

OKLAHOMA Water News

Bimonthly Newsletter of the Oklahoma Water Resources Board

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From the Director



Duane A. Smith
OWRB Executive Director

Water Appreciation Day, held at the State Capitol in Oklahoma City on April 19, provided a unique opportunity for the state's water community to exchange information on their water management, conservation, and educational programs with state legislators and each other. What began as a relatively modest endeavor to highlight the importance of Oklahoma's water resources generated a lot of interesting—and at times, spirited—discussions of the many varied and complicated water issues that our legislative leaders are currently debating.

More than 30 local, state and federal agencies and organizations turned out in the Capital Rotunda to answer questions and provide information. With their help, we have already established our annual

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Reduced Stream Monitoring Poses Many Problems

Federal budget cuts are currently threatening the nation's network of approximately 7,400 U.S. Geological Survey stream gages that measure the level and flow of water in rivers and streams, providing critically important data to water agencies and the public.

One result of the loss of gages along the network is the hampered ability to forecast flooding events. River flooding costs billions of dollars in property damage each year, and according to the National Weather Service, kills about 125 people, more deaths per year than are attributed to tornadoes or hurricanes. Additionally, stream gage data is critical for determining frequency and intensity of flooding. This information guides engineers and architects in building bridges, roads, and communities; aids in determining the 100-year flood measurement for flood insurance policies and construction regulations; and provides a record of the gradual changes in patterns of drought and high water.

According to Michael Norris, Coordinator of the National Streamflow Information Program, the national network currently takes about \$120 million each year to run about 7,400 gages, down from a peak of 8,221 in 1968. The program has always been supported by a



The USGS stream gaging network in Oklahoma currently includes 170 stations.

patchwork of money from the U.S. Geological Survey, other federal agencies, and more than 800 state and local "funding partners."

Partially in response to increased flooding events, the government expanded the network in the late 1990s by reactivating more than 500 stream gages that had been previously discontinued, adding financing for the net-

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From the Director . . . *Continued from page 1*

Water Appreciation Day as the state's premier event celebrating Oklahoma's most precious natural resource.

Particularly helpful in making the day a resounding success were OWRB Chairman Rudy Herrmann, Secretary of Environment Miles Tolbert, OML Director Danny George, and those legislators who attended the morning press conference—Rep. Don Armes, Rep. Mike Reynolds, Rep. Jerry Ellis, and Rep. Debbie Blackburn. All are supportive of the OWRB's current initiatives to update the Oklahoma Comprehensive Water Plan and recapitalize the Statewide Water Development Revolving Fund. And

thanks to the Oklahoma Rural Water Association, especially Executive Director Gene Whatley, for sponsoring the legislative breakfast reception.

A special thank you goes to Gary Jones, President of the Oklahoma Public Employees Association, who contributed remarks at our April 19 OWRB/Oklahoma City bombing remembrance ceremony on the Capitol grounds. Of course, April 19 also marked the day we remembered Bob Chipman and Trudy Rigney, the Water Board employees who perished in the Murrah Federal Building in 1995. Still, we miss them and vow never to forget their sacrifice.

Reduced Monitoring . . . *Continued from page 1*

work, and putting more of the program under direct federal control to protect critical gages. But after September 11, with more resources going to national security, the budget for the stream program stayed essentially flat while inflation caused costs to rise about three percent each year. And while the pressure on the federal government to hold the line on rising budgets is fierce, at the state and local level it is even more so.

According to Glenn G. Patterson, head of the cooperative water program for the USGS, which pays for 65% of the network, quite a few funding sources have reported that things are not looking so good for continued funding. This means the network has begun to shrink again. In 2005, 50 gages were lost and currently about 200 gages are "threatened" by budget cuts at some level. Fortunately, the Bush administration has requested an additional \$2 million on top of the roughly \$14 million direct federal contribution from the USGS to the program.

