

A QUARTERLY NEWSLETTER FOR THE LOWER COLORADO RIVER BASIN: WORKING TOGETHER TO SOLVE COMMON PROBLEMS

## TCRFC MARKS FIRST FIVE YEARS

The Texas Colorado River Floodplain Coalition (TCRFC) commemorated its five-year anniversary at its biannual meeting Nov. 14, 2006. The meeting, attended by board members, legislative staff and floodplain coordinators, highlighted the accomplishments of the five years since the coalition's creation and provided an opportunity to plan future initiatives.

Guest speakers, former State Representative Bob Turner and Mark Warren of the Texas Association of Counties, shared their perspectives on working with the Texas Legislature, engaging members within the coalition and improving organizational effectiveness.

Coalition members discussed plans to continue working with the Federal Emergency Management Agency to increase the effectiveness of local flood protection programs and to update floodplain maps in the basin. The group also plans to recruit new members to join the coalition and will continue to promote flood safety efforts such as the NOAA weather radios and the Turn Around, Don't Drown educational programs.

Previous board member Renee Blaschke, former Mayor of Smithville, and outgoing Chairman James Oakley, Burnet County Commissioner, were recognized for their service to the coalition. Plaques were presented to the 30 charter member communities during a recognition ceremony.



TCRFC Board members celebrate five years of success. From left to right, Region II Representative Vickie Box, Bastrop County; Region III Representative Terry Felton, Marble Falls; Region I Representative Monica Martin, Wharton County; Treasurer Brian Shirley, Marble Falls; incoming Chair Rob Lindsey, Mills County; and former Chair James Oakley, Burnet County.

Authority's continued support for improving floodplain management initiatives in the basin."

The coalition also is working to improve statewide floodplain management initiatives by supporting additional staffing and funding at the state level. The Texas Senate Intergovernmental Affairs Committee has studied these issues as a part of its interim charges. The coalition will partner with the Texas Floodplain Management Association and other groups to support these initiatives during the upcoming legislative session.

TCRFC is a partnership of 54 cities and counties in the Colorado River basin and surrounding areas seeking better ways to reduce and mitigate flood damage. The coalition was formed in response to a combination of rapid growth, a greatly expanded number of homes and businesses in the floodplain and devastating floods that have recurred in the basin. The Lower Colorado River Authority provides administrative and technical support to the coalition.

The coalition partners with local cities and counties to strengthen floodplain programs, raise standards and increase coordination between neighboring communities with the goal of preventing and reducing flood damages. The coalition also works to increase state and federal funding to provide basinwide coordination among local floodplain programs and increase public outreach and input on flood issues.



Chair Rob Lindsey of Mill County speaks to the group during its biannual meeting on Nov. 14.

"The TCRFC should be proud of its continued success in the basin," said incoming TCRFC Chairman Rob Lindsey of Mills County. "The coalition appreciates the Lower Colorado River

### WHAT'S INSIDE

NOAA recognizes 2006 Mark Trail Awards..... 2

Floodplain News in Brief..... 2-3

Floodplain Mapping Update..... 4

Pre-Mitigation Program ..... 4

Winter Weather Outlook..... 5

Recreating 1938 Flood..... 6

Floodplain Manager Spotlight ..... 7

Roy H. Byars Honored ..... 7

Events Schedule..... 8

**This award recognizes NOAA's mission of protecting lives and property.**

## NOAA recognizes Central Texans with 2006 Mark Trail Awards

In September the National Oceanic and Atmospheric Administration (NOAA) presented two Mark Trail Awards for weather awareness efforts in Texas. Roy Sedwick, CFM, LCRA senior floodplain coordinator and Texas Floodplain Management Association executive director, received this national award for his support of NOAA's Weather Radio All-Hazards program.

Sedwick has been a strong advocate of NOAA Weather Radio All-Hazards and has used his flood management position to promote NOAA Weather Radio for flood warnings. He is also being honored for launching a NOAA Weather Radio All-Hazards matching program in which local communities receive a free receiver for every one they purchase.

