



OKLAHOMA

water news

MONTHLY NEWSLETTER OF THE OKLAHOMA
WATER RESOURCES BOARD

Gerald E. Borelli, Chairman

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RWDs Face 3 to 5-Year Waits, High Costs and Funding Problems

The turn of the tap that brings a flow of fresh water is a heedless act taken for granted a dozen times a day by the city dweller. Not so, out in the country. Often this same act elicits a flood of appreciation from the rural resident who has endured years of birthing and growing pains that "come with the territory" in founding a rural water district. And his numbers are legion.

Bill Secrest, OWRB member and manager of Wagoner County RWD #4, says the wait for making piped-in water a reality is typically three to five years. The time is spent signing up potential customers, working with engineers in the design, arranging financing, seeing copious paperwork through the system and overseeing the actual construction. It can be longer, much longer, for some he concedes — 19 years from start to finish for Nowata RWD #7.

"The shortest time to completion, if all the parts come together in record time, could be a year," he said, "although I don't know of any that have finished so fast."

Sometimes the sheer size of a rural water district can slow its completion. Rogers County #3 serves 3000 customers in a compact 110-square mile area, while Caddo County RWD #3's 1450 taps are scattered along a distribution network 900 miles long. In contrast, Kay County RWD #2 serves 18 customers on two miles of line.

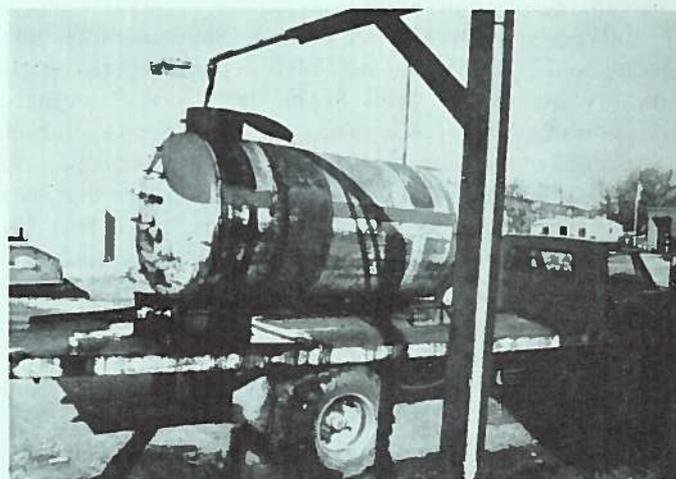
Every day, two-thirds of a million Oklahomans turn their taps to receive water provided by some 475 rural water districts.

Only those who have endured bad-tasting water or a supply so scant that a single tub of laundry could use up the entire day's ration, or who have doled out water hauled in drums can appreciate its worth. Unlike the urbanite who often gets a great bargain on water subsidized by the city, the resident living beyond the reach of city lines pays a water bill that reflects the real cost of developing and delivering the water.

According to Gene Whatley, executive director of the Oklahoma Rural Water Association, rural water customers can expect a bill half-again to double that of city dwellers. Relatively "cheap" water is available in eastern Oklahoma where supplies are abundant, while western Oklahomans

may pay a minimum bill as high as \$30 to \$45 for the first 1000 gallons, then two dollars or more per thousand for the rest.

The minimum bill reflects the district's indebtedness, explained Whatley. The RWD borrows money from the FmHA or another source on behalf of the water users, then every user assumes an equal share of the debt. In these times of high interest rates (FmHA's has doubled in recent years) and higher construction and maintenance costs, each customer's share generally is \$3500 to \$4000. The share could be even more costly if the water source is a lake, in which case, costs must cover the construction of a treatment plant.



Water hauled in barrels and tank trucks is harsh reality for a rural family with a poor well or no water supply at all. Such a scene is repeated daily in both western Oklahoma, where water supplies are scarce and eastern Oklahoma, where lack of treatment and distribution systems plague many homeowners, even though they may literally live at lake's edge.

