MAY - JUNE 2002

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OKLAHOMA
Water News

Bimonthly Newsletter of the Oklahoma Water Resources Board

Duane A. Smith
OWRB Executive Director

From the Director

The Second Session of the 48th Oklahoma Legislature adjourned Friday, May 24. Despite across-the-board agency budget cuts and no appropriation of cost-share funds to recapitalize the Drinking Water SRF Loan Program, the agency's work will progress as usual and even expand into new areas during fiscal year 2003. As we tighten our belts and adjust to reduced funding with which to carry out our mission, rest assured Water Board employees will continue to provide a high level of service for our customers, the citizens of Oklahoma.

During the closing month of the session, the OWRB's recently approved 0.037 mg/L Water Quality criteria for phosphorus in Oklahoma's six Scenic Rivers received the lion's share of attention, both from the Legislature and the media. In related legislation, SB 972 establishes a total maximum daily load (TMDL) process to identify the amount of phosphorus contributed from

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2002 Legislation Sets Board Agenda

Bills passed during the recently concluded legislative session will expand OWRB financial assistance, initiate new studies, suspend water marketing efforts, and create a legislative water planning committee. A summary of this and other legislation of chief concern to the OWRB appears below:

SB 972—ensures that municipal dischargers will not be subjected to potential increased treatment costs until the phosphorus loadings from all impaired Scenic River watersheds are identified and addressed through the state's total maximum daily load (TMDL) process. Oklahoma Secretary of Environment Brian Griffin will coordinate state agency development of a watershed restoration and protection strategy for each impaired scenic river in Oklahoma, including goals for bringing each impaired water back into compliance with Oklahoma's Water Quality Standards.

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New Phosphorus Standard Becomes Effective

Duane Smith explains to Rep. M.C. Leist, Chairman of the House Committee on Environment and Natural Resources, how the Board developed its proposed phosphorus standard for Scenic Rivers. The 0.037 mg/L Standard will become state law on July 1, 2002, and will become federal law upon EPA approval.

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our Scenic River watersheds. Also, as we seek implementation of the new numerical limit in both Oklahoma and Arkansas, the Water Board will be intimately involved in ongoing discussions between the two states to bring about much-needed phosphorus reductions while minimizing the potential economic impacts to municipalities and the poultry industry. If recent deliberations with Arkansas officials are any indication, we should make considerable headway throughout the next several months. And I'm sure that the phosphorus standard will be the primary topic of discussion at the next meeting of the Arkansas-Oklahoma Arkansas River Compact Commission in September. Aside from regulatory efforts, interstate cooperation and dialogue will be the key to resolution of this controversial issue. I will keep you informed of our progress.

SB 1410, summarized below, places a three-year moratorium on the general sale or exportation of water outside Oklahoma. While this legislation temporarily closes the door on intrastate water marketing, it also creates a terrific opportunity to focus on the need for intelligent water planning and identification of important water issues currently facing Oklahoma. Staff are identifying a course of action to update the Oklahoma Comprehensive Water Plan, due in 2005, which will incorporate regional planning initiatives. Regionalization of water and wastewater systems, water marketing, instream flow protection, and extended projections of Oklahoma's long-range water use are just a few of the subjects that will be the focus of this, perhaps our most important planning effort ever undertaken.

Legislation Sets Agenda . . . *Continued from page 1*

SB 1247—expands eligibility for the Board's Rural Economic Action Plan (REAP) grant program. The bill increases the population limit for eligible entities from 1,500 to 1,750 and the household tap limit for rural water/sewer districts from 450 to 525. (The REAP program, created by the State Legislature in 1996, targets primarily small towns. As a result, it is a key component of the state's overall economic development program for rural Oklahoma.)

SB 1306—allows certain swine feeding operations to transfer water rights permits to heirs or other buyers without having to apply for a new permit. Such transfers would be limited to operations that do not increase the size or scope of their operations or the amounts of water withdrawn.

