

OKLAHOMA WATER NEWS

Bimonthly Newsletter of the Oklahoma Water Resources Board



Duane A. Smith

*from
the desk
of the
Director*

I am well satisfied that the Water Board attained the legislative goals we set out early in the year. I believe the Legislature demonstrated its confidence in the Board and staff with the endorsement of existing programs and assignment of new initiatives.

We are pleased with the passage of SB 101, a weather modification measure that seeks to ameliorate costly hail damage to crops and property. We are excited with the opportunity to work in partnership with property and casualty insurance companies in implementing a true state-of-the-art hail suppression/rainfall enhancement program. We believe this cooperative approach can produce a model for the nation. It establishes a

Weather Modification Revolving Fund, creates a Weather Modification Division in the OWRB and an Advisory Board composed of myself as chairman, and including representatives of agriculture, tourism, the insurance industry and the Oklahoma Legislature.

In the same tone is the Oklahoma Flood Hazard Mitigation Program created by HB 1841. The program is an effort to reduce losses and human suffering by removing structures with histories of repetitive loss from the floodplain. It encourages communities to develop comprehensive flood hazard mitigation plans. The law names a Flood Hazard Mitigation Team on which the Water Board will play a key role.

The Legislature again appropriated \$4.5 million for the Rural Economic Action Plan (REAP), with a potential for additional funding from oil and gas production tax revenues. There was also clarification in the statutes that will make the REAP program more effective in meeting the needs of small communities.

The OWRB received an appropriation for its share of the EPA cost match for the Drinking Water State Revolving Fund, one of the agency's most important initiatives.

The Beneficial Use Monitoring Program (BUMP) was funded for the second year, reaffirming the Legislature's confidence in the program and its first-year successes.

We look forward to carrying out the provisions of HCR 1066, instructing the Board to meet with Choctaw and Chickasaw tribes and local leaders to design the Comprehensive Kiamichi River Basin Water Development Plan, due for submittal to the Legislature February 1, 2000.

SCR 60 establishes a task force, including the OWRB, to study the Cache Creek Basin and the operation of Lakes Lawtonka and Ellsworth. The task force will seek means to maximize water supply and recreational benefits and minimize flooding; and report to legislative leaders by December 31. □

Board Aids Bridge Creek In Tornado Recovery Efforts

Monstrous tornadoes have so many devastating aspects -- one catastrophe melting into another, like ripples in a pond. The immediate focus is on the victims, then on their crushed homes and businesses, crumpled cars and trucks, dead or dazed farm animals and family pets.

The immediate tragedy is so heart-rending and the losses so enormous that many of the fringe problems are dismissed to outer circles. Among the problems realized later in the disaster are the loss of utilities and destruction of water wells -- especially critical to a small, rural community like Bridge Creek where residents rely on individual wells for water supply.

According to Gary Glover, who oversees the Water Board's well driller/pump contractor program, many of the community's 300+ wells were damaged by the storm or covered up with debris. Some water wells skipped over by the tornado were damaged in good-intentioned cleanup efforts by crews with tractors and debris removal equipment.

Glover headed up an OWRB team that spent weeks in the field locating wells buried in rubble and marking them with tall flags so tractors could avoid further damage. On the team were Geologists Mark Belden, Kent Wilkins and Kim Sullivan and Hydrologists Lisa Penderson, Ray Hardy, and Nathan Kuhnert and Engineer Hank Elling.

For water wells that appear intact, Glover advised well owners to remove submersible pumps and disinfect the wells.

Gravel and other small debris often lock the pump in the wells allowing pollution and debris to sift in the opening between the pump and the inner casing. "In those cases, the well is lost to use and must be plugged," Glover said. He urged well owners to include loss of a water well in damage claims to insurance companies.

"In many cases, insurance will pay for plugging the tornado-damaged well and replacing it with a new one," he said. In cases where wells are damaged beyond repair and the costs of plugging are not covered by insurance, help may be available from the OWRB Well Drillers Indemnity Fund, Glover pointed out.

Amendments to Senate Bill 549 by Sen. Bruce Price and Rep. M. C. Leist, during the recent Legislative Session provide for costs of plugging wells damaged in a declared disaster, such as the May 3 tornado. Costs of well plugging previously borne by the owner now can be reimbursed from the Well Drillers Indemnity Fund administered by the OWRB.

