### NOVEMBER-DECEMBER 2000

### In This Issue

From the Director

State Cloud Seeders Break for Winter

Well Plugging Demonstrated

Bureau Names New Area Manager

Morris Named Employee of the Quarter

#### FLOOD CURRENT:

Improved Training Required to Assist Local Floodplain Officials October Floods Devastate Central, Southern Oklahoma Communities

Financial Assistance Program Update

# OKLAHOMA News

Bimonthly Newsletter of the Oklahoma Water Resources Board



Duane A. Smith Executive Director

### From the Director

On November 14, the Water Board and Choctaw/ Chickasaw Tribes co-hosted the Joint State/Tribal Request for Qualifications (RFQ) Pre-Submittal Workshop at our Oklahoma City office. The RFQ process is the first relevant task to be addressed under HCR 1109, which directs the OWRB and Choctaw/ Chickasaw Tribes to evaluate all feasible proposals for the potential development of southeast Oklahoma waters. Information collected through submitted RFQ's will assist the OWRB and Tribes in determin-

ing the ability of potential applicants to finance and participate in the Southeast Oklahoma Water Resources Development Plan.

The scope of this exciting and diverse project was evidenced by the approximately 40 workshop attendees representing interests in the Sardis Lake and southeast Oklahoma area, Oklahoma City and metropolitan area, Texas municipalities, and various engineering and private firms. Revenue

See Director, Page 2

## State Cloud Seeders Break for Winter

As parched soils and withered crops gave way to saturated grounds and rising rivers, the Oklahoma Weather Modification Program's 2000 project season officially concluded October 31. According to Sen. Robert S. Kerr,



Tim Sedlock, Project Meteorologist for the Oklahoma Weather Modification Program, adjusts burn-in-place flares on one of two aircraft stationed at Oklahoma City's Wiley Post Airport.

president of the Oklahoma Weather Modification Board, 156 total seeding flights — 86 for hail suppression and 70 for rainfall enhancement – were conducted this year. Included in those operations were 20 flights performed along the Oklahoma border in the States of Kansas and Texas, consistent with agreements effectuated with those two states early in 2000.

"Following the driest August through September period in the state's history, we really leaned on our pilots and meteorologists to take advantage of every possible cloud seeding opportunity," Kerr pointed out. "Operations really picked up in October and I think we really had an impact on breaking the back of the extended drought which plagued many of our farmers, ranchers and citizens." He added that the program will resume in March 2001.

The Weather Modification Advisory Board was created in 1999 to oversee the program and coordinate a mechanism that provides long-term program funding through voluntary assessments provided by state property/casualty insurance companies. The cooperative state/private insurance cost-share effort, emphasizing hail

See Cloud Seeders, Page 2

### Director . . . . Continued

ultimately generated through the final selected proposal(s) will provide for repayment of construction costs for Sardis Reservoir to the Corps of Engineers, assist in establishment of a crucial regional water supply system in the Sardis area and fulfill various other economic development objectives in southeast Oklahoma, including the area encompassed by the Choctaw and Chickasaw Nations.

On a very related note, history was made November 27 as we held the first State/Tribal Water Compact Negotiations meeting at the State Capitol. The State Negotiating Team – fronted by Howard Barnett, the Governor's economic development advisor — and the Tribal Negotiating Team, including Choctaw Chief Greg Pyle, Assistant Chief Mike Bailey and prominent Hugo attorney Bob Rabon, agreed that the compact must address at least three vital issues: (1) water rights administration, including the management of existing rights and the handling of new permit applications; (2) water quality standards administration; and (3) development of water resources in southeast Oklahoma, including expansion of economic development opportunities in the region.

The second meeting of the Joint Special Committee on waste by pollution, called by Representative M.C. Leist and Senator Bruce Price, was held December 12. After consideration of a number of options — ranging from statutory changes to additional requests for funding and resources — that would facilitate our compliance with the Supreme Court's decision, the Board recommended to the Committee development of a memorandum of agreement that realigns workloads between the OWRB and Oklahoma Department of Agriculture. The MOA approach conforms to

existing environmental statutes, removes potential duplication of effort among agencies and maximizes efficiency. We eagerly await the Joint Committee's decision on this very important matter.