Brian Mrazik, a retired Geological Survey official, says complacency often leads people to question the expense of the gage: "When floods come along, everyone's excited. They say, 'Let's fund gages.' You go 20,30 years without a flood, and people say, 'Why the hell are we paying for this thing?'"

Patterson reports that the gages most likely to be cut are those that do not have a critical role in flood alerts and safety, but loss of that data can have serious implications. "The benefit from stream gages comes from the myriad day-to-day decisions of how big to make a culvert or how big to make a bridge," he says.

That loss of data troubles Mark T. Anderson, South Dakota Water Science Center director: "If you have a discontinuity of a couple of years even, you lose part of the substantial investment that's been made in the period of record. It's like

you're squandering the investment of your predecessors."

Advocates for a more robust stream gage network argue that the system is a bit like a pointillist painting: the loss of a single dot would probably not change the overall picture. But lose enough of them over time and the image is lost.

Excerpted from an article entitled "Experts See Peril in Reduced monitoring of Nation's Streams and Rivers," published in The New York Times, 11 April 2006.

Oklahomans Rely on Water Data

Oklahoma's streamgaging program, conducted through the USGS Cooperative Water Program in cooperation with the OWRB and other sponsors, plays a vital role in water rights administration, water planning, drought monitoring, water quality management, interstate water compacts, and related efforts. Unfortunately, the state's streamgaging activities continually face cost increases and federal budget cuts, resulting in the loss of important streamgages as well as related water resource data. Currently, non-USGS cooperators pay about two-thirds of the cost of the Coop program.

The OWRB has worked intimately with the USGS Oklahoma District and their staff in monitoring the state's water resources. Timely, dependable, and accurate streamflow and water quality data provided by the USGS is integral to the OWRB's continuing mission in managing and protecting the surface and groundwaters of Oklahoma. This information is also critical to Oklahoma's municipal, industrial, and agricultural sectors, which are dependent upon water supply.

Increasingly though, consistent funding cuts have led to sharp reductions in the number of active gages, especially in rural areas of our state, and this handicaps our ability to fully comprehend Oklahoma's water quantity and quality situation at any given time. Furthermore, the loss of the hydrologic and climatological data provided by the gages is arguably increasing the risk to human life and property from extreme weather events, such as flooding and drought.

"There are many technologically advanced tools at our disposal that could greatly improve water supply management and forecasting abilities," says OWRB Executive Director Duane Smith, "but we need to preserve the data infrastructure that facilitates our use of these tools. It is a critical component of water management."

Water Appreciation Day Attracts Varied Interests



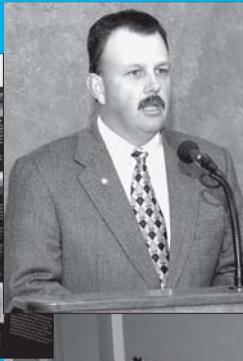
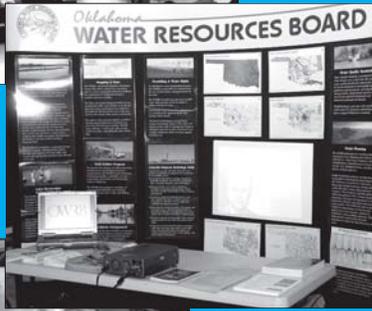
Above: Capitol rotunda with 31 exhibitors representing Oklahoma water interests

Right: The OWRB's bombing anniversary ceremony, held on the State Capitol grounds, took place in front of a Shumard oak tree planted in memory of agency employees Bob Chipman and Trudy Rigney, who lost their lives in the tragedy.



Left: Rep. Don Armes at a press conference on the state's priority water issues held in the Capitol Press Room. Other speakers included the OWRB's Rudy Herrmann and Duane Smith, Secretary of Environment Miles Tolbert, Rep. Mike Reynolds, Rep. Jerry Ellis, Rep. Debbie Blackburn, and Oklahoma Municipal League Director Danny George.