SB 1348—removes the exemption for poultry operations and hatcheries from the anti-corporate farming statutes, thus preventing the larger, potentially more environmentally damaging corporate poultry operations from becoming established in Oklahoma. The bill prohibits the Oklahoma Department of Agriculture, Food, and Forestry from accepting and approving any pending applications for poultry feeding operations within one mile in each direction of the Pensacola Project's Grand River Dam Authority sea level boundary line.

SB 1410—places a three-year moratorium on state efforts to compact with Oklahoma's Native American tribes or negotiate agreements to market large supplies of water out of state, unless repealed by the State Legislature. The bill also directs creation of a 19-member joint legislative committee to investigate state water planning issues.

HB 1995—allows the Board, for the first time, to fund nonpoint source-related projects through the Clean Water SRF Loan Program. New agency rules effectuating this ground-breaking expansion of eligible projects to reduce pollution contributed through diffuse runoff and related sources, including implementation of water source protection programs, are in development.

HB 2228—broadens the scope of the Oklahoma Floodplain Management Act and encourages training for Oklahoma's floodplain management officials.

HB 2330—provides guidance to the OWRB in defining recreational sites related to the three-mile setback provision for swine feeding operations under state groundwater law.

HB 2349—prohibits the siting of poultry operations within floodplains or close to Scenic Rivers, public drinking water wells, and other important water bodies in the state.

HB 2525—appropriates $3.84 million in General Revenue Funds to the OWRB, a 4.64% reduction ($392,711) from last year's appropriation. This includes $4.23 million for REAP grants and adds one FTE to the Board's Financial Assistance Division. The appropriation also includes $220,430 for contractual services with the Oklahoma Rural Water Association to provide training and technical assistance for rural water systems.

HB 2526—authorizes the OWRB to expend $1 million from Gross Production Tax REAP funding for the Beneficial Use Monitoring Program and provides full funding ($1.2 million) if tax revenues are sufficient. It provides $1.872 million in REAP funding to the Oklahoma Conservation Commission as cost-share and $250,000 for upstream flood control structure rehabilitation work. Also included from REAP monies is $50,000 in additional funding to the Oklahoma Rural Water Association and $171,758 to the OWRB for water study matching funds.

Sardis Water System Under Construction

In late April, crews began laying water lines that will eventually serve thousands of southeast Oklahoma residents living around Sardis Lake, located on Jackfork Creek, a tributary of the Kiamichi River.

Crews laying water lines for the new Sardis Lake regional water supply system, anticipated for completion next spring

Groundbreaking for the much-anticipated regional water treatment and distribution system comes on the heels of the approval of $5.7 million in funding from the U.S. Department of Agriculture's Office of Rural Development, a $122,397 Rural Economic Action Plan (REAP) grant from the OWRB, and other funding from federal and state loans and grants, bringing the total to almost $9.6 million.

The construction of the Sardis water system is a tribute to the hard work and persistence of local residents, as well as a model for cooperation between federal and state government agencies, said Duane Smith, OWRB Executive Director.

For years, area residents have sought establishment of a water treatment and distribution system in lieu of hauling water from the nearby lake or drilling water wells through the rocky terrain. Legal conflicts, primarily associated with a standing lawsuit between the State of Oklahoma and Corps of Engineers over the reservoir's construction debt, as well as engineering design problems, have for years plagued initiation of the system. By next spring, approximately 1,266 homes and businesses around the lake will be provided with the abundant water supply of Sardis Lake.

Other communities in the region, such as the nearby towns of Clayton and Talihina, and a Latimer County rural water district, have also expressed an interest to tie into the system's lines in the future. The system--including a raw water storage tank, treatment plant, four treated water storage tanks, and several miles of distribution lines--will be operated by the Sardis Lake Water Authority.

Sardis Lake yields some 156,800 acre-feet per year (about 140 million gallons per day) of excellent quality water supply--more water than either Oklahoma City or Tulsa residents use in an average year.

