

Oklahoma

Water
News

MONTHLY NEWSLETTER OF THE OKLAHOMA WATER RESOURCES BOARD

FAP Boon to Rural Oklahoma's Outmoded Sewer, Water Works

Grant Priority System Ensures Fairness

Since inception of the OWRB's Financial Assistance Program in 1982, the Board has provided almost \$35 million in loans and grants to Oklahoma communities with aging or damaged water and sewer systems. An extremely popular facet of the FAP is the Board's grant program. More than \$9 million has been awarded in 134 emergency grants to small cities, towns and rural water districts, many of which would have been unable to obtain financing elsewhere due to their small size and limited tax base.

It would seem difficult—if not impossible—to find fault with a program that has helped rebuild water towers destroyed by prairie tornadoes, extended water distribution lines to meet the needs of isolated communities and provided funds for the repair or construction of water and sewage treatment facilities which are required to meet federal Environmental Protection Agency standards. Yet due to a recent controversy over so called "pork barrel" projects and a subsequent State Attorney General's opinion on the matter, even the most straightforward state funding programs are undergoing close scrutiny. According to Walid Maher, OWRB Planning and Development Division chief, the FAP's unique grant priority

system more than answers any critics.

"The priority system was carefully developed to ensure fairness to all grant applicants," he said. "When laying the groundwork for the Financial Assistance Program, the development of a comprehensive and fair system of awarding grants was a must. And, in fact, we are continually modifying the system to make it even more equitable.

Entities may qualify for an individual grant up to \$100,000. But since funds are limited—they come from interest earned on the Statewide Water Development Revolving Fund—only a limited number of applicants can receive funding at any one time, Maher pointed out. Once an application is received, Board staff promptly appraise the nature and severity of each situation, as well as each community's debt burden, and its willingness to commit reserve funds to the proposed project.

"The grant priority system consists of a mathematical equation which rates the applicants by means of a formula awarding points for each criterion, up to 116 total points. The Board then considers each project based on its rating and the availability of grant funds," Maher explains.

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*Hundreds attend
9th Annual Water
Conference*

*Water Quality vs.
Development theme
attracts both sides.
See more pictures
inside!*



Marian Mlay, Director of EPA's Office of Groundwater Protection in Washington, D.C., told conferees that more emphasis needs to be put on pollution prevention; 97 percent of EPA groundwater funds now go into cleanups. Pesticide control, leaking underground storage tanks and wellhead protection are issues before EPA and the states.

Grant Program, continued from page 1

The criteria involved in the FAP's priority system are:

- severity, nature of the emergency situation facing the applicant;
- water and/or sewer rate structure;
- indebtedness of the applicant;
- local contribution;
- median household income of the applicant's service area;
- entity's ability to finance the project on its own;
- amount of grant requested; and
- number of previous grants received.

Success stories abound in Board's program to assist communities troubled with sewer, water problems.

Success stories pour into the OWRB from all across rural Oklahoma. Officials of the Town of Headrick, 10 miles east of Altus, are ecstatic over a \$77,000 grant awarded in August. As with many communities in the state, Headrick's old, deteriorated water system was in dire need of repair. Failing water lines of the 50-year old system were replaced with new PVC pipe and gate valves. The town also plans to construct a chlorination station to improve the quality of their water. The OWRB grant was combined with \$5,644 in reserve funds and in-kind services provided by Headrick. Such creative financing of water and sewer projects is a cornerstone of the Board's Financial Assistance Program.

In far southeastern Oklahoma, the Town of Haworth put a \$57,000 OWRB grant to work renovating its ailing sewage lift station. Previously, submerged pumps at the lift station clogged and caused raw sewage to back up into a nearby school and neighborhood. To correct the health hazard, the Haworth Public Works Authority has rehabilitated the existing lift station and installed above ground pumps. Again, the grant was combined with reserve funds totaling more than \$5,000. An unexpected, yet pleasant, bonus occurred at proj-

ect's end when the engineering firm supervising the project discovered that it was \$1,800 under budget. The unspent money was channeled back into the Water Development Fund, where it is available to future applicants.