Glover cautioned well owners not to use water from a damaged well until the well has been inspected and disinfected. Before using water from a well in the tornado area, even though it appears normal, he urged homeowners to submit a water sample to the Oklahoma Department of Environmental Quality (ODEQ) Lab to ensure the water is safe for drinking.

According to instructions from the DEQ, homeowners can disinfect a water well with ordinary chlorine laundry bleach (5.25 percent chlorine.) Do not use scented bleach such as lemon or pine.



Hydrologist Lisa Penderson and Geologist Kent Wilkins worked on the OWRB team that assisted in locating, clearing and assessing damage to water wells in Bridge Creek. Global Positioning System (GPS) equipment, used here by Penderson, along with well logs, helped pinpoint well locations.

HOW TO DISINFECT A WELL

1. Pump the well enough in advance to completely remove sediments and other debris.
2. For a 6-inch diameter well, use five pints (80 ounces) of bleach for every 100 feet of standing water. For wells of different diameter, use approximately one pint of chlorine bleach per inch in diameter for every 100 feet in depth.
3. Open all water taps in the system until a strong chlorine odor is present, then close the tap. This will allow for disinfection of the house service line. To disinfect the well casing, briefly flush water back down the casing with a garden hose. Reinstall the sanitary well seal.
4. Let the chlorine remain in the water system for at least four hours (better still, overnight), but no longer than 24 hours. Then, turn on all the taps until the chlorine odor is gone.

Although the renovation/replacement of water wells would seem a minor task compared to the immense task of rebuilding a community, it is a vital step in helping Bridge Creek families again put down roots. □



The Financial Assistance Program of the Oklahoma Water Resources Board (OWRB) is so successful in its mission that today it stands as the state's primary provider for water and wastewater improvements. The cornerstone of the initiative that has won the respect of the nation's financial community is the bond loan program, credited with enabling 211 water/sewer projects totaling over \$303.6 million.

The FAP that flourishes in 1999 began in

1983 with the Oklahoma Legislature's appropriation of \$25 million in "seed money" to the Statewide Water Development Revolving Fund. In terms of appropriations, it was a small seed, but it thrived under able management, and continues to bear abundant fruit for the cities and rural areas throughout Oklahoma.

So fruitful and far-reaching are the programs that FA Division Chief Joe Freeman, and Assistant Chief Paul Hodge, estimate that projects approved and funded by Financial Assistance Programs touch the lives of more than 1.5 million Oklahomans.

It's Oklahoma's top provider of loans for water/sewer projects

The sale of \$75 million in revenue bonds in March continues to nourish the loan program. The recent bond issue again received Standard & Poor's AA rating, reflecting the program's maturity, good history of borrower repayments, strong management and sound underwriting standards. Loans are funded from a "blind pool" in which loans are not committed



Seated: Debbie Dickson, administrative assistant
Wilma Beagle, accountant
Angela Thompson, financial analyst supervisor
Suzi Kyte, financial analyst
Karen Yuan, engineer
Jennifer Halstead, environmental specialist
Laticia Durham, financial analyst

Standing: Tiger Feng, engineer
Shelly Bacon, grant analyst
Harold Springer, chief engineer
Paul Hodge, assistant division chief
Joe Freeman, division chief
Marc Hullinger, engineer
Manuel Phillips, financial analyst intern
John Day, environmental specialist

Not present: Reese Daugherty, engineer and technical supervisor; Jalisha Booth, clerk; Laura Oak, CPA accountant.

until after the bond issuance. Money from the lending pool is used to make low interest loans to communities which meet the FAP's strict requirements.

As of June 8, the bond loan program has approved 211 loans underwriting more than \$303.6 million in water and wastewater projects in Oklahoma.

Day-to-day management of the program is handled by Freeman and his staff of 17 specialists, with oversight by the Board's Finance Committee.

FAP generated \$25 million in emergency grants

Since inception of the Financial Assistance Program in 1983, interest earned on the Statewide Water Development Revolving Fund and bond issue reserves has contributed more than \$25 million to a fund for emergency grants. The Board awards grants up to \$100,000 for sewer and water emergencies to communities that demonstrate the greatest need for the funds.

To gain eligibility, communities must exhibit conditions which "threaten life, health or property" and rank high in the priority point system carefully developed by the FA division.

With the award of two emergency grants at the June 8 Board meeting, the Board has approved 437 emergency grants totaling \$25,002,528.25. Of the total grants approved to date, 274 enabled water improvements; 162 assisted sewer infrastructure; and one contributed to a project consisting of both water and wastewater facilities.