El Reno Dedicates Upgraded Plant

On May 21, members of the OWRB Financial Assistance Division attended a dedication ceremony in El Reno to celebrate the completion of water treatment plant upgrades funded by the Drinking Water State Revolving Fund (DWSRF). The water treatment plant, which formerly treated 3.5 million gallons per day (mgd), now processes 5 mgd with a peak flow of 7.5 mgd.

The El Reno Municipal Authority serves 5,330 water customers as well as 4,946 sewer customers. This project was initially financed through a DWSRF interim construction loan for $4.69 million. On May 30, 2002, that loan was refinanced with a $1.83 million DWSRF refinancing loan at a 0% interest rate (plus a 0.5% administration fee) and a $3.05 million loan through the OWRB's Bond Loan Program at a 2.502% interest rate, giving the community long-term financing at 60% of the market rate.

View from above one of two new 36-foot diameter Claricone clarifiers at the upgraded El Reno Water Treatment Plant

2001 BUMP Report Available Online

A comprehensive report of 2001 water quality data from throughout Oklahoma is now available on the OWRB Web site (www.owrb.state.ok.us). The report, an annual disclosure of detailed physical, chemical, and biological information from 246 lakes and streams collected at approximately 600 sites, is a compilation of data obtained by Water Board staff through the agency's Beneficial Use Monitoring Program (BUMP).

"We are again pleased to present to the public this vital water quality data, which is extremely valuable to local, state, and federal decision-makers. The BUMP effort, in tandem with Oklahoma's Water Quality Standards, is the cornerstone of the state's overall water quality management program," says Derek Smithee, Chief of the OWRB's Water Quality Division.

Oklahoma's BUMP, created in 1999, is directed by the Water Quality Division of the OWRB. A primary goal of the program is to identify waters of the state that are experiencing impairments to their prescribed beneficial uses as well as the cause and source of the declining quality of individual waters. Beneficial uses for state waters—including public and private water supply, fish and wildlife propagation, agriculture, recreation, and navigation—are assigned to streams and stream segments in the Water Quality Standards (also available on the OWRB Web site), based upon the primary benefits derived from those waters by the public.

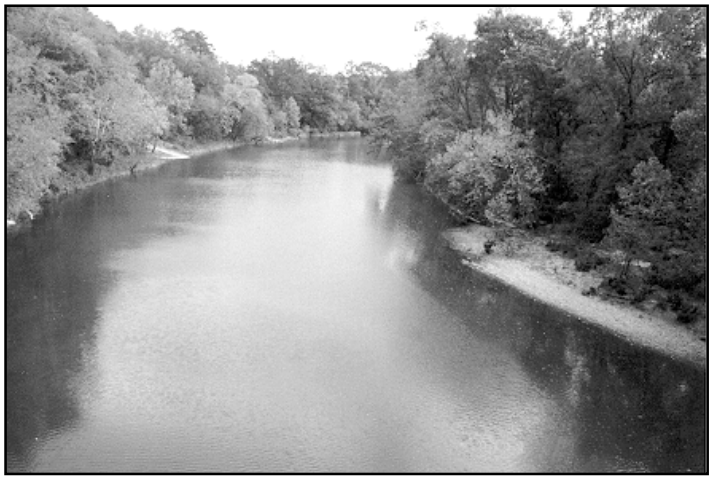
Collecting samples from Lake Murray. Beginning in November 2000, quarterly samples were collected at five sites from the lake surface and one site at 0.5 meters from the lake bottom. Based on turbitity, true color, and secchi disk depth readings, Lake Murray had excellent water clarity in 2001.

According to Bill Cauthron, manager of the Board's Monitoring Section, BUMP data gathered during 2001 indicate that the major quality concerns of Oklahoma lakes are dissolved oxygen, pH, and turbidity. Data also indicate that only nine percent of sampled lakes were "hyper-eutrophic," which means they contain an excessive amount of nutrients that could lead to taste and odor problems. Forty-five percent of sampled lakes were considered eutrophic, 40 percent were mesotrophic, and six percent were oligotrophic (waters relatively low in nutrients).