Then add in the "tap fee" — an up-front, one-time assessment ranging from a hundred to several hundred dollars to bring the water to the house from the nearest line. In divvying up the costs, RWD organizers also take into consideration expenses accrued in wages to district employees, insurance costs and a reserve fund for future expansion. A sharp pencil must be put to figuring costs, a task made touchier by state laws which limit a RWD to breaking even on the costs of supplying water to its customers.

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Rural Water Districts, continued from page 1

Because the rural water purse strings are tight, Whatley says the Oklahoma Rural Water Association spends a great deal of time and effort in educating member districts in efficient day-to-day operation and maintenance and emphasizes water conservation.

The most common source of water for the rural water district is a nearby municipality which welcomes the additional income gleaned from the sale of water surplus to its needs. Some 43 percent of the districts purchase water, 36 percent develop their own wells and 21 percent tap a surface source.

Once a potential water supply is secured, RWD organizers must shop for affordable financing. The most common source remains the FmHA, since 1961 the federal backer of 90 percent of the state's rural water districts. Oklahoma, recipient of \$300 million over the past 20 years, is among three states in the nation with the greatest investment of FmHA funds. The first FmHA financing in Oklahoma was \$65,760 loaned to Nowata Rural Water District #3 in 1963 at an interest rate of 3.8 percent. Early rates available through the Farmers Home Administration rose slowly, holding at five percent until October, 1981. Today, Oklahoma rural water districts vie for FmHA funds reduced by 65 percent and loaned at an interest rate of 9.625 percent. Likewise, FmHA grants are doled out sparingly, funding only 20 to 25 percent of any rural water system. So sparse is the federal money now that rare is the case indeed in which FmHA will participate with a 50 percent grant contribution.

Bill Secrest, OWRB and OWRA Board member, says local banks usually are not interested in underwriting a rural water system with fewer than 1000 customers, considering it high-risk with too few assets. Secrest, himself a resident of a suburb served rural water and manager of a large, bank-financed district, is quick to point out that not a single rural water system in Oklahoma has failed. The migration of 50,000 to 60,000 new rural water customers to the country and the suburbs every year is giving rise to some districts of 3000 or more customers, and local banks are quick to bid on such loan business.

If the rural water district is too small to pursue bank financing, Housing and Urban Development (HUD) funds, another program under the budget knife, offer some assistance through the Department of Economic and Community affairs.

Held in abeyance by a State Supreme Court ruling last month is the OWRB program which would have offered affordable loans to cities, towns and rural water districts for construction or improvement of water and sewer facilities. The court's interpretation was that the terms of the program's bond sale violated the constitution by making the state liable for the debts of local entities loaned money from the statewide water development fund. To assure the program's integrity, the Legislature late in April approved a joint resolution calling for a constitutional amendment to let the \$25 million fund be used to assist local water projects. A statewide election scheduled for the August 28 primary will give Oklahomans an opportunity to vote on the issue.

In the meanwhile, Secrest and Whatley both lament the delay in the loan program that was conceived to relieve funding problems caused by big federal cuts.

But regardless of the obstacles — long periods in organization, high costs, short money — both men see a secure future for rural water. And for whatever reasons the new-generation country-dwellers turn to the land, they will always have a need for good water. One of the solutions, according to Whatley and Secrest, may lie in the formation of rural water co-ops to develop the water supply, build the treatment plant, lay the distribution lines, keep the books and mail the bills.

One such organization already in existence is the Poteau Valley Improvement District in LeFlore County, a co-op formed by the merger of seven rural water districts and five towns to share the waters of Lake Wister.

Co-ops will succeed, Whatley believes. Two-thirds of a million people strung along thousands of miles of water line in 475 rural water systems are living proof that the cooperative spirit is alive and well in Oklahoma.



Board Awards Grants to Five Communities

At its regularly scheduled meeting April 10, the Oklahoma Water Resources Board presented grants to five communities, judged by the Board to have emergency needs for improvements to water and sewer systems. Grant funds are generated by interest accrued on the \$25 million water development fund.

Communities awarded grants were Colcord in Delaware County, \$95,816; Picher in Ottawa County, \$97,900; Oilton in Creek County, \$28,420; Muldrow in Sequoyah County, \$77,200; and Rural Water District #7 in Muskogee County, \$90,000.