The Lower Colorado River Authority, KXAN-TV 36 and H-E-B also received the award for their support of the NOAA Weather Radio All-Hazards program. Over the past two years, these organizations have distributed more than 30,000 radios at H-E-B stores throughout Texas.

"With this award, we recognize these recipients for their important contribution to NOAA's mission of protecting lives and property," said retired Navy Vice Adm. Conrad C. Lautenbacher Jr., Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator. "Whatever the danger, whatever the hour, when minutes count, count on NOAA Weather Radio All-Hazards."



(from left to right) Jim Spencer, KXAN-TV meteorologist; Bob Rose, LCRA meteorologist; Vice Admiral Conrad C. Lautenbacher Jr., USN (Retired), assistant administrator for Weather Services, NOAA; and Roy Sedwick at a reception in Washington, D.C. where the Mark Trail Awards were presented.

Celebrating its 10th year, the awards program honors individuals and organizations that use or provide NOAA Weather Radio All-Hazards receivers or transmitters to save lives and protect property. Twenty-four award recipients have been recognized nationally this year. The Mark Trail Awards are named for the nationally syndicated comic strip character that serves as the campaign symbol for the NOAA Weather Radio All-Hazards program. Since 1995 Jack Elrod, writer and illustrator of Mark Trail, and King Features Syndicate have been strong advocates for publicizing severe weather safety through the use of the radios.

## FLOODPLAIN NEWS IN BRIEF

### New handbook provides tools for coastal communities

The Association of State Floodplain Managers (ASFPM) has developed No Adverse Impact (NAI) floodplain management, a managing principle to address the shortcomings of the typical local floodplain management program. Rather than depending upon the minimum requirements of federal programs, NAI provides tools for communities to provide a higher level of protection for their citizens and to prevent increased flooding now and in the future. In 2003 ASFPM published No Adverse Impact—A Toolkit for Common Sense Floodplain Management, which did not address issues specific to coastal issues. This year, ASFPM has published the draft of No Adverse Impact in the Coastal Zone. To view a copy, go to [www.floods.org/NoAdverseImpact/coastal.asp](http://www.floods.org/NoAdverseImpact/coastal.asp).

### Resource for stormwater managers

The Stormwater Manager's Resource Center (SMRC) Web site has been revised, reorganized, and updated to supply the latest research and resources for the storm water professional. A project of the Center for Wetland Resources, and funded by the U.S. Environmental Protection Agency, the SMRC was originally launched in 2001 to provide communities covered under the National Pollutant Discharge Elimination System Phase II with the tools and techniques necessary to protect their watersheds. In the intervening years the SMRC has provided indispensable resources to storm water managers including model ordinances, design specifications and guidance manuals. The Web site also has generated well over half a million hits. In tandem with this project, the center has also over-

hauled its main Web site to better provide watershed practitioners with the resources they need such as guidebooks, slideshows, example watershed plans, and model ordinances. Visit the SMRC at [www.stormwatercenter.net](http://www.stormwatercenter.net) and the center's main Web site at [www.cwp.org](http://www.cwp.org).

## Public dedication of the New Taiton NOAA All-Hazards radio broadcast

The National Weather Service began a new NOAA All-Hazards radio broadcast on 162.450 MHz from New Taiton (Wharton County). The new broadcast will serve Wharton, Colorado, Matagorda, Jackson and Fort Bend counties.



The left radio is the WR-100 model and retails for \$24. The right radio is the WR-300 model and retails for \$36.

NOAA All Hazard Radios broadcast National Weather Service warnings, watches, forecasts and other hazard information 24 hours a day. Working with the Federal Communication Commission's (FCC) Emergency Alert System, NWR is an "All Hazards" radio network, making it the single source for comprehensive weather and emergency information. In conjunction with federal, state and local emergency managers and other public officials, NWR also broadcasts warning and post-event information for all types of hazards – including natural (such as earthquakes or avalanches), environmental (such as chemical releases or oil spills), and public safety (such as AMBER alerts or 911 telephone outages).

