



## OKLAHOMA

## water news

MONTHLY NEWSLETTER OF THE OKLAHOMA  
WATER RESOURCES BOARD

Gerald E. Borelli, Chairman

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## Damage Tally Tops \$90 Million In Aftermath of Epic Floods

A headline in a Lawton paper read "Hundreds Flee Area Homes" after East Cache Creek spilled over its banks to flood that rain-soaked town. One-hundred-seventy-five people in nearby Apache narrowly escaped rising waters, stated the *Lawton Morning Press*. "Rooftop Rescues" were subjects of similar stories in Guthrie, where more than 250 people were evacuated as a result of unremitting rains that washed southwestern and central Oklahoma from October 17 until October 21.

Ironically, the rains came after a long, dry season during which 27 Oklahoma counties requested drought assistance. By the end of a drenching four-day period brought on by Hurricane Tico in the Gulf, 13 counties called for federal flood disaster assistance. Agricultural damages alone amount to \$77 million, and the relentless precipitation "washed away newly planted wheat and left tons of debris in the fields," stated Governor Nigh in a recent report to President Reagan by way of the Federal Emergency Management Agency. Private damages are estimated at \$6.5 million, according to the Governor's office, and damages to roads and bridges tally up to \$10.2 million.



On October 21 this home approximately one mile north of Guthrie appeared as an island in the floodwaters again poured over the area by cantankerous Cottonwood Creek.

East Cache Creek, which flooded for the second time in five years, soon will be the subject of a Corps of Engineers study. Oklahoma Water Resources Board engineers will meet with Lawton officials to analyze reported malfunctions of the floodgates of Lake Ellsworth during the highwater crises in Lawton, and representatives of various federal agencies involved in both prevention and correction of flood-related problems will meet shortly to design

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## Joan Wilkerson to be Honored at Capitol Retirement Reception



The day before Thanksgiving, friends and associates of Joan Wilkerson will gather in the Blue Room of the Capitol to honor her on her retirement from 33 years of service with the Oklahoma Water Resources Board.

The very site of the reception reflects the state's esteem for the woman who entered the working world as a window dresser and retired as one of the state's foremost authorities on water law and management.

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*Damages, continued from page 1*

more efficient warning and evacuation programs. Such a program, recently adopted, helped the residents living below Timberlake Dam in Grady County deal with the crisis in a timely fashion. And though warnings of flooding weren't handled as smoothly as tornado warnings usually are, according to a source at the National Weather Service, there was little loss of life—only one death reported in connection with extensive flooding.

Scores of rural bridges washed out in the deluge, water covered the Bailey Turnpike at one point, and flood waters obscured a number of highways. The main street of Chickasha was knee-deep in water. Federal financial assistance to areas declared "disasters" should help rebuild, but final figures on damages, by county, are still coming in. Losses for those people not covered by federal flood insurance may never be recovered.

"Nearly 300 homes in Guthrie were flooded," Harold Springer, OWRB Engineering Division chief, said, "but only 51 homeowners were covered by federal flood insurance. That's disturbing, since floods have occurred here before and people are aware of the danger." Cottonwood Creek, notorious for overflowing its banks in high rains, flooded area homes in 1974, and another major flood devastated the community in 1959. Springer added that the Board's attempts earlier this year to acquaint Oklahoma communities with the federal flood insurance program have not produced the desired results.

"People aren't sufficiently impressed by the kind of damage water can cause," said Springer, "and perhaps that accounts for the numbers who disregarded flood warnings." He added that people who live near streams that rise rapidly in times of heavy rains should move to high ground before the warnings, before exit roads are under water. "Of all natural disasters in the United States flash flooding is the number one killer of people," Springer said. "But most of the deaths occur unnecessarily, when people use poor judgment. It's amazing how many people, despite all warnings, will ignore roadblocks to cross unsafe bridges, or drive off into water at night when there's no way to see what's ahead."

An important element in averting rain-related disaster is proper warning by weather forecasters. Mike Mathis, OWRB meteorologist, says most people overestimate the abilities of the forecaster. "This is still an infant science, and people expect exact predictions. We can't recreate the atmosphere in a lab, and much of our forecasting is based on what we expect the weather to do, based on our observations of it in the past." Even when inclement weather warnings are accurate, there's the "cry wolf" syndrome. "We can't alarm people about every single storm cell or they may tend to ignore future warnings."

Before such disasters occur, the best protection for life and property is proper floodplain management, asserts Springer. "Communities should discourage people from living on floodplains, and floodplain management boards should be formed to insure that buildings are not erected in flood prone areas." Towns are required to comply with federal building code guidelines in order to qualify for

federal flood insurance, and once approved by the Federal Emergency Management Agency's office, citizens of those communities may buy subsidized flood insurance from local insurance agents.