Right: OWRB Display



Left: Ed Eckenstein OWRB, demonstrates the agency's online mapping system



Above: April meeting of the nine-member Water Board in the Governor's Large Conference room. Below: From left, Rep. Percy Walker with OWRB Members Lonnie Farmer and Harry Currie

Below: Jane Weber of the Oklahoma Geological Survey, with OWRB geologist Noel Osborn



Above: Meredith Lee, Education Outreach Coordinator, at the Oklahoma Scenic Rivers Commission exhibit

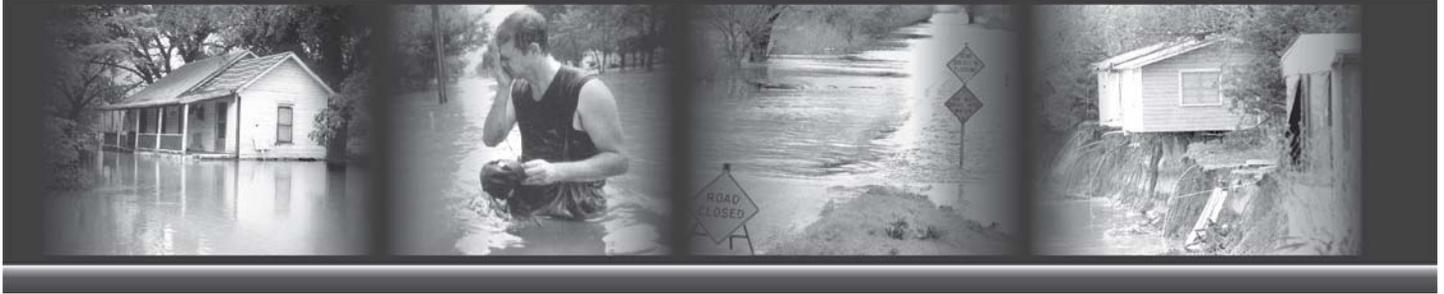


Right: Grand Lake Water Watcher Larry Love with Lynda Williamson (OWRB) display water monitoring instruments



Above: Miles Tolbert, Oklahoma Secretary of Environment, with EPA Region 6 Water Quality Division staff

FLOOD CURRENT



From the Coordinator



Mike Mathis
State Floodplain Coordinator, OWRB

I want to thank the Oklahoma Floodplain Managers Training Cadre. In particular, Bill Smith has been invaluable to the OWRB and our accreditation program. With Jack Graham, of FEMA, still on disaster duty in Texas, Bill has been helping us teach the Floodplain Management 101 workshops this past year. Bill is also developing a short two-hour special workshop that will be offered later this year through each of the five OFMA Regions. For more information about this opportunity, contact your OFMA Regional Representative.

I also want to encourage all Oklahoma communities to participate in the NFIP to become accredited prior to June 2006. The first accreditation year is quickly coming to a close, and already 153 administrators have become accredited; only 225 to go. This new accreditation law has created an opportunity for community officials to gain a clear understanding of their role and the responsibility of NFIP participation. This educational effort also allows our community leaders to learn how they play a key role in reducing future flood losses through implementation of a sound permitting system.

However, these workshops are not just for local floodplain administrators. Training staff has trained city council members, county commissioners, state legislators, insurance agents, floodplain boards, reporters, and concerned citizens. Monthly floodplain workshops in Oklahoma City have far-reaching benefits beyond just accreditation. These training workshops lead to improved local programs and they help integrate the No Adverse Impact approach into daily floodplain management.

In May, our training staff will take Floodplain Management 101 and 202 on the road--in Bartlesville on May 4, McAlester on May 16, Oklahoma City on May 18, Woodward on May 23, and Lawton on May 25. Specific workshop locations, as well as easy enrollment, are available on the OWRB's Web site. I remind you that these workshops are free. Joe Remondini of the Tulsa Corps of Engineers is facilitating each of the 202 Workshops, all featuring the Map Modernization Program. The 202 Workshops will also

provide a valuable advanced program for Certified Floodplain Managers to earn continuing education credits and will provide training in NAI, mitigation, master drainage planning, and OWRB "hot topics."