## Floodplain Coalition Thanks LCRA with resolution

Texas Colorado River Floodplain Coalition Chair and Burnet County Commissioner James Oakley recently presented a resolution to the LCRA Board of Directors on behalf of the Texas Colorado River Floodplain Coalition (TCRFC) to thank LCRA for its support of the organization.

"LCRA has been a leader in stewardship and floodplain management for decades and has made Central Texas a safer place to live," Oakley said.

At the LCRA Board's Oct. 18, 2006 meeting, Oakley thanked LCRA for fostering the coalition's basinwide programs and services that provide guidelines for mitigating hazards, updating floodplain maps, helping communities obtain lower-cost flood insurance by improving floodplain management, and distributing all-hazard radios. LCRA Board member Ida A. Carter, representing Burnet County, in turn thanked Oakley for his leadership of the coalition. "James has played a significant role in helping the communities of the Colorado River basin work together to protect life and property during the river's regular floods," Carter said.

## Floodplain issues at the Legislature

The Texas Senate Intergovernmental Relations Committee issued its interim report in December 2006. The report includes recommendations to address outdated floodplain maps and rising insurance costs and can be viewed at [www.senate.state.tx.us/75r/senate/commit/c520/c520.htm](http://www.senate.state.tx.us/75r/senate/commit/c520/c520.htm). Senator Royce West serves as the chair of the Intergovernmental Relations committee. Senator Mario Gallegos Jr. serves as chair of the newly formed committee on flooding and evacuation.

The report supports improving the state's flood management programs with better organization, funding and staffing and recommends that flood studies should be done on a watershed basis rather than based on population. Legislation is being drafted that would consolidate the programs under the Texas Water Development Board, funded by a percentage of the tax revenue from sales of flood insurance policies, which totaled \$3.3 million in general revenue in 2006.

## '07 New Year's Resolution

Let's do better in the Community Rating System! Roseville, CA became the first Class One community in the Community Rating System. Insurance policy holders there will receive a 45 percent discount.

Remember to check out 1610 am or 1670 am for LCRA rebroadcasts of NOAA All-Hazards radio.

## FLOODPLAIN MAPPING UPDATE

Updating floodplain maps is a top priority for the Federal Emergency Management Agency (FEMA). Updated Flood Insurance Rate Maps (FIRM) and Flood Insurance Studies (FIS) are critical tools in the effort to protect lives and property in the lower Colorado River basin. Progress continues on remapping projects in this basin.

### BURNET COUNTY

Burnet County will receive nine new map panels in conjunction with the Travis County mapping project. These are being provided in order to keep floodplain information consistent along Lake Travis between the two jurisdictional boundaries. The deadline for appeals and protests was Sept. 14, 2006. As soon as FEMA reconciles these, a letter of final determination will be issued. Communities affected by these maps will have six months to adopt the new maps into their local floodplain regulations. The map modernization project for the entirety of Burnet County is scheduled to begin in 2007.

### FAYETTE COUNTY

FEMA finalized the maps on April 17, 2006 and issued a letter of final determination. The final maps became effective on Oct. 17, 2006.

### MATAGORDA COUNTY

The Matagorda County flood map scoping meeting was held April 12, 2006. In accordance with the scope of the study, the study contractor will use

existing technical information and studies provided by the county, cities, LCRA and other agencies to update existing mapping information, perform re-delineations, and match to the topography in order to create the new maps.

### TRAVIS COUNTY

FEMA delivered preliminary DFIRMs to Travis County communities in February 2006. The deadline for appeals and protests was Sept. 14, 2006. As soon as FEMA reconciles these, a letter of final determination will be issued. Communities affected by these maps will have six months to adopt the new maps into their local floodplain regulations.

### WILLIAMSON COUNTY

FEMA delivered preliminary DFIRMs September 2006. FEMA conducted a community coordination meeting in December to discuss the appeals and adoption processes for the maps. Public notice about the maps and any new base flood elevations are expected to be published in late December and early January, starting a 90-day appeal period. Any appeals or protests to the FIRMs or FIS should be made through the local community to FEMA during that 90-day period.

### SCHEDULED TO START IN 2007

Brown and Burnet counties are scheduled to be mapped in 2007.