Here's an Update on Arcadia Construction

This aerial view looking south at construction at the Lake Arcadia site near Edmond shows an earthen dam approximately 42 percent complete. The embankment is shown as a diagonal in the photo, between the outlet structure on the left and the intake tower on the right. Impoundment of the lake is scheduled for March 1986, with formal opening ceremonies in September 1987.

Stream Water Division Sets Permit Hearings

Stream water rights in Stream Systems 2-9-3, 2-9-4, 2-10 and 2-11 are being reviewed as part of a continuing OWRB program to make unused water available to the public.

The program, initiated in 1976, set up a rotation of stream systems wherein the allocation and actual usage are compared to determine whether the water has been put to beneficial use as required by Oklahoma Law. If a water right holder has failed to use the full allocation at least once in any continuous 7-year period, or failed to use amounts in accordance with a schedule of use approved by the Board, the amount of water authorized must be reduced or the permit cancelled.

Notices of hearings were mailed April 30, with hearings to be held June 14, 19 and 20. When a permit holder receives notice, the water use history should be reviewed, corrected if necessary, signed before a notary and returned to the Board before the hearing, or appear at the hearing to present evidence of use for Board consideration, says J.A. Wood, Stream Water Division chief.

If the water right holder agrees with the proposed reduction or cancellation, the form should be signed, notarized and returned to the Board prior to the hearing.

Board Lowers Allowable Chlordane Standard

In mid-April the Oklahoma Water Resources Board approved a revised chlordane limit as an amendment to the 1982 Water Quality Standards. The change came in response to a recommendation by the Environmental Protection Agency. The previous limit of 20.0 micrograms per liter is lowered to 0.02 micrograms per liter with the amended standard. Since the OSDH lab which processes the samples has a detection limit of 0.1 micrograms for chlordane, any detectable amount would be in violation of the new standard.

Water Quality Division Chief Ron Jarman points out that the pesticide may be legally used only for termite control, and exterminators are licensed by the state. The problem, Jarman believes, is not with the licensed exterminators, but with unauthorized users. Recent reports of chlordane traces throughout the state make it more of a widespread problem than the earlier concern over PCB's, he said.

Synar to Keynote Lone Chimney Dedication

Lake Lone Chimney, the 2050th watershed lake to be built in Oklahoma, will be dedicated in June 1 ceremonies featuring Congressman Mike Synar as keynote speaker. The event will get underway at the site five miles south of Pawnee with a viewing of the project at 9:00 a.m., a program featuring parachutists at 10:30, the welcome and address by Rep. Synar at 11 a.m. and lunch at noon.

Reservations are necessary and may be made through local Conservation District Offices or by calling the Oklahoma City Office at (405) 521-2384 by May 15.

AWRA Symposium Slated in June in Seattle

The American Water Resources Association will conduct a symposium entitled "A Critical Assessment of Forecasting in Western Water Resources Management" June 10-13 at the Seattle Sheraton Hotel in Seattle, Washington.