Last but not least, it is time to begin planning for the Sixteenth Annual OFMA Conference, September 17-20 in Norman. The conference planning committee, chaired by Laureen Gilroy, has some preliminary information posted on the OFMA web site, so please check out what is in store for the premier annual OFMA event and mark your calendars.



Above top, Dorothy Martinez, an official with the National Flood Insurance Program, discusses flood elevation issues at a January workshop. Above, Gavin Brady of the OWRB's Tulsa branch office assists David Wedell, Cordell Floodplain Administrator, and Jerry Turner, Okemah city manager, at an OWRB Floodplain Management workshop in March.

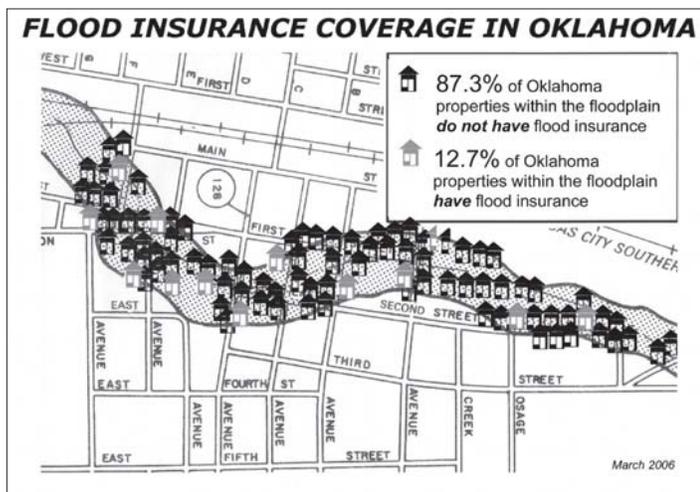
“Grandfathering” Can Save You Money

“Grandfathering” is an important term to understand if you live in an area with potential flood hazards. It is used to define insurance rate applicability in communities where Flood Insurance Rate Maps (FIRMS) are revised due to changes to structures, such as bridges, culverts, dams, and levees, or new developments that alter the base flood elevation.

FEMA’s ongoing Map Modernization initiative will result in many such changes to Oklahoma’s flood zone boundaries and property classifications. Taking advantage of the option to “grandfather” properties added to Zone A can save money for the property owner.

Pre-FIRM structures (constructed prior to the date of the community’s initial FIRM): If a policy was obtained prior to the effective date of a map change, the policyholder is eligible to maintain the prior zone and base flood elevation as a basis for insurance rating. This is the case as long as continuous coverage is maintained. Such a policy can be assigned and continued to a new owner at the option of the policyholder.

If a building is Pre-FIRM, and a policy was not obtained prior to the effective date of a map change, the applicant may receive Pre-FIRM (subsidized) rates based on the new zone, rather than the actuarial (elevation based) rates.



Of the 76,701 structures residing in Oklahoma’s Special Flood Hazard Areas (SFHAs), 66,937 lack flood insurance policies and only 9,764 are insured. SFHAs, or floodplains, are land areas that are at high risk for flooding. A home located within an SFHA, as indicated on Flood Insurance Rate Maps (FIRMS), has a 26 percent chance of suffering flood damage during the term of a 30-year mortgage.

**May is Flood Awareness
Month in Oklahoma**

Be Flood Safe, Be Flood Smart

Post-FIRM structures (constructed on or after the date of the community’s initial FIRM): If a policy was obtained prior to the effective date of a map change, the policyholder is eligible to maintain the prior zone and base flood elevation for insurance rating purposes, as long as continuous coverage is maintained. Such a policy can be assigned and continued to a new owner at the option of the policyholder.

If a building has been constructed in compliance with a specific FIRM, and that FIRM is revised, the owner is eligible to obtain a policy using the zone and base flood elevation data from the last FIRM, provided that proof is submitted to the insurance company. Acceptable documentation for proof is discussed in the NFIP Flood Insurance Manual, Rating Section. Continuous coverage is not required.