2001 BUMP Lake Trophic Status Results

Trophic Status	# of Lakes	Percent	Surface Acres
Hyper-Eutrophic	3	9%	15,501
Eutrophic	16	45%	69,592
Mesotrophic	14	40%	12,291
Oligotrophic	2	6%	14,395

Data indicate that essentially all streams sampled in 2001 were suitable for uses related to public and private water supply. Inorganic turbidity, through sediments from runoff, was the primary detriment to fish and wildlife propagation, and bacteria were the major concern for recreation that involves primary body contact with the water. A small number of sampled streams had minor problems associated with dissolved solids and chlorides, thereby limiting irrigation uses.



The Mountain Fork River near Smithville, a permanent ambient trend monitoring station in northeastern McCurtain County. BUMP data indicate that this portion of the Mountain Fork supports the beneficial uses of Public and Private Water Supply, Agriculture, and Recreation.

Specific information about sampling results for each lake and stream can be found in the online version of the report. Starting this year, to increase data accuracy, BUMP staff will sample all 99 rivers in the ambient site network annually and all lakes biannually. Each year, BUMP staff also monitor 30 to 60 additional sites specifically to assist other state agencies, providing valuable data for decisions related to uses and protection of waters throughout the state.

OWRB's Mike Albano Retires

OWRB staff bid a bittersweet farewell to a retiring Mike Albano at the end of April. Mike has played an integral role for the past 12 years at the OWRB, and everyone agrees that it will be difficult to fill his shoes. "His quiet and knowledgeable way of doing his job assured customers they were dealing with a professional who would interpret groundwater law in a most equitable fashion," says Duane Smith, OWRB Executive Director. "Mike will truly be missed."

With Bachelor's and Master's degrees in Geology from the University of Oklahoma, and more than 17 years of prior experience as a geologist, Mike's comprehensive knowledge of geologic formations and the valuable water resources they yield has proved invaluable on many occasions. But in addition to his professional expertise, his sense of humor and kindheartedness will be missed as well.

From all of us at the OWRB, congratulations to Mike for an outstanding career, and we wish him a happy and exciting retirement.

OWRB Staff Pitch In

On May 13, in spite of the rain, 20 OWRB staff members participated in LitterBlitz, a spring litter collection effort sponsored by Oklahoma City Beautiful and the City of Oklahoma City. The volunteers collected 22 bags of trash from the grounds of Memorial Park at 36th and Classen, just south of the OWRB main office. The OWRB's participation in LitterBlitz was organized by Jann Hook, Information Systems Administrator.

Litter Blitz volunteers: (standing) Tony Mensah, Angela Thompson, John Day, Noel Osborn, Kevin Koon, Laura Oak, Crystal Stephens, Andy Scurlock, Dean Couch, Mike Sughru, and (seated) Jan Hook

Hodge Named Employee of the Quarter

At the May 2002 staff meeting, Paul Hodge, Assistant Chief of the Financial Assistance Division, was named Employee of the Quarter. Paul transferred to the OWRB in 1993, and was promoted to Assistant Chief in January 1994. As of this year, Paul has completed 30 years of state service.

According to Executive Director Duane Smith, Paul is especially valuable as a supervisor because of his training skills. He has been extremely diligent in educating himself and his staff on every aspect of the OWRB's various loan and grant programs—from environmental to financial to legal issues—and has been particularly focused on insuring that staff build positive relationships with customers.

Welcome

OKLAHOMA WATER RESOURCES BOARD

Visit the OWRB web site at

www.owrb.state.ok.us

GIS on Display at Capitol

The eighth annual "GIS Day at the Capitol" was held on April 23. Representing the OWRB, Kevin Koon and Mike Sughru showcased an impressive display of various Water Board projects and programs they have assisted with, including those related to the Rural Water Survey, dam safety, bathymetric mapping, Southeast Oklahoma Water Study, and various hydrologic investigations.

GIS Day is sponsored by the State GIS Council, which comprises 15 state agencies. The goal of GIS Day is to educate Oklahoma legislators and the public about GIS and how these intricate systems play such an important role in providing vital geographic information for state agencies and citizens.