A state-federal initiative offers loans for wastewater facilities

The Clean Water State Revolving Fund (CWSRF) loan program is one of the state's strongest and most respected funding initiatives. The U.S. EPA commends it as "a very well managed program, as evidenced by the continued good financial condition of the fund."



Marc Hullinger, left, engineer of the Board's Financial Assistance Division, examines details of the Ponca City wastewater treatment plant, a project financed by an \$18 million loan from the Board's Clean Water State Revolving Fund program. Also pictured, Sam Blackburn, construction services administrator, and David Rankin, resident inspector, both of FHC, Inc.

Ponca City Wastewater Treatment Plant



Old and new facilities are shown in this view of construction at the Ponca City wastewater treatment plant. Building in foreground is the old operations building which will be replaced by the new one behind it. Structure on right is an existing digester unit undergoing renovation. Five buildings and other facilities are being added in the two-phase project scheduled for completion in August. It is designed to meet the projected needs of Ponca City for 20 years.

As an incentive to achieve compliance with the federal Clean Water Act, the Board offers lower than market interest rates on loans to wastewater systems. The CWSRF is supported with funding from the U.S. EPA, state matching funds (generated through the issuance of debt), loan interest and principal payments, and investment earnings on CWSRF accounts at the state treasury.

This financing alternative underwrites loans to large cities and smaller entities that meet requirements of the program. Large communities often combine CWSRF funds with bond loan program funds to construct or refinance large projects. As construction loans are repaid in the large community CWSRF program, loan proceeds are used to make new loans.

The Board has approved 83 CWSRF loans totaling \$296.1 million.

DWSRF targets needs of drinking water systems

The most recent addition to round out the OWRB array of infrastructure financing opportunities is the Drinking Water State Revolving Fund program, in which the Oklahoma Department of Environmental Quality provides a prioritized list of applicants to the FA Division for funding. The Division is “banker” in the cooperative effort to provide low-interest loans to municipalities and rural water districts for the construction or improvement of drinking water treatment and distribution facilities. The first loans approved under the DWSRF initiative were those to Holdenville in August, 1998, and Cushing in September. With the able management of the FA Division, Oklahoma’s Drinking Water SRF program was the first in EPA Region 6 to close loans. Since implementation, the program has approved three loans totaling \$9.75 million.

The program is supported by \$5.5 million in appropriations by the Oklahoma Legislature to match EPA grants to the Drinking Water State Revolving Fund.

REAP grants are a boon to small communities

When the Oklahoma Legislature mandated the Rural Economic Action Plan (REAP) in 1996, its members assigned to the OWRB administration of that portion of the program that assists water and wastewater projects. The \$18 million appropriated to the program specifically targets communities with populations of 7000 or less, but awards priority to those of 1,500 or less.

In structuring the program, the legislature aimed its assistance to areas where faltering tax bases and declining populations limit economic viability. As of mid-year, 1999, the Board has approved REAP grants to 161 communities totaling \$12.5 million. □



Report Notes 5-Year Water Quality Trends

A new report, *Five Year Trends Update, 1993-1997*, charts long-term trends in Grand Lake’s water quality, based on data collected by Grand Lake Association (GLA) volunteers in Oklahoma Water Watch, a citizens monitoring program administered by the OWRB.

Derek Smithee, OWRB Water Quality Division chief, emphasized that long-term data is extremely valuable to water quality managers, environmental agencies and state leaders in making sound decisions in managing Grand Lake as an important economic resource.

Since 1992, volunteers have tested for dissolved oxygen, water clarity, pH, air temperature and water temperature, adding nitrate-nitrogen, ammonia-nitrogen and ortho-phosphate parameters in 1993 as means of monitoring the lake’s aging processes.

The report noted that volunteers sampled streams, coves and open lake areas and found most areas followed normal seasonal water quality patterns. Dissolved oxygen (DO) levels were normal and stable in most open lake locations, but somewhat lower the upper lake area.

Only a few isolated exceptions were noted in evaluating the lake’s overall clarity. A decline in water clarity can be a symptom of accelerated algae growth and sediment loading.

Sampling in some coves showed elevation in nitrate, phosphorus and ammonia levels in 1996 and 1997. Overall, results demonstrated encouraging trends in water clarity and low nutrient levels in major areas of the lake.

