beat their national time in the Safety event and scored about the same in Process.

The Operations Challenge Competition got off to an exciting start at the Texas Shootout, a new competition that tests PVC pipe cutting skills using a straight saw and a hole saw. The Shootout showcases two skills that are a basic part of the collection system event, a competition that requires precision, brawn and speed in equal parts. Individual members of the operations challenge teams participated in this competition. Winning honors went to the Power SAWS, an upcoming team from the San Antonio Water System, and the city of Austin's Dillo Express.

The CReWSers will defend their Division 1 National Championship title at the Water Environment Federation's National Operations Challenge Competition in October on their home turf in Dallas, Texas. Four other Texas teams will compete in Division 2 of the same competition. It should be an exciting day.

John Bennett, DCRWS Project Manager Wins the Hatfield Award

John Bennett, Project Manager at the Trinity River Authority's Denton Creek Regional Wastewater System received the Water Environment Association of Texas' Hatfield Award at the Texas Water 2006 conference held in Austin in early April.

The William D. Hatfield Award recognizes operators of wastewater treatment plants for outstanding performance and professionalism.

Bennett has been employed by TRA since the day after he graduated from high school. He was originally hired as a seasonal grounds care employee at the Central Regional Wastewater System and was promoted to Maintenance Mechanic I within weeks. Just three years later, Bennett was promoted to Chief Maintenance Mechanic where he developed a reputation for being the go-to person to get the job done.

During his career, he has accrued a total of 904 hours of Texas Commission on Environmental Quality-approved training hours and earned a Class "A" Wastewater Certification in August of 2000. He graduated Phi Theta Kappa from Tarrant County College with AA in Management in December of 2001. He is a past recipient of the V. M. Ehlers Scholarship and is currently pursuing an undergraduate degree in Management at The University of Texas at Arlington.

While at CRWS, Bennett developed and expanded the personnel training program, creating training programs specific to the technical requirements of the Operations, Maintenance, and Technical Services Departments at the plant. Subsequently, the Central training programs received TCEQ "Approved Provider" status.

In 2003, Bennett was promoted to the position of Manager at the TRA's DCRWS. The DCRWS plant expanded to a 5 MGD facility in 2005. DCRWS serves a geographical area currently undergoing rapid development. As a result, DCRWS has already begun the process of planning for the next expansion.

Under Bennett's management, the plant produces a highly polished effluent with ammonia and BOD levels consistently under 1 mg/l.

Bennett is the former captain of the tremendously successful TRA CReWSers Operations Challenge team.

In 2003, Bennett was named the Water Environment Association of Texas' Municipal Operator of the Year.

CRWS Maintenance Mechanic Finds a Forever Friend in Stray

Scruffy showed up at Trinity River Authority's Central Regional Wastewater System's treatment plant on a cold January morning in 1999. Barry Van Campen, Maintenance Mechanic II, first noticed her lying on the cold grass as he was walking to the Operator's Building. As Van Campen approached the dog, she began barking. At first, he was concerned she would bite but she proved more of a barker than a biter.

The dog, a medium-sized terrier mix, looked sick. Van Campen shared some food with her igniting a warm and long-lasting relationship between the man and pooch.

Scruffy, as she has come to be known, is sometimes thought of as the plant mascot. Everyone knows she is Van Campen's dog as the two are inseparable. He considers Scruffy his partner and friend. Scruffy greets Van Campen every morning as he arrives at work and accompanies him around the plant as he performs his duties, barking at all who approach.

Van Campen has been primarily responsible for Scruffy's care. He feeds her and takes her to the veterinarian on a regular basis.

After seven years of taking care of each other, Scruffy and Van Campen have formed a strong bond, sure to last.

Barry Van Campen, Maintenance Mechanic II, has been a true friend to Scruffy since the dog first appeared at CRWS in January 1999. Scruffy's love for Barry is evident on her face as she gazes up at him.

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