The OWRB's participation in water and sewer projects doesn't end with the awarding of grants. OWRB Planning and Development engineers keep a watchful eye on projects throughout construction to ensure that FAP funds result in efficient water and wastewater treatment systems. Then, the staff continues to work with hometown officials in monitoring the project's revenues and expenses so that FAP-financed improvements are adequately funded for operation and maintenance.

The Financial Assistance Program was created by the State Legislature in 1982 to boost water resources development in Oklahoma. Maher points out that the largest applicant to receive a FAP grant is Pawhuska with a population of approximately 4,800 while Meridian, with a population of only 78, has the distinction of being the smallest grant recipient.

"The program has been immensely successful since its inception. In fact, FAP loan and grant monies have been instrumental in the construction of more than \$32 million worth of projects. Unfortunately, many rural communities remain in dire need of water and sewer project funding from the OWRB," he added.

According to Maher, 66 grant applications requesting almost \$5.3 million are on file at the OWRB, while 53 loan applications totaling more than \$33 million await attention of Board staff. Such demand on the Revolving Fund seed money—plus obligations for water resources planning and research activities, security and collateral for revenue bonds issued to provide loan funds, state cost-sharing on federal water projects, and repayment of water supply storage contracts with the federal government—have methodically depleted the account to less than \$8 million.

"Revolving Fund monies have

gone to pay for remediation activities at Tar Creek, various state water supply studies and water storage in Sardis Reservoir," Maher said.

"Furthermore, creation of the State Wastewater Facility Construction Revolving Loan Fund has necessitated an appropriation of \$1,855,600 from the FAP's Revolving Fund to match \$9,278,000 in federal grant money. This new program, coupled with a December Sardis payment of \$500,000, will deplete the account to approximately \$5 million," he added.

Mahe hopes that a legislative appropriation next session will replenish the fund to its original \$25 million level.

"There seems to be a groundswell movement in the state—led by the Water Coalition and endorsed by Gov. Bellmon and the chairmen of the Senate and House Natural Resources Committees, Sen. Giles and Rep. Hobson—supporting such an appropriation," he said. The primary concern seems to be where the money will come from—a bond package, general revenues or the Legislature's emergency "rainy day" fund.

Such high-level support has given Maher renewed optimism.

"It's no secret that the Financial Assistance Program has been a huge success; it's certainly no secret to the Legislature and their constituents in rural sectors of the state. I believe I'm safe in saying that the Program will continue to answer Oklahoma's water and sewer project needs, both fairly and equitably," Maher said.



Water Use Reports in Mail

On January 4, Jann Hook, OWRB Program Analyst, sent 10,874 water use reports to the Oklahoma City post office. The reports bear the addresses of 9373 Oklahoma irrigators and 1501 industries, municipalities and rural water districts that have permits issued by the Board for the use of stream water and groundwater.

One copy is marked "original" for

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A. At the luncheon, Gov. Henry Bellmon discusses the urgency for cleanup of the Illinois and Arkansas Rivers.

B. Walid Maher of the OWRB and Board Member Bill Secrest exchange views during the coffee break.

C. U.S. Rep. Wes Watkins calls Oklahoma the nation's groundwater research center.

D. Board Member Gerald Borelli relates past Water Conference experiences to the OWRB's Shelly Bacon while James Leewright and Connie Ziegelgruber check last-minute details.

E. Worth Jeffus, of Texas County Conservation District, Hollis farmer Sam Messenger and OWRB Board Member Ervin Mitchell discuss mutual concerns over western Oklahoma water supplies.

F. Clarence Burch, former chairman of the State Planning & Resources Board, was one of seven honored as an Oklahoma Water Pioneer.