The report recommends additional monitoring to protect one of the state's prime surface water resources.

The Grand Lake chapter of OWW, organized in 1992, was the first in the state, and today, 50 GLA volunteers continue to collect water quality data at 37 sites. Monitors have volunteered more than 4700 hours. The group has helped to establish baseline water quality conditions, identify potential water quality concerns, determine water quality trends and promote citizen involvement in managing water quality.

Julie Cunningham, OWW coordinator, said "the GLA monitors have exceeded all we asked and sampled in all kinds of weather for five years."

At Quality Control sessions April 30-May 1, Resolutions of Appreciation were presented to Cliff Younger, Chet Long and Ted Myers.

Five-Year Outstanding Volunteer Awards were presented to Albert Hall, Virginia Seibert, L. M. Seibert, Lonnie Stover, Sr., Cecille Bales, Don Bramer and Don Roderick.

Honored for two years' service were Shirley Trout-Claybaugh, Weldon Speer, Linda Elmburg, the Wyandotte Tribe and Marion Sizemore. □



First Crude Oil Revenues In

Thanks to a measure passed by the Oklahoma Legislature in the special session to deal with low crude oil prices, the Rural Economic Action Plan (REAP) was beneficiary of \$103,701. The amount contributed to REAP in June reflected earnings for May.

House Bill 1003X of the session called January 20 revamped the gross production tax collection formula and created a special revolving fund to receive oil tax revenues at such time as crude oil prices recovered. The revolving fund was earmarked for education, but included the OWRB REAP to share the revenues.

The fund is tiered with a cap of \$100 million. According to Mike Melton, OWRB assistant to the director, if crude oil prices should rise to \$20 per barrel and stay at that level for a year, the Board's REAP could be beneficiary of \$5 million.

New REAP Deadlines Adopted

The Financial Assistance Division announces changes to the procedure it uses in scoring applications for Rural Economic Action Plan (REAP) grants. Changes to OWRB rules governing the program adopt a "closed cycle" that sets a Septem-

ber 1 deadline for submittal of grant applications to be considered for FY 2000 funding.

Joe Freeman, FA Division chief, said the Board had used an "open cycle" in which grant applications were continually accepted, prioritized and funded as money became available. "The disadvantage was that a community whose application scored very high in priority points and had awaited funding for a year or more could be bumped by any new application that scored even one point higher," he explained.

"The mismatch between the Water Board's "open cycle" program and the COGs' "closed cycle" program had made coordinating of project funding unnecessarily complicated, confusing and time consuming," he pointed out. "I believe this system is fairer for all REAP applicants."

REAP applications already on file with the OWRB Financial Assistance Division, as well as new ones submitted by the September 1 deadline, will be considered for funding in this cycle. Freeman says his staff is working toward the Division's goal of having those of highest priority eligible for approval by the 9-member executive Board at its November meeting, with funding when money is made available to the program January 1, 2000.

Value of Water Booklet Offered

How can water planners and suppliers make better investment decisions for their water supply?

The answer may lie in the National Water Research

Institute's new publication entitled *The Value of Water*, made available without charge to decision-makers in Oklahoma through the Water Resources Board.

The document challenges the decision-maker to consider investment opportunities in a new way -- by recognizing the real value of water.

The Value of Water shows that the real value of water is not necessarily associated with its price or cost, but what it does to enhance the environment, economy and quality of life.

For a free copy, please call 405-530-8800 or write to the Oklahoma Water Resources Board, 3800 N. Classen, Oklahoma City, OK 73118.

Wister Revegetation Project Recruits Seven



Recruited for work on the Wister Revegetation Project are, seated: Dane Evans, Matt Cogburn, Bryan Martin, Michael Gibson. Standing: Steve Hughes, Mike Green and Jared Steelman. Wick Warden and Robin Randolph of the Water Quality Division staff oversee the project.

Guiles Employee of the Quarter

Lenora Guiles, an employee of the Information Services Section, was honored as Employee of the Quarter at the June 24 staff meeting. Executive Director Duane Smith commended Guiles for working quietly behind the scenes in a number of important agency programs and being a perennial volunteer in tackling tough tasks.

A graduate of Capitol Hill High School, Guiles worked in



the private sector several years before joining the Water Board's Information Services Section in January 1987.

She is a lifetime resident of Oklahoma City and the mother of an adult son, Michael.