## Pre-Disaster Mitigation program enhanced

The Federal Emergency Management Agency (FEMA) released the guidance for the fiscal year 2007 Pre-Disaster Mitigation (PDM) program in November including several enhancements. First Congress doubled the appropriation for the coming year from \$50 million to \$100 million for competitive grants, technical assistance, and program support. This significant increase in federal funding will help states and local jurisdictions plan and implement mitigation activities before disasters strike.

Second, the PDM program for each state now will receive no less than \$500,000 provided that the State submits sub-applications in that amount that meet

all of the national eligibility requirements of the program as stated in the guidance. This will provide a more predictable level of funding for states.

In addition, FEMA has decided that there will be no limit to the number of sub-applications states can submit during the 90-day application period in FY 2007. Therefore, all eligible sub-applications will be forwarded and reviewed during the national ranking process.

The PDM application cycle begins in the fall of each year. Applications are due in February. For more information, see [www.fema.gov/government/grant/pdm/index.shtm](http://www.fema.gov/government/grant/pdm/index.shtm).

## Winter weather outlook: What changes will El Niño bring?

By BOB ROSE

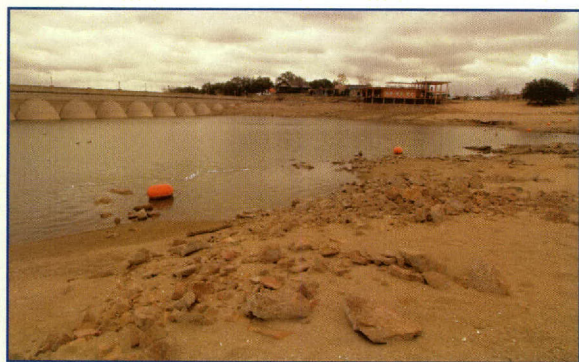
LCRA Chief Meteorologist

The year 2006 turned out to be warm and relatively dry across Central and South Texas. A moderate to severe drought that began in spring 2005 continued and grew worse in 2006, with widespread rainfall deficits by late fall of 9 to 12 inches. At the same time, the summer of 2006 ended up being one of the warmest on record.

But there was light at the end of the tunnel. A strengthening El Niño in late summer and fall was supposed to bring a change in the weather pattern, with an end to the drought and the development of widespread, drenching rains. Similar weather changes took place with El Niños in 1991, 1997 and 2004.

However, this year has been quite different from previous El Niño years. Only limited autumn rains fell during autumn, and November ended up unusually dry. Despite a moderate El Niño in place, the weather across the nation during autumn resembled that of a La Niña (which is typically dry across the southern U.S.), rather than a moderate El Niño (which is typically wet).

With the weather pattern out of sorts, this has left many climate experts, including myself, wondering what type of weather will occur this winter.



Lake Buchanan is feeling the effects of the ongoing drought. This photo was taken January 9, 2007.

### This El Niño system not like recent ones

The current El Niño may be somewhat different from the ones that have historically brought widespread fall and winter rains to our region. This year's El Niño features unusually warm water mainly in the central Pacific Ocean, with slightly cooler waters off the coast of South America. This unusual distribution of warm water in past years

has generally resulted in unusual weather across parts of the United States.

It's also worth noting the current El Niño developed late in the summer, an uncommon time for its development. As a result, the atmosphere didn't have sufficient time to react to these developments, and the previous drought pattern continued.

Long-range forecast solutions indicate a moderate El Niño will continue this winter and slowly weaken this spring into early summer. The solutions indicate that while this El Niño may be somewhat of an oddball, its influence will increase this winter, bringing wetter and somewhat colder weather to Central Texas.

Looking back at previous winters with late starting El Niños, most of them ended up with near normal rainfall. However, none of them showed extremely heavy or prolonged rain. Interestingly, most of the winters also had fairly cold temperatures, especially during January and February.

### Expect a colder winter in 2007

Using history and science as a guide, I expect temperatures during the first three months of 2007 to average slightly below normal, with two to three strong cold outbreaks. Between the cold fronts, there will be some mild periods, but the cold will end up winning. Conditions should also trend wetter, with Pacific storm systems becoming more frequent.