G. Newly elected Senator Ed Long addresses water quality concerns from an agribusiness perspective.

A. Borelli chats during break with Assistant Director Mike Melton and Mary Schooley, of the OWRB.



B. Charles Newton, retired chief of the OSDH Water Facilities Engineering Service, accepts the Water Pioneer Award on behalf of late co-worker Loyd Pummill.



D.



G.



E.



F.



C. Cal Hobson suggests ways to add monies to the depleted Statewide Water Development Revolving Fund.

D. OWRB workers assist some of the 300 people who attended the Ninth Oklahoma Water Conference.

E. U.S. Senator Don Nickles welcomes conferees prior to his discussion of pressing state water quality issues.

F. OWRB Chairman Robert S. Kerr, Jr., Mlay, James Odendahl of Weyerhaeuser and Oklahoma City Manager Terry Childers listen as U.S. Rep. Mike Synar addresses the crowd.

G. Synar discusses measures needed to fight "the war against water pollution."

Mainstream continued from page 2

return to the Water Resources Board; the other is for the water user's file. Hook asked that completed water use reports be mailed back to the Board within 30 days.

Japanese Guests of OWRB

Japanese officials with an interest in water and wastewater treatment systems were guests of the Water Resources Board November 19. Mike Melton, OWRB assistant director and Mike Mathis, assistant chief of the Planning and Development division, accompanied the two visitors on a tour of Edmond's new state-of-the-art water treatment plant near Lake Arcadia after an office briefing on the OWRB and its role in managing the state's water resources.

The visitors were Masaya Hayashi, chief supervisor of the Uji Water Purification Plant in Kyoto, and Shozo Inoue, a public systems engineer with the Mitsubishi Electric Corporation Branch in Osaka.

Kyoto Prefecture, designated by the governor as Oklahoma's "sister state," is located in the southwestern part of the main island of Honshu. Eighty percent of the prefecture's 2.6 million people live in Kyoto City, supplied water by Bywa Lake, 15 miles distant. Hayashi said plentiful rainfall insures a reliable water supply, but, trihalomethanes—a result of over-chlorinated wastewaters—present water quality problems.

Japanese visitors Masaya Hayashi and Shozo Inoue present a souvenir of Kyoto to Mike Mathis (left) and Mike Melton of the Oklahoma Water Resources Board.



Hayashi and Inoue's visit began an 18-day U.S. tour that included stops in Oklahoma City, New York City, Seattle and Los Angeles.

Council Adopts Resolution

Following suit of the Oklahoma City Municipal Improvement Authority, the Oklahoma City Council members recently adopted a resolution affirming their desire to maintain and improve the quality of area rivers.

The Municipal Improvement Authority and City Council construct and maintain facilities for water and wastewater treatment in the Deep Fork, North Canadian, South Canadian River and Cottonwood Creek basins which represent a taxpayer investment of more than \$5.6 million. In the Resolution, both organizations vowed to protect and maintain the quality of the water and to use whatever means are necessary to protect their investment.

Mayor Ron Norick encouraged central Oklahoma citizens, state and local agencies and organizations to join the Municipal Improvement Authority and the City Council in this resolve.

Earthquakes Tied to El Nino?

New research suggests that earthquakes on the Pacific Ocean floor may trigger shifts in ocean currents and air pressure called El Ninos (or the Southern Oscillation).

Earlier theories held that changes in the atmosphere and at the sea surface caused catastrophic changes in water temperature and climate.

The new theory was set out in two articles in recent issues of EOS, a journal of the American Geophysical Union. An author at the Hawaii Institute of Geophysics suggests that earthquakes along the East Pacific Rise (a seismically active zone from the Gulf of California to Easter Island and beyond) were related to the El Nino. During 285 months he found a striking coincidence between the earthquakes and the five to seven-year recurrence of El Ninos.

Also, USGS researchers in Menlo Park, Colorado, noted that periodic undersea volcanic eruptions which spread lava onto the ocean floor could heat the water enough to set the oscillation in motion. Surveys by bottom-scanning sonar have observed fresh lava flows recurring about once every five to seven years.