Springer added that communities which do not carry out the floodplain management regulations set by the government can be dropped from the roster of insurance program participants, thus denying townspeople the option of insuring against flood damage.

"We encourage individuals and municipalities to contact the water resources board or local insurance agents for more information on the National Flood Insurance program," Springer said.

*Wilkerson, continued from page 1*

"The hours at window display were terrible and the pay low, so I decided to put myself through secretarial school," Wilkerson (whose first name is pronounced Jo Ann) remembers. She interviewed with the Director of State Parks in the former Planning and Resources Board, Dick Chiles, back in 1950, after other attempts to land office work had failed due to her lack of experience. Exasperated, she told Chiles she'd "jump out of the window" if he refused her on those grounds. After a hearty laugh, he hired her on the spot. Ultimately, Wilkerson worked under water board directors Ira Husley, Francis Borelli, Frank Raab, Forrest Nelson and the current Executive Director, James Barnett.

"I wouldn't trade my experience for anything," she claims, in retrospect. Her continuous involvement over the years in the changes in policy and development of water law in the state gradually earned her distinction of being the resident authority. Sometimes the growing pains experienced by the agency made for rough going, but Wilkerson says she stayed because "I'd been with the Board since its beginning and it was more than just a job. Now, I'm glad I stayed on because I can look back and feel a deep sense of inner satisfaction over the things I've contributed.

"Back in 1963 there were only 16 employees and we all had to double up on work," she recalls. "I kept books, monitored purchasing and personnel and set up the agency's first data processing system. In the period between 1963 and 1969, I traveled the entire state in stream water vested right determinations made under a law passed in 1963."

She was also present for meetings of the Water Law Advisory Committee from 1969 until 1971 when the state's water laws were recodified.

Wilkerson authored the chapter on water law and its administration in today's *Oklahoma Comprehensive Water Plan* which included a history of water laws back to the time of the Territorial Engineer.

Tom Lay, agency attorney hired in 1979, claims Wilkerson's experience proved invaluable. "No one else has Joan's familiarity with actual water law history, and I have relied heavily upon her knowledge of people and events. There's no way we can replace her."

"It was never boring," Wilkerson adds with a laugh, "but I'm glad to leave now, on a high note." An accomplished painter, she looks forward to spending more time at her easel, and with her husband of 35 years, Bob.



### Carlin, Nigh Pledge Interstate Cooperation

In a memorandum of understanding signed by Governors Carlin and Nigh in mid-November, Kansas and Oklahoma pledged cooperation in remedying ground-water pollution in the Tar Creek area shared by both states.

The Oklahoma Water Resources Board, lead agency in the 24-member Tar Creek Task Force, pointed out that at the conclusion of more than three years of study, the group now has specific recommendations for cleanup which require the interaction of Kansas and Oklahoma health and environmental agencies.

### Sperry, Burnt Cabin Receive OWRB Grants

In ceremonies at the capitol November 4, Gov. George Nigh presented \$24,000 to Cherokee County's Burnt Cabin community, and \$68,000 to the Town of Sperry in Tulsa County.

The Utilities Service Authority of Sperry received its grant to complete updating its sanitary sewage system, a project financed in part by the FmHA. The \$68,000 grant will provide for the construction of new lift stations and for laying pipe from old stations.

Burnt Cabin families have long drawn water from unhealthful or distant wells, but the recent OWRB grant, in combination with contributions from the Indian



Representatives of the newly formed rural water district in Burnt Cabin receive \$24,000 for a water system from the Governor. From the left: Gerald E. Borelli, OWRB Chairman; Governor George Nigh; Jimmie Phillips, Chairman of the Board of the Burnt Cabin Rural Water District; Paul Ackerson, Secretary-Treasurer for the district; and James R. Barnett, OWRB Executive Director.