Those who were fortunate to attend the 21st Annual Governor's Water Conference, held November 15, witnessed perhaps our most thought-provoking and successful Conference ever. OWRB staff, especially Mike Melton and the recently "retired" Mary Whitlow, and the more than 30 sponsoring organizations put together an outstanding program while the Renaissance Hotel and Myriad Convention Center provided excellent facilities for our 300 guests. Entrepreneur T. Boone Pickens highlighted the event with a luncheon discussion of his efforts to market Texas Panhandle groundwater for use in Texas urban areas, such as San Antonio and Dallas. Various other experts also updated conferees on ever-changing, and often controversial, water and environmental issues, including tasks associated with formulation of the Southeast Oklahoma Water Resources Development Plan and creation of a State/Tribal Water Compact; potential impacts of the Supreme Court's waste by pollution decision; recent exciting developments in weather modification technology and research; how the Endangered Species Act has and will impact water resource-related projects; how the states and federal government are wrestling with determining and setting total maximum discharge loads (TMDL's) for the nation's rivers and streams; and issues facing the future of navigation in Oklahoma and elsewhere. As always, the buzz created by our array of interesting speakers will dominate discussions between water resource professionals in Oklahoma for months to come. I urge everyone to clear their November 2001 calendars for next year's Water Conference.

### Cloud Seeders . . . . Continued

suppression benefits, is expected to provide as much as \$3 million per year for expansion of the program to at least seven aircraft and three project radars. The current program employs three aircraft and two radars. The state has contracted with North Dakota's Weather Modification, Inc., to conduct program operations since 1996.

"Expansion of the program is imperative if we want to provide adequate statewide coverage," according to Duane Smith, Executive Director of the Oklahoma Water Resources Board, the agency that coordinates the program. "During major outbreaks of storms, it is virtually impossible for three planes to reach all of the prime seeding areas," he adds. Smith is also Chairman of the Oklahoma Weather Modification Advisory Board.

This year, the Advisory Board also investigated the potential implementation of a long-term research program, conducted hand-in-hand with Oklahoma's ongoing operational cloud seeding activities, to scientifically estimate the specific impacts of weather modification, especially its potential in reducing millions of dollars in annual crop and property damage due to large hail

events. Future research plans under consideration revolve around a proposal submitted by the National Center for Atmospheric Research (NCAR) and Center for Analysis and Prediction of Storms (CAPS). The proposal includes collaboration with the Oklahoma Weather Center, housed at the University of Oklahoma.

"The Weather Center is home to a unique collection of atmospheric scientists and the most sophisticated network of weather monitoring tools in the world," Smith said. "I think we would be remiss to conduct research of this nature without utilizing their unique and extensive expertise that could not only verify the impact of our cloud seeding program, but actually identify measures to improve its effectiveness both in Oklahoma and around the world."

Smith said that the Advisory Board is investigating several funding alternatives for the potential five-year research project, including federal weather research programs, state appropriation(s) and/or non-profit state foundations. "We're very excited about the opportunity to demonstrate and document weather modification's potential as both a feasible and effective water resources management tool," he emphasized.

# Well Plugging Demonstrated

On August 18, near Gerty, Hughes County residents and other interested citizens were afforded a unique opportunity to witness professionals decommissioning a water well. The demonstration was sponsored by the OWRB, Hughes County Rural Water District #6, OSU Cooperative Extension Service and Oklahoma Department of Environmental Quality. The work was supervised by Clifford Tatum, of Hughes RWD #6, and Kent Wilkins, of the OWRB's McAlester Field Office.

Plugging of unused or abandoned wells is crucial because they can provide a direct conduit for contaminants to reach the state's groundwater supplies. Old wells with deteriorated casings make it possible for pesticides, fertilizers or anything applied in the general area of a well to reach groundwater. Insecurely capped wells of any age are also a public safety hazard.