Preferred Risk Policies: Buildings written under the preferred risk policy program must be located in zones B, C, or X on the FIRM in effect on the dates of application and subsequent renewals. A building that becomes ineligible for a preferred risk policy due to a map change to a special flood hazard area can be rewritten on a standard rated policy using zones B, C, or X.

Again, if you are not now in Zone A and there is a chance that a future FIRM revision will show your parcel to be located in the floodplain, you can reduce your flood insurance premium by buying and maintaining a policy for the low risk flood area before the new map goes into effect.

Article courtesy "Flood News for Michigan Floodplain Managers" (Spring/Summer '05)

OFMA Conference Set

The Oklahoma Floodplain Managers Association's Sixteenth Annual Conference will be held September 17-20 at the University of Oklahoma's Center For Continuing Education in Norman.

Due to the numerous hurricane disasters experienced in the U.S. throughout the past year, this year's meeting will focus on potential significant changes in the nation's floodplain management policy, even basic inland program elements, that may be implemented by the Department of Homeland Security and Federal Emergency Management Agency.

The Conference will begin with a Board of Directors meeting on September 17, followed by a golf tournament. The opening plenary session is scheduled for the following morning. Four breakout sessions are planned, including the Floodplain Management 101 basic workshop. The evening of September 19 will feature the Annual Awards Banquet, which recognizes Oklahoma's leaders in floodplain management. Nomination forms can be downloaded from OFMA's web site (www.okflood.org). The meeting will conclude on Wednesday, September 20, at 4 p.m.

For more information about the conference, please visit www.outreach.ou.edu/outreach/continuing_education.html.

Beagle honored as Employee of the Quarter

Wilma Beagle was honored as the OWRB's Employee of the Quarter during the monthly staff meeting in March. Wilma began working at the OWRB in 1998 in the Financial Assistance Division as an Accountant, and recently transferred to the Fiscal Services Department where her accounting skills will continue to benefit the agency. Appreciated by her colleagues for her efficiency and organizational skills, Wilma attends professional development seminars, keeps up with federal regulations, and explores creative ways to improve OWRB processes.



Employee of the Quarter Wilma Beagle with Duane Smith

Farmer Honored with Founders Award

Oklahoma City resident and Oklahoma Water Resources Board member Lonnie Farmer was honored with the Founders Award at the Oklahoma Rural Water Association's annual meeting in Oklahoma City on April 18. The award is presented to those who demonstrate tireless work and dedication to rural water interests.



From left, Lonnie Farmer with National Rural Water Association CEO Rob Johnson and his father, R.K. Johnson, who also received this year's Founders Award.

Norton and Keys Resign

The U.S. Department of the Interior, which oversees such federal agencies as the National Park Service, U.S. Fish and Wildlife Service and Bureau of Indian Affairs, will soon have two new leaders. Both Interior Secretary Gale Norton and Bureau of Reclamation Commissioner John Keys have resigned their positions.

Norton resigned March 10 after five years of service to the Bush administration. She is the first woman to serve as Interior secretary. In a publicly released letter to President Bush, Norton said she planned to return to private life. "Now I feel it is time for me to leave this mountain you gave me to climb, catch my breath, then set my sights on new goals to achieve in the private sector," she wrote in the letter. She also credited the department for "great work in the face of hurricanes, record-setting wildfires and droughts, acrimonious litigation and expanded post 9/11 security responsibilities."

Norton also served as Colorado's attorney general from 1991 to 1999 and she was one of the negotiators of a \$206 billion national tobacco settlement in a suit by Colorado and 45 other states.

John Keys resigned his position as Commissioner of the Bureau of Reclamation on April 15. "As Commissioner, John led the way in developing the Water 2025 Initiative that is helping to avoid future water crises in the West," says Norton. "He and the rest of the Interior water team were crucial in resolving a nearly 75-year dispute when California water users reached agreement with the federal government and six other states on a multi-decade agreement for sharing and using water in the Colorado River."