A \$ Saved is a \$ Earned!

With the Board's approval of two emergency grants in June, the total dollars awarded in emergency grants surpassed the \$25 million legislative appropriation that established the Statewide Water Development Revolving Fund in 1983. In addition to putting the powerful Financial Assistance Program in place, the seed money provided -- and continues to provide -- opportunities for grants funded from interest earnings.

Joe Freeman, Financial Assistance Division chief, announced that the grants for \$50,000 to Shell Creek RWD #12 and \$50,000 to the Keota PWA pushed emergency grant totals "over the top" to \$25,002,528.25. All the while, most of the seed money that set the Financial Assistance Program in motion remains viable to back the Board's bond issues. It continues to earn interest that accrues in the emergency grant fund to assist communities with urgent infrastructure needs.

The \$25 million in emergency grants exerts wider, more critical influence than its total would suggest, enabling \$140.2 million in total projects.

A series of bond sales backed by the fund has provided \$292 million in loans for the construction and improvement of water and wastewater infrastructure in 75 of Oklahoma's 77 counties.

At the June 8 Board Meeting:

Executive Director Duane Smith updated the Board on legislation of interest and declared a very successful session, in terms of OWRB programs and appropriations. Mike Melton, legislative liaison, distributed copies and discussed results of pertinent legislation.

Joe Freeman, Financial Assistance Division chief, asked and gained approval for emergency grants to Shell Creek RWD #12 (McIntosh Co.) and the Keota PWA (Haskell Co.) The Board approved loans to the Shattuck MA, (Ellis Co.), Broken Arrow MA, Owasso PWA (Tulsa Co.) and Chandler MA (Lincoln Co.)

Rural Economic Action Plan (REAP) grants were awarded to the Town of Meridian, (Logan Co.), Temple UA, (Cotton Co.), Meeker MA, (Lincoln Co.), RWD #5, (Adair Co.) and the Town of Tyrone, (Texas Co.)

Planning and Management Division chief Mike Mathis asked approval of two temporary and five regular permits and amendment to one temporary groundwater permit. Three regular permits were issued for stream water use. Water well driller/pump contractor licenses were issued to Mike Buse, Turn Key Drilling; and Leroy Ledford, Ledford Pump Service. Contracts for Financial Assistance under the Statewide Rural Energy and Water Conservation Program were extended for 12 entities.

The Board voted to reconsider action, vacate the Board Order and withdraw the permit for water use issued to Seaboard Farms, Inc., at the May Board meeting. The Board asked staff to hold hearings to gather additional information and return with recommendations to the Board in August. Hearings were scheduled at the High Plains Vo-Tech in Woodward at 10 a.m. June 28.

The Board elected these officers for the upcoming year: Lonnie Farmer, Davidson, chairman; Richard Sevenoaks, Tulsa, vice-chairman; and Grady Grandstaff, Oklahoma City, secretary. □

FINANCIAL ASSISTANCE PROGRAM UPDATE

Approved at May & June, 1999

Board Meetings

FAP Loans

1999 Bonds; 30-year maximum term - Variable or Fixed Rate

Comanche Co. RWD #2	\$ 1,045,000.00
Broken Arrow MA	\$ 1,910,000.00
Chandler MA	\$ 3,000,000.00
Muskogee MA	\$ 4,300,000.00
Owasso PWA	\$ 570,000.00

CWSRF Loans

Broken Arrow MA	\$ 1,128,000.00
Broken Arrow MA	\$ 945,000.00
Muskogee MA	\$ 2,164,800.00
Owasso PWA	\$ 931,609.92
Shattuck MA	\$ 500,000.00

Emergency Grants

Pushmataha Co. RWD #3	\$ 44,506.00
Town of Commerce	\$ 48,000.00
Town of Davidson	\$ 56,780.00
Garfield Co. RW,SD #5	\$ 100,000.00
McIntosh Co.,Shell Creek RWD #12	\$ 50,000.00
Town of Keota	\$ 50,000.00

TOTALS AS OF JUNE 8, 1999

APPROVED Amount	FAP Loans - 211 \$303,685,000.00	CWSRF Loans - 83 \$296,103,876.38
APPROVED Amount	Emergency Grants - 437 \$25,002,528.25	REAP Grants - 161 \$12,570,406.60
APPROVED Amount	DWSRF Loans - 3 \$9,753,675.00	Hardship Grants - 2 \$1,038,752.30