In Gerty, the depth of the well was measured using a weighted cord. If the well included a pump, it would have been removed. Next, clean silica sand was shoveled in to a depth of 16 feet below the surface. Enough bentonite chips to fill 2 feet on the well were added and hydrated through addition of sufficient water. The bentonite swells to form an efficient barrier against surface water. A concrete mixture was then poured down the casing to bring the level up to 4 feet below the surface. The casing was removed at that level, then clean soil was placed on top of the wet concrete and

the hole was filled in.

For complete information on how to properly decommission a water well, contact a licensed well driller or the Oklahoma Water Resources Board.



Plugging of unused or abandoned wells is crucial . . .







### Bureau Names Area Manager

Larry Walkoviak, a native Oklahoman, has been appointed manager of the Bureau of Reclamation's Oklahoma-Texas Area Office in Austin, Texas. Walkoviak will be responsible for managing Reclamation programs and projects in Oklahoma (through the Bureau's field office in Oklahoma City) and the portion of Texas east of the

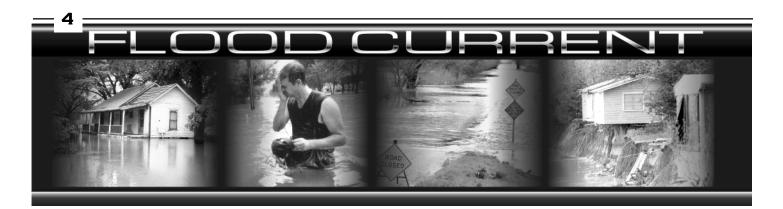
Pecos River, as well as the Wichita Project in Kansas.

Walkoviak was born in Shawnee and raised on a dairy farm in east Texas. He graduated with a bachelor's degree in agricultural engineering in 1974 from Texas A&M prior to starting a career with the Bureau of Reclamation in January 1975. Walkoviak replaces Elizabeth Harrison, who has been named Deputy Director, Office of Policy, in Denver, Colorado.



# Morris Named Employee of the Quarter

Ken Morris (left), of the OWRB's Planning and Management Division, received the Employee of the Quarter award at the agency's October staff meeting. As State National Flood Insurance Program (NFIP) Coordinator, Morris has instigated countless outstanding accomplishments related to the promotion of sound floodplain management in the 363 NFIP member communities in Oklahoma. In addition to providing numerous technical assistance and training opportunities for the state's floodplain administrators, Morris spearheaded development of the Oklahoma Floodplain Managers Association and the organization's certification program, the first nationally accredited program of its type in the U.S. He also promoted passage of legislation that established a state-funded flood hazard mitigation program in 1999.



# Improved Training Required to Assist Local Floodplain Officials

by W. Kenneth Morris, CFM, State NFIP Coordinator, OWRB

There is nothing quite like a flood to demonstrate that many local floodplain administrators are not familiar enough with their ordinances, requirements of the National Flood Insurance Program (NFIP) or disaster relief to provide timely response during crisis and recovery periods. Unless they are adequately trained, they or their superiors (usually elected officials) often believe the state and/or Federal Emergency Management Agency (FEMA) will come in and save the day with little responsibility on the part of the local government.

A case in point is the flash flooding which ravaged several southwest Oklahoma communities in October. As the waters were receding, I found myself in one of those communities, briefing the mayor of the Town of Apache (an insurance agent), Caddo County commissioners and other impacted local officials. They were shocked when I explained that their residents should not proceed with any flood repairs or move back into their homes until damage reports were completed. Unfortunately, this flood caught them largely unaware of the requirements and responsibilities they vowed to uphold. Still, after several intense meetings and discussions, I tip my hat to the local Caddo County and Apache officials for efficiently enforcing their NFIP ordinance, both before and after the floods which devastated the area.

Well-trained floodplain officials are intimately familiar with local ordinances, substantial damage provisions, specifics concerning Increased Cost of Compliance coverage, how state or federal aid is intertwined with flood insurance and the importance of annual local floodplain management workshops. The time for training is before the flood. Bringing the public and local officials up to speed on pertinent floodplain management and disaster regulations on the heels of a flooding event is tough — tough on emergency management, tough on elected officials, tough on citizens and tough on the NFIP. The best way to break the cycle of repeated flooding is through enforcement of substantial damage provisions, something many floodplain administrators know little about.