ACTIVE CONSERVATION STORAGE IN SELECTED OKLAHOMA LAKES AND RESERVOIRS AS OF APRIL 25, 1984

| PLANNING REGION LAKE/RESERVOIR | CONSERVATION STORAGE (AF) | PERCENT OF CAPACITY |
|-----------------------------------|-------------------------------|-------------------------|
| SOUTHEAST | | |
| Atoka | 109,800 | 88.0 |
| Broken Bow | 918,100 | 100.0 |
| Pine Creek | 76,500 | 98.5 |
| Hugo | 157,600 | 100.0 |
| CENTRAL | | |
| Thunderbird | 105,858 | 99.9 |
| Hefner | 71,800 | 95.0 |
| Overholser | 13,600 | 86.0 |
| Draper | 72,500 | 72.5 |
| SOUTH CENTRAL | | |
| Arbuckle | 62,571 | 100.0 |
| Texoma | 2,514,300 | 95.3 |
| Waurika | 203,100 | 100.0 |
| SOUTHWEST | | |
| Altus | 67,024 | 50.4 |
| Fort Cobb | 78,177 | 99.7 |
| Foss | 155,990 | 64.0 ² |
| Tom Steed | 83,804 | 94.2 |
| EAST CENTRAL | | |
| Eufaula | 2,329,700 | 100.0 |
| Tenkiller | 627,500 | 100.0 |
| Wister | 27,100 | 100.0 |
| Sardis | 302,500 | 100.0 |
| NORTHEAST | | |
| Eucha | 79,567 | 100.0 |
| Grand | 1,491,800 | 100.0 |
| Oologah | 544,240 | 100.0 |
| Hulah | 30,594 | 100.0 |
| Fort Gibson | 365,200 | 100.0 |
| Heyburn | 6,600 | 100.0 |
| Birch | 19,200 | 100.0 |
| Hudson | 200,300 | 100.0 |
| Spavinaw | 30,000 | 100.0 |
| Copan | 43,400 | 100.0 |
| NORTH CENTRAL | | |
| Kaw | 428,600 | 100.0 |
| Keystone | 616,000 | 100.0 |
| NORTHWEST | | |
| Canton | 97,500 | 100.0 |
| Optima | 3,755 | --- ¹ |
| Fort Supply | 13,792 | 99.2 |
| Great Salt Plains | 31,400 | 100.0 |
| STATE TOTALS | 11,975,717¹ | 97.3¹ |

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

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

The program will feature technical sessions such as "Incorporation of Forecasts in Water Resource System Operation," "Advances in Short-Term Runoff Forecasting," "Forecasting Water Demand," "Advances in Instrumentation, Data Transmission and Data Handling," and "Accuracy and Worth Forecasting." A complete program and registration information is available by writing Kenneth D. Reid, executive director, American Water Resources Association, 5410 Grosvenor Lane, Suite 220, Bethesda, MD, 20814.

If You've Ever Installed a Well Pump...

you will appreciate these Murphy's Laws reprinted with the permission of *Water Well Journal*.

1. After a factory training course, a serviceman can destroy a cannonball by performing routine maintenance.
2. After six people have absolutely verified the proper rotation of a 3-phase motor, it will be found to be running backwards.
3. The owner of any pump that is delivering less than its advertised performance will be either a lawyer or a retired engineer.
4. A factory expert with whom you need to talk will be out of town.
5. The pump owner will not feel it is important to tell you that (a) the house is located on a hill 100 feet above the well or (b) he has added 3000 feet of irrigation pipe and 40 sprinklers to his 10-gallon-per-minute system.
6. A pump that is performing perfectly will be struck by lightning. Conversely, any pump that is a real headache will never be struck by lightning.
7. Good decisions are made either on the basis of good information or dumb luck.
8. Sometimes God is just plain annoyed with this installation.

Photo Right:

Discussing the manual that served as text for the Stanford Workshop on Risk-Based Approach to Dam Safety Assessment are lecturers Edward Kavazanjian, Jr., Joseph B. Franzini and Martin W. McCann, Jr. of the Civil Engineering staff of Stanford University and Mike Mathis and Cecil Bearden of the OWRB Engineering Division. The Board's Engineering Division hosted the workshop held April 24 and 25 in Oklahoma City. The workshop was sponsored by the Federal Emergency Management Agency to instruct engineers and dam safety managers in methods of prioritizing dams for remedial action.

APRIL CROP AND WEATHER SUMMARY

Favorable temperatures and rains boosted the growth and development of wheat and other small grains. Wheat, oats and barley remained in good condition, and wheat advanced to 75 percent jointing. Eastern counties began grain sorghum planting; corn is up-to-stand in southern areas; alfalfa harvesting began in southern Oklahoma. Pastures and ranges are greening rapidly.

Temperatures ranged below normal, with the coolest 24 degrees reported in the Panhandle during the week ending April 22. All areas received greater than normal rainfall, the week's totals ranging from .04 inch in the Panhandle to 1.31 inches in the northeast and 1.22 inches in the southeast.

Courtesy Oklahoma Crop and Livestock Reporting Service



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