The accomplishments of John Keys include development of the Lower Colorado River Multi-Species Conservation Program (MSCP), a coordinated, comprehensive, long-term multi-agency effort to conserve and work toward the recovery of endangered species and protect and maintain wildlife habitat on the Lower Colorado River.

Before being appointed Commissioner in 2001, Keys spent 34 years as a career employee with the Bureau, first as a civil and hydraulic engineer and later as the Pacific Northwest Regional Director.

President George W. Bush has selected Idaho Governor Dirk Kempthorne as his choice to replace Norton as Interior secretary. Kempthorne, who was first elected governor in 1998, is also a former senator. The Interior secretary job, which oversees federal lands, requires Senate confirmation. Deputy Interior Secretary P. Lynn Scarlett is currently acting Secretary.

William Rinne, Deputy Commissioner for Operations at Reclamation, will serve as acting Commissioner of the Bureau until the President nominates and the Senate confirms a new commissioner.

Oklahoma Drought Monitor

Reservoir Storage

As of April 24, the combined normal conservation pools of 31 selected major federal reservoirs across Oklahoma (see below) are approximately 90.7 percent full, a 0.8 percent decrease from that recorded on April 10, according to information from the U.S. Army Corps of Engineers (Tulsa District). Twenty-six reservoirs have experienced lake level decreases since that time; 25 reservoirs are currently operating at less than full capacity. Six reservoirs are now below 80 percent capacity.

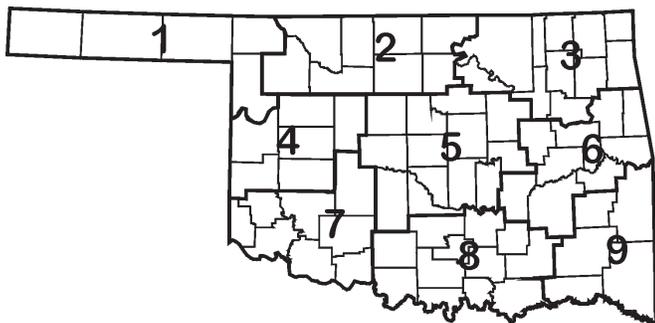
Storage in Selected Oklahoma Lakes & Reservoirs

As of April 24, 2006

Climate Division	Conservation Storage (acre-feet)	Present Storage (acre-feet)	Percent of Conservation Storage
North Central	451,860	449,524	99.5
Northeast	3,567,922	3,364,757	94.3
West Central	276,790	263,630	95.2
Central	154,225	127,921	82.9
East Central	2,968,683	2,358,622	79.5
Southwest	301,810	194,817	64.5
South Central	2,795,156	2,735,006	97.8
Southeast	1,536,494	1,434,329	93.4
State Totals	12,052,940	10,928,606	90.7

Drought Indices

According to the latest Palmer Drought Severity Index (April 22, below), state drought conditions continue to worsen as all regions report various stages of drought. Both the Northeast and East Central climate divisions are in "extreme drought" while the Southeast, Central, and Southwest now report "severe drought." All of Oklahoma's nine climate divisions have undergone PDSI moisture decreases since April 8.



The latest monthly Standardized Precipitation Index (through March, below) reflects increasingly dry conditions throughout much of Oklahoma. Among the *selected* time periods (3-, 6-, 9- and 12-month SPIs), "extremely" and/or "very" dry conditions are present throughout most of eastern and southern Oklahoma within the past 6- to 12-month periods. The Central climate division is also experiencing an extended dry period.