While I'm optimistic our region will begin seeing more frequent rains, the pattern doesn't look to be extremely wet, and rainfall should average near to just slightly above normal. While this probably won't be a drought breaker, soaking rains this winter will help ease drought conditions.

Another point to keep in mind: With the forecast for colder than normal temperatures and near normal rainfall, there will be an increased threat for periods of ice and even some snow. Significant snow is rare in this part of the state, so I wouldn't expect more than just a dusting.

This winter will feel more like a true winter than the past couple of years, with colder temperatures and more frequent periods of clouds and rain. The winter will also have its share of surprises, especially with the oddball El Niño driving the pattern.

E-mail him at [bob.rose@lcra.org](mailto:bob.rose@lcra.org).

**The current weather pattern has climate experts wondering what's in store this winter.**

## Recreating the July 16-26, 1938 flood in the Colorado River basin

By Melinda Luna, P.E.  
LCRA Senior Engineer

LCRA staff and consultants recently worked to recreate the flood of July 16-26, 1938.

Using rainfall data that was collected after the flood, 231 rainfall gauges were entered into a computer program and used to calibrate a hydrologic model. The rainfall data was entered into GIS to help check the data and create images of rainfall distribution.

These images help to see how and where the rainfall was distributed and give a sense of looking at radar images as people do today.

The project helped to better understand how the Colorado River basin would respond to a large flood. Since radar has only been recently used to help predict river and lake levels, there has not been a large flood that LCRA can use to help calibrate computer models. The two floods that have been used are the 1997 and 1998 floods.

The project also helped staff to understand the value of the rainfall observer and how the data it collects can be used.

During the research staff came across old

**The '38 flood dumped  
30 inches of rain in  
San Saba over a 10  
day period.**

newspaper stories that still hold true today. The local newspapers welcomed the first three days of rain after two months without significant rain. Then a week later, the stories recorded the largest flood ever in the area of the San Saba and upper Colorado Rivers. Other stories told of the risk of establishing a town so close to the banks of the creeks and rivers. The 1938 flood was a large rainfall event over the San Saba River and Brady Creek, which dropped 30 inches of rain in 10 days. At the time of the flood Buchanan and Inks dams were the only dams in the chain of the Highland Lakes. The flood caused the



In July 1938, flood waters inundated the City of San Saba where Mill Creek flows into the San Saba River. The July 1938 flood is the flood of record for this area. Photo credit: LCRA Corporate Archives, W00472.

opening of 22 of 37 gates at Buchanan Dams - the largest ever gate opening in the history of the dam. At the time, only a handful of gauges lined the Colorado River and its tributaries. Because of the 1938 flood, the effort to put out more gauges was intensified.

LCRA staff will use this data in the development of future computer models of the San Saba and Upper Colorado Rivers. The procedure developed in the project along with some of the work can be used to recreate other floods such as the September 1952, 1957, 1978 floods, which will help in the development of other models. Comparing the calculated water levels from the recreated flood and what actually happened during the flood, helps to build a computer model that will better tell us what will happen during other floods.

## FLOODPLAIN MANAGER SPOTLIGHT

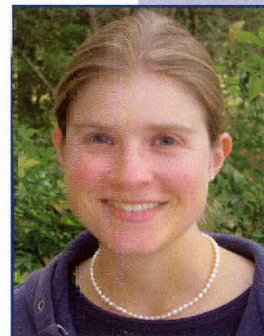
Heidi M. Carlin joined the LCRA Floodplain Management team this fall as the assistant floodplain management coordinator. Heidi comes to LCRA with more than two years of experience as the Assistant National Flood Insurance Program state coordinator. She is a certified floodplain manager (CFM) who graduated with honors from Texas State University in 2003.

### What brought you to floodplain management and LCRA?

My love for geography and water resources sparked my interest in floodplain management at the TCEQ and when the opportunity arose to work with Mike Howard, I took it. Thanks to all the great things I learned at TCEQ, I was able to qualify for the LCRA position in floodplain management. I have wanted to work at the LCRA for years. Plus, my commute is now half as long, that's always a bonus!