Visitors viewing displays during GIS Day at the Capitol

OKLAHOMA Weather Facts

- The average statewide temperature from 1971 to 2000 was 60.2° F.
- The warmest year from 1892 to 2001 was 1954, averaging 63.7° F.
- The coolest year from 1892 to 2001 was 1892, averaging 58.2° F.
- The record low daily temperature is -27° F (occurring Feb. 13, 1905, in Vinita and Jan. 18, 1930, in Watts).
- The record high daily temperature is 120° F (occurring five times, most recently in Tipton on June 27, 1994).
- The average statewide annual precipitation from 1971 to 2000 is 36.44 inches.
- The wettest year from 1892 to 2001 was 1957 with 48.21 inches.
- The driest year from 1892 to 2001 was 1910 with only 18.95 inches.
- The greatest reported daily precipitation is 15.68 inches, occurring in Enid on October 11, 1973.
- The greatest reported 24-hour snowfall is 30.3 inches, occurring in Ardmore on December 7, 1942.
- The average annual number of tornadoes from 1950 to 2000 is 54.1.
- The most tornadoes occurring in one year is 146 in 1999.
- The deadliest tornado occurred in Woodward on April 9, 1947, resulting in 107 deaths.

Source: 2002 Oklahoma Climatological Survey (www.ocs.ou.edu)

OWRB Employees Recognized at Breakfast

In celebration of Public Service Recognition Week, OWRB Chiefs once again donned their aprons for the annual Employee Breakfast, preparing a delightful array of breakfast treats for OWRB staff. During the breakfast, Duane Smith, Executive Director, regaled staff with some lighthearted humor and expressed sincere appreciation for both individual and team efforts in the past year.

Preparing to serve staff (left to right): Mike Mathis, Planning and Management Division Chief; Jim Schuelein, Administrative Services Division Chief; Jann Hook, Information Services Administrator; Joe Freeman, Financial Assistance Division Chief; Duane Smith, Executive Director; and Derek Smithee, Water Quality Division Chief

Water Resources Update

Reservoir Storage

Reservoir storage levels in Oklahoma remain generally good. As of June 3, the combined normal conservation pools of 31 selected major federal reservoirs across Oklahoma (see below) are approximately 98.1 percent full, a 0.7 percent decrease from that recorded on May 20, according to information from the U.S. Army Corps of Engineers (Tulsa District). Thirteen reservoirs have experienced lake level decreases since that time. Only eight reservoirs are currently operating at less than full capacity (compared to six two weeks ago). Two reservoirs (including Lugert-Altus, 54.1 percent; and Tom Steed, 67.8 percent) remain below 80 percent capacity.

Storage in Selected Oklahoma Lakes & Reservoirs

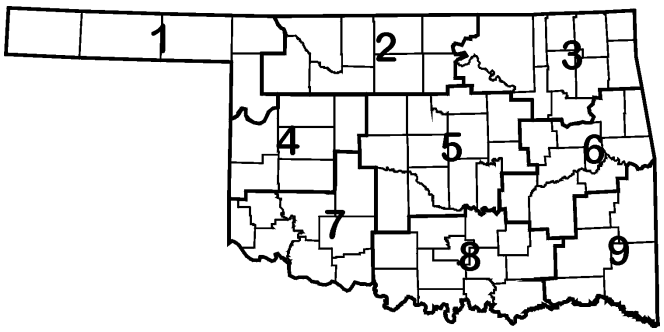
As of June 3, 2002

Climate Division	Conservation Storage (acre-feet)	Present Storage (acre-feet)	Percent of Storage Conservation	Flood
North Central	505,170	505,170	100.0	5.27
Northeast	3,777,634	3,763,203	99.6	17.04
West Central	276,790	269,738	97.5	0.00
Central	154,225	154,225	100.0	0.58
East Central	2,968,681	2,968,681	100.0	4.42
Southwest	301,810	212,245	70.3	0.45
South Central	3,118,676	2,985,060	95.7	0.72
Southeast	1,561,859	1,561,859	100.0	3.73
State Totals	**12,664,845**	**12,420,181**	**98.1**	**6.54**