Training is the key. While Oklahoma has 363 communities enrolled in the NFIP, only 80 local floodplain officials are certified to manage those individual programs. Floodplain management is a full-time job, definitely not a responsibility assigned as an afterthought to an untrained city/town official or employee.

The Association of State Floodplain Managers, Oklahoma Floodplain Managers Association, and other organizations offer voluntary certification programs, including testing requirements concerning the many, varied aspects of floodplain management. These certification programs are critical to the success of local floodplain management. They must be supported and fostered.

But more should be done. Training requirements for local staff would ensure more effective administration of local ordinances and FEMA should consider certification of the local floodplain administrator as a prerequisite to community participation in the NFIP. All local floodplain administrators, including certified ones, should attend periodic training on the NFIP and related elements of emergency management and assistance, particularly the constantly changing federal requirements described in Title 44 of the Code of Federal Regulations. The OFMA and ASFPM have continuing education requirements for their voluntary certification programs. A combination of further incentives and requirements — again, perhaps in conjunction with NFIP participation — should be explored so that local administrators, once trained and/or certified, remain up to speed on the latest floodplain management techniques and regulations. We should explore the potential integration of floodplain management curriculum at the university level and, on a related note, the ASFPM has held preliminary discussions with the Emergency Management Institute about developing an "Introduction to Floodplain Management" course and identifying other partners for such an effort.

In summary, in Oklahoma and elsewhere, we desperately need a comprehensive program for training, educating and certifying floodplain managers, both at the state and local levels and as an option for college students who are interested in the field. To be effective, these training and educational opportunities must be interwoven with appropriate incentives and requirements that will ensure that the right people have the right tools to deal with flooding events.

### October Floods Devastate Central, Southern Oklahoma Communities

(Thanks to the Associated Press, Apache News and Federal Emergency Management Agency for portions of the following story.)

Early Sunday morning, October 22, one of the worst floods ever to hit Apache, Oklahoma, southwest of Oklahoma City, destroyed numerous homes, washed out highways and roads, displaced dozens of families and prompted several citizens to seek the shelter of a sturdy tree in their effort to escape the wrath of rapidly rising floodwaters.

Prayers for relief from Oklahoma's severe drought situation turned to curses as thunderstorms dumped up to 15 inches of rain on some areas of already soggy south-



Flooding in the Josseyville housing addition, south of Apache, as the floodwaters were receding during the morning of October 24.

ern Oklahoma. Fifty homes in Apache were destroyed, along with 20 in nearby Anadarko. At least 200 residents were evacuated and the damage was enough to drive some victims away permanently.

"My parents can't afford flood insurance. They live on a fixed income," Debra Love said. "This is our third flood, and our last. We're leaving."

As many as 60 roads and bridges were damaged in the Anadarko area after 16 inches of rain fell in six days. Floodwaters rose as high as seven feet in some houses before receding.

In Carter County, about 80 miles southeast, swollen creeks flooded highways with up to three feet of water and carried away cars. "People just don't listen. You tell them not to drive through the damn water, and what do they do? They drive through the damn water," said Ed Reed, the county's emergency manager. Almost one-half of flood-related deaths occur in vehicles, primarily when people drive into flooded

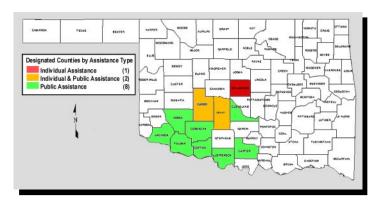
highway dips or low-drainage areas at night.

Ardmore, the Carter County seat, received 3.2 inches of rain on Thursday, October 26 after averaging more than one inch per day for the previous week. Highways in Carter, Jefferson and Stephens counties were temporarily closed due to the high waters. Near Chickasha, hit hard by the Sunday/Monday storms, a water main broke, seriously jeopardizing the city's water service. The National Guard and state emergency management officials tanked in water as a precaution, and schools and factories closed to help ease the water load. Chickasha received an estimated \$1 million in flood damages.