### What do you hope to accomplish in your work at LCRA?

I am hoping for a career at LCRA and learning as much as I can about as many aspects of LCRA as possible. I believe in destiny, hard work, and keeping your mind open. This way, good things will come your way.



Heidi M. Carlin

### What motivates you?

A good challenge always motivates me. When my husband and I hiked the 100 mile long Wonderland Trail around Mount Rainier last summer, the ultimate challenge of simply finishing kept me going when I was feeling beat down and tired. That experience changed my entire outlook on life.

### What would you like to tell others?

Work hard and never give up, good things take time. Believe in yourself - if you don't believe in yourself, nobody else can believe in you.

## Roy H. Byars honored for contributions to the NWS Volunteer Observer Program

Recognizing 71 years of service to America, the National Weather Service (NWS) named former Blanco, Texas, resident Roy H. Byars as a 2006 recipient of the prestigious Thomas Jefferson Award for outstanding service in the Cooperative Weather Observer Program.

Roy Byars passed away August 29, 2006. The award was presented posthumously by Austin/San Antonio Weather Forecast Office in December.

"Cooperative observers are the bedrock of weather data collection and analysis," said retired Brig. Gen. David L. Johnson, director of NOAA's National Weather Service. "Satellites, high-speed computers, mathematical models and other technological breakthroughs have brought great benefits to the Nation in terms of better forecasts and warnings. But, without the century-long accumulation of accurate weather observations taken by volunteer observers, scientists could not begin to adequately describe the climate of the United States." The NWS Cooperative Weather Observer Program has given scientists and researchers continuous observational data on temperature, precipitation and other weather factors since the program's inception more than a century ago.

In addition to his support of the National Weather Service, Byars was also a dedicated member of his community. In addition to being a volunteer LCRA rain fall observer since 1975, Roy Byars remained active as an officer, director or associate in a wide range of local, regional and national organizations.



Roy Sedwick, LCRA presents a certificate of appreciation to the daughters of Roy H. Byars for Mr. Byars' years of service as an LCRA volunteer rainfall observer.

# Calendar of Events

## January 29-February 2, 2007

Managing Floodplain Development through the NFIP,  
FEMA 4.5 Course - Denton, TX

Texas Floodplain Management Association, [tfma@earthlink.net](mailto:tfma@earthlink.net)

## February 10, 2007

Lou Withrow Annual SkyWarn Training, Austin, TX

The Commons Center at UT Pickle Research Campus,  
<http://www.utexas.edu/depts/grg/kimmel/SKYWARN2007.html>.

## February 20-22, 2007

Basic Mitigation Course, Austin, TX

Texas Division of Emergency Management,  
[www.txdps.state.tx.us/dem](http://www.txdps.state.tx.us/dem).

## March 5-9, 2007

Flood Fight Course, Austin, TX

Texas Division of Emergency Management, [www.txdps.state.tx.us/dem](http://www.txdps.state.tx.us/dem)  
or contact Roy Sedwick, LCRA at 512-473-3200 or by email  
[roy.sedwick@lcra.org](mailto:roy.sedwick@lcra.org)

## March 12-16, 2007

Managing Floodplain Development through the NFIP - FEMA 4.5  
Course, Beaumont, TX

Texas Floodplain Management Association, [tfma@earthlink.net](mailto:tfma@earthlink.net)

## April 4-5, 2007

TCRFC Spring Flood Summit, Austin, TX

New summit format for the Annual meeting. Come participate in  
breakout groups, officer elections, and legislative updates.

## May 21-24, 2007

Texas Floodplain Management Association Spring Conference,  
College Station, TX

Visit [www.tfma.org](http://www.tfma.org) for more information.

## June 3-8, 2007

Association of State Floodplain Managers Annual Conference:  
"Charting the Course - New Perspectives in Floodplain  
Management," Norfolk, VA

Visit [www.floods.org](http://www.floods.org) for more information.

Government Publications  
Texas State Documents

JUN 26 2007

Depository  
Dallas Public Library

P.O. Box 220  
Austin, Texas 78767-0220