Well Measurement Underway

The annual cooperative well measurement program of the Water Resources Board and the U.S. Geological Survey got underway January 9 in Oklahoma's Panhandle counties. By completion March 31, the hydrolo-

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Dena Riddle retired December 30 after 13 years of service to the State of Oklahoma, ten-and-a-half of them spent as secretary to the OWRB Stream Water division. Robert S. Kerr, Jr., OWRB chairman, presents Riddle with a Resolution of Appreciation. The ceremony was held in conjunction with the Board's monthly meeting on December 13. Friends and co-workers honored Riddle with a reception at OWRB offices on December 30.

Mainstream continued from page 5

gists will have recorded static water levels in 1,018 wells across the state.

According to Groundwater Division Chief Duane Smith, the effort will begin with measurement of 517 wells in the Ogallala aquifer—300 of

them in the Panhandle counties; 217 in the four northwest counties underlain by the Ogallala.

USGS teams will measure 244 wells in Cimarron, the western half of Texas, Harper, Woodward and Roger Mills Counties. OWRB hydrologists

will be responsible for 273 wells in the eastern half of Texas, and all of Beaver and Ellis Counties.

Oklahoma's program was initiated in 1937, and the state has cooperated since 1950.

**ACTIVE CONSERVATION STORAGE IN SELECTED OKLAHOMA LAKES AND RESERVOIRS
AS OF DECEMBER 20, 1988**

| PLANNING REGION LAKE/RESERVOIR | CONSERVATION STORAGE (AF) | PERCENT OF CAPACITY | PLANNING REGION LAKE/RESERVOIR | CONSERVATION STORAGE (AF) | PERCENT OF CAPACITY |
|-----------------------------------|------------------------------|------------------------|-----------------------------------|------------------------------|------------------------|
| SOUTHEAST | | | Wister | 63,250 | 100.0 ³ |
| Atoka | 63,620 | 51.5 | Sardis | 289,110 | 95.6 |
| Broken Bow | 914,839 | 99.6 | NORTHEAST | | |
| Pine Creek | 77,700 | 100.0 ³ | Eucha | 60,100 | 75.5 |
| Hugo | 157,600 | 100.0 ³ | Grand | 1,267,700 | 85.0 |
| McGee Creek | 100,949 | 91.9 | Oologah | 518,940 | 95.4 |
| CENTRAL | | | Hulah | 30,594 | 100.0 |
| Thunderbird | 94,241 | 89.0 | Fort Gibson | 364,265 | 99.7 |
| Hefner | 72,795 | 96.6 | Heyburn | 6,600 | 100.0 |
| Overholser | 15,935 | 100.0 | Birch | 19,031 | 99.1 |
| Draper | 88,458 | 88.5 | Hudson | 200,300 | 100.0 |
| Arcadia | 27,390 | 100.0 ¹ | Spavinaw | 15,850 | 52.8 |
| SOUTH CENTRAL | | | Copan | 43,400 | 100.0 |
| Arbuckle | 54,552 | 87.2 | Skiatook | 296,212 | 92.7 |
| Texoma | 2,360,434 | 89.5 | NORTH CENTRAL | | |
| Waurika | 193,844 | 95.4 | Kaw | 413,869 | 96.6 ³ |
| SOUTHWEST | | | Keystone | 614,147 | 99.7 |
| Altus | 94,713 | 71.3 | NORTHWEST | | |
| Fort Cobb | 77,447 | 98.8 | Canton | 73,958 | 75.9 |
| Foss | 162,257 | 66.6 ² | Fort Supply | 13,900 | 100.0 |
| Tom Steed | 79,779 | 89.7 | Great Salt Plains | 31,400 | 100.0 |
| EAST CENTRAL | | | STATE TOTALS | 11,847,230 | 91.3 |
| Eufaula | 2,273,651 | 97.6 | | | |
| Tenkiller | 614,400 | 97.9 | | | |

1. In initial filling stage
2. Conservation storage lowered for project modification
3. Seasonal pool operation

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.

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