In late November, the Federal Emergency Management Agency made federal disaster aid available to stricken residents and business owners in Caddo and Grady Counties. The assistance was authorized under a major disaster declaration issued for the state by President Clinton. The declaration covered damage to private and public property from the storms and flooding that occurred over the period of October 21-29. Specifically, individual and public assistance is available to residents of Caddo and Grady Counties; public assistance only in McClain, Carter, Jefferson, Cotton, Comanche, Kiowa, Tillman and Jackson Counties; and individual assistance only in Oklahoma County.

The assistance, coordinated by FEMA, can include grants to help pay for temporary housing, minor home repairs and other serious disaster-related expenses. Low-interest loans from the U.S. Small Business Administration will also be available to cover residential and business losses not fully compensated by insurance.

In addition, federal funds will be provided to affected local governments to pay 75 percent of the eligible cost for repairing or replacing damaged public facilities in Caddo, Carter, Comanche, Cotton, Grady, Jefferson, Kiowa, McClain and Tillman Counties. The declaration also made cost-shared funding available to Oklahoma for approved projects that reduce future disaster risks. Additional designations may be made later if requested by the state and warranted by the results of additional damage assessments. The damage assistance application period runs through January 26.



Counties eligible for various federal assistance as a result of flooding which occurred in Oklahoma from October 21-29. (Map courtesy Federal Emergency Management Agency.)

## Financial Assistance Program Update

Approved at October 10 and November 14, 2000 Board Meetings

10/10/00 11/14/00	1	Rural Water District #2, Wagoner County	\$1,345,000.00 \$775,000.00	Financial Assistance Program Update	
11/14/00	1 2	CWSRF Loans Big Cabin Public Works Authority, Craig County Pocola Municipal Authority, Leflore County	436,000.00 760,000.00	Totals as of 11/14/2000	
		DWSRF Loans - None		FAP Loans #Approved 224	
		Hardship Grants - None		Amount	\$330,010,000.00
		Emergency Grants		CWSRF	
10/10/00	1	Turkey Ford School, Ottawa County	\$97.750.00	#Approved	98
	2		69,040.38	Amount	\$337,411,384.24
11/14/00	1	Hall Park Municipal Authority, Cleveland County	100,000.00		
		Reap Grants		DWSRF	
10/10/00		Noup Grants		#Approved	9
11/14/00	1	Calument Public Works Authority, Canadian County	119,130.00	Amount	\$29,421,954,90
	2	Devol Public Works Authority, Cotton County	75,191.00		
	3	Calvin Public Works Authority, Hughes County	99,500.00	Hardship Grants	
	4 5	Wetumka Municipal Authority, Hughes County Rural Water District #9, Cherokee County	90,000.00 69,900.00	#Approved Amount	£4,000,750,00
	6	Copan Public Works Authority, Washington County	150,000.00	Amount	\$1,038,752.30
	7	Rural Water District #5, Osage County	72,510.00	Emergency Grants	
	8	Pittsburg Poblic Works Authority, Pittsburg County	99,999.00	#Approved	459
	9	Town of Carrier, Garfield County	99,980.08	Amount	\$26,597,548.96
	10 11	Rural Water Sewer and Solid Waste Mgmt. District #3, Dewey Co Wapanucka Public Works Authority, Johnston County	o. 99,916.43 35,250.00		
	12	Town of Colbert, Bryan County	59.080.00	REAP Grants	
	13	Rural Water District #2, Atoka County	99,800.00	#Approved	256
	14	Town of Willow, Greer County	85,000.00	Amount	\$20,942,643.86
	15	Rural Water District #2, Washita County	58,832.75		



Bimonthly Newsletter of the

### OKLAHOMA WATER RESOURCES BOARD

3800 N. Classen Boulevard
Oklahoma City, OK 73118
Phone 405-530-8800 Fax 405-530-8900

Lonnie L. Farmer, *Chairman*; Richard C. Sevenoaks, *Vice Chairman*; Grady Grandstaff, *Secretary*; Richard McDonald, Bill Secrest, Dick Seybolt, Ervin Mitchell, Wendell Thomasson, Harry Currie

Brian Vance, Writer/Editor Barry Fogerty, Photographer/Writer James Leewright, Graphic Art/Layout