### ACTIVE CONSERVATION STORAGE IN SELECTED OKLAHOMA LAKES AND RESERVOIRS AS OF OCTOBER 28, 1983

PLANNING REGION LAKE/RESERVOIR	CONSERVATION STORAGE (AF)	PERCENT OF CAPACITY
<b>SOUTHEAST</b>		
Atoka	97,200	78.3
Broken Bow	725,066	80.0
Pine Creek	77,664	99.9
Hugo	127,257	80.8
<b>CENTRAL</b>		
Thunderbird	105,925	100.0
Hefner	75,355	100.0
Overholser	15,935	100.0
Draper	77,900	77.9
<b>SOUTH CENTRAL</b>		
Arbuckle	59,522	95.1
Texoma	2,637,700	100.0
Waurika	203,100	100.0
<b>SOUTHWEST</b>		
Altus	54,533	41.0
Fort Cobb	78,423	100.0
Foss	151,140	62.0 <sup>2</sup>
Tom Steed	88,971	100.0
<b>EAST CENTRAL</b>		
Eufaula	2,329,700	100.0
Tenkiller	516,001	82.2
Wister	20,310	75.0
Sardis	276,081	91.3
<b>NORTHEAST</b>		
Eucha	56,000	70.4
Grand	1,400,800	93.9
Oologah	544,240	100.0
Hulah	30,594	100.0
Fort Gibson	357,907	98.0
Heyburn	6,600	100.0
Birch	19,200	100.0
Hudson	200,300	100.0
Spavinaw	30,000	100.0
Copan	43,400	100.0
<b>NORTH CENTRAL</b>		
Kaw	428,600	100.0
Keystone	616,000	100.0
<b>NORTHWEST</b>		
Canton	89,510	91.8
Optima	150	--- <sup>1</sup>
Fort Supply	12,760	91.8
Great Salt Plains	31,400	100.0
<b>STATE TOTALS</b>	<b>11,030,694<sup>3</sup></b>	<b>90.0<sup>3</sup></b>

1. In initial filling stage
2. Temporarily lowered for maintenance
3. Conservation storage for Lake Optima not included in state total

Data courtesy of U.S. Army Corps of Engineers, Bureau of Reclamation, Oklahoma City Water Resources Department, and City of Tulsa Water Superintendent's Office.

Health Service and the Cherokee Nation, will finance a new water district supplied from Lake Tenkiller.

James R. Barnett, OWRB executive director, said both communities qualify for grants by being in emergency situations. An emergency is defined in program regulations as "a situation where the life, health or property of the persons served by the water or sewage facility is endangered."

### Annual Dam Safety Meeting December 14

OWRB will present its second annual Dam Safety Evaluation Meeting on December 14 at 9:30 a.m. in the eleventh floor Board Room at OWRB offices, 1000 N.E. Tenth Street, Oklahoma City. Representatives of a number of state and federal agencies will examine dam safety issues.

A spokesman from the Soil Conservation Service will explain how dams are rated, in terms of relative degrees of risk; a representative from the River Forecast Center in Tulsa will propose uniform flood routing procedures that could be used by all agencies involved in flood control; and the Bureau of Reclamation will review the Lawn Lake dam failure near Estes Park, Colorado, in analyzing current warning processes.

"Digitized radar," a new technology which indicates how much rain falls from a particular cloud formation over time, will be explained by the National Weather Service representative; the Oklahoma Climatological Survey will present the technology's possible applications in reservoir operation, flood forecasting and weather modification; and the Tulsa District Corps of Engineers will examine current applications.

### Sen. Nickles, Board Back Seward Project

Legislation authorizing construction of a reservoir to supply water to Kingfisher, Logan, Canadian and Oklahoma Counties was introduced November 15 by Sen. Don Nickles.

James R. Barnett, OWRB executive director, said the project has long been under study by the Board as a key feature in the long-range plan to meet the needs of rapidly developing central Oklahoma.

A reconnaissance level report soon to be released by the Bureau of Reclamation is expected to show substan-

tial project benefits from water supply, flood control and recreation. The mile-long structure would be located on Cottonwood Creek in Logan County, 20 miles north of Oklahoma City.

The reservoir would be approximately twice the size of nearby Arcadia Reservoir and about the same size as Tom Steed Reservoir near Hobart.

Resolutions in support of the reservoir have been passed by the governing bodies of Edmond, Guthrie and other communities. Sen. Nickles said he plans to hold a series of hearings in the state in January or February.

Barnett, in voicing OWRB support of Seward, pointed out that it is a choice site and one of the last potential sites for a major surface water supply in the Oklahoma City metro area. He said construction of the dam could spare Guthrie residents future losses such as those suffered in October flooding.

### NOVEMBER CROP AND WEATHER SUMMARY

Wheat pastures continued to improve with rainfall, although short moisture was reported in Cimarron County and in the southeast. Fieldwork in other areas was limited due to wet fields.

Winter oats and barley continued in good condition. Wet fields, however, have thwarted plantings in the southwest. Cotton crops were rated fair to poor; peanuts good to fair; and soybeans fair. Alfalfa crops and pastures and ranges were rated good to fair.

Early November temperatures ranged from normal in the southwest to four degrees below normal in east central areas. Rainfall amounts were light to moderate throughout the state.

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