Palmer Drought Severity Index

Standardized Precipitation Index

Through March 2006

Climate Division (#)	Current Status 4/22/2006	Value		Change In Value	Through March 2006			
		4/22	4/8		3-Month	6-Month	9-Month	12-Month
NORTHWEST (1)	MODERATE DROUGHT	-2.22	-1.38	-0.84	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
NORTH CENTRAL (2)	MODERATE DROUGHT	-2.56	-1.80	-0.76	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
NORTHEAST (3)	EXTREME DROUGHT	-4.38	-3.67	-0.71	MODERATELY DRY	EXTREMELY DRY	VERY DRY	VERY DRY
WEST CENTRAL (4)	MODERATE DROUGHT	-2.16	-1.05	-1.11	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
CENTRAL (5)	SEVERE DROUGHT	-3.47	-2.69	-0.78	MODERATELY DRY	VERY DRY	NEAR NORMAL	MODERATELY DRY
EAST CENTRAL (6)	EXTREME DROUGHT	-4.36	-3.77	-0.59	NEAR NORMAL	EXTREMELY DRY	EXTREMELY DRY	EXTREMELY DRY
SOUTHWEST (7)	SEVERE DROUGHT	-3.04	-2.10	-0.94	NEAR NORMAL	VERY DRY	NEAR NORMAL	MODERATELY DRY
SOUTH CENTRAL (8)	MODERATE DROUGHT	-2.81	-1.82	-0.99	NEAR NORMAL	MODERATELY DRY	NEAR NORMAL	MODERATELY DRY
SOUTHEAST (9)	SEVERE DROUGHT	-3.82	-2.73	-1.09	NEAR NORMAL	VERY DRY	VERY DRY	EXTREMELY DRY

Financial Assistance Program Update

Loans/Grants Approved as of April 19, 2006

FAP Loans—317 totaling \$566,955,000

The OWRB's Financial Assistance Program (FAP), created by the State Legislature in 1979, provides loans for water and wastewater system improvements in Oklahoma. The tremendous popularity of the bond loan program is due, in part, to extended payoff periods of up to 30 years at extremely competitive interest rates, averaging approximately 4.762 percent since 1986.

CWSRF Loans—173 totaling \$585,159,915

The Clean Water State Revolving Fund (CWSRF) loan program was created in 1988 to provide a renewable financing source for communities to draw upon for their wastewater infrastructure needs. The CWSRF program is Oklahoma's largest self-supporting wastewater financing effort, providing low-interest loans to communities in need.

DWSRF Loans—57 totaling \$246,551,785

The Drinking Water State Revolving Fund (DWSRF) loan program is an initiative of the OWRB and Oklahoma Department of Environmental Quality to assist municipalities and rural water districts in the construction and improvement of drinking water systems. These projects are often mandated for communities to obtain compliance with increasingly stringent federal standards related to the treatment of drinking water.

REAP Grants—440 totaling \$38,461,017

The Rural Economic Action Plan (REAP) Program was created by the State Legislature in 1996. REAP grants, used for water/wastewater system improvements, target primarily rural communities with populations of 7,000 or less, but priority is afforded to those with fewer than 1,750 inhabitants.

Emergency Grants—523 totaling \$30,746,882

Emergency grants, limited to \$100,000, are awarded to correct situations constituting a threat to life, health, or property and are an indispensable component of the agency's financial assistance strategy.

Total Loans/Grants—1,510 totaling \$1,467,874,599

Estimated Savings—\$462,874,599

Applicants eligible for water/wastewater project financial assistance vary according to the specific program's purpose and requirements, but include towns and other municipalities with proper legal authority, various districts established under Title 82 of Oklahoma Statutes (rural water, master/water conservancy, rural sewage, and irrigation districts), counties, public works authorities, and/or school districts. Applications for agency financial assistance programs are evaluated individually by agency staff. Those meeting specific program requirements are recommended by staff for approval at monthly meetings of the nine-member Water Board.

More information about the OWRB's Financial Assistance Program can be obtained by calling the OWRB at (405)530-8800.

Rudy Herrmann, *Chairman*; Mark Nichols, *Vice Chairman*; Bill Secrest, *Secretary*
Harry Currie, Lonnie L. Farmer, Ed Fite, Jack Keeley, Kenneth K. Knowles, Richard C. Sevenoaks

Brian Vance, *Writer/Editor* • Darla Whitley, *Writer/Layout* • Barry Fogerty, *Photography*

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