Drought Indices

According to the latest Palmer Drought Severity Index (June 15, below), drought conditions have improved slightly in virtually all areas of Oklahoma. While the Panhandle and West Central regions remain in the "severe" and moderate drought categories, respectively, the North Central climate division has improved from "moderate" to "mild" drought. Only one of Oklahoma's nine climate divisions has undergone a PDSI moisture decrease since June 1.

The latest monthly Standardized Precipitation Index (through May, below) indicates long-term dryness throughout the past year in much of northern and western Oklahoma, especially the Northwest/Panhandle climate division.



Among the selected time periods (3-, 6-, 9- and 12-month SPIs), the Northwest climate division reports "extremely dry" conditions throughout the last 9- and 12-month periods and "very dry" conditions in the last 3- and 6-month periods. "Very dry" conditions have also impacted North Central, West Central and Southwest regions during the last 12-month period. Among periods beyond one year, the 15-, 18-, and 24-month SPIs also report particularly dry conditions for the Northwest and North Central climate divisions. [SPI updates are available around the 10th of each month.]

Palmer Drought Severity Index

Climate Division (#)	Current Status 6/15/2002	Value 6/15	Value 6/1	Change In Value
NORTHWEST (1)	SEVERE DROUGHT	-3.46	-3.80	**0.34**
NORTH CENTRAL (2)	MILD DROUGHT	-1.44	-2.62	**1.18**
NORTHEAST (3)	INCIPIENT MOIST SPELL	0.87	0.40	**0.47**
WEST CENTRAL (4)	MODERATE DROUGHT	-2.22	-2.34	**0.12**
CENTRAL (5)	NEAR NORMAL	0.11	-0.41	**0.52**
EAST CENTRAL (6)	NEAR NORMAL	0.24	-0.07	**0.31**
SOUTHWEST (7)	INCIPIENT DROUGHT	-0.80	-0.97	**0.17**
SOUTH CENTRAL (8)	INCIPIENT MOIST SPELL	0.63	0.44	**0.19**
SOUTHEAST (9)	MOIST SPELL	1.17	1.45	**-0.28**

Standardized Precipitation Index

Through May 2002

3-Month	6-Month	9-Month	12-Month
VERY DRY	**VERY DRY**	**EXTREMELY DRY**	**EXTREMELY DRY**
NEAR NORMAL	NEAR NORMAL	**MODERATELY DRY**	**VERY DRY**
NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	**MODERATELY DRY**
NEAR NORMAL	NEAR NORMAL	**MODERATELY DRY**	**VERY DRY**
NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
NEAR NORMAL	NEAR NORMAL	**MODERATELY DRY**	**VERY DRY**
NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
MODERATELY WET	VERY WET	MODERATELY WET	MODERATELY WET

Financial Assistance Program Update

Loans/Grants Approved as of June 11, 2002

FAP Loans—259 totaling $403,755,000

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 low-interest rates, averaging approximately 4.762 percent since 1986.

CWSRF Loans—128 totaling $442,953,903

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—23 totaling $74,488,647

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—331 totaling $28,009,730

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 1,500 inhabitants.

Emergency Grants—489 totaling $29,029,670

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

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.

This bimonthly newsletter, printed by Oklahoma University Printing Services, Norman, Oklahoma, is published by the Oklahoma Water Resources Board as authorized by Duane A. Smith, Executive Director. Eighty-eight hundred copies have been printed and mailed bimonthly at an approximate cost of 29 cents each. Copies have been deposited at the Publications Clearinghouse of the Oklahoma Department of Libraries.

Bimonthly Newsletter of the
OKLAHOMA Water News
OKLAHOMA WATER RESOURCES BOARD
3800 N. Classen Boulevard
Oklahoma City, OK 73118
www.owrb.state.ok.us

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