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Water for Texas Conference

By Lou Ellen Ruesink, Editor, Texas Water Resources
They came from New Ulm, Tow, and Granbury from Deer Park, Wildrado, Freer, and Taft.

They came with problems to solve, with dreams to fulfill, and with successes to share.

They came to listen, to learn, and to question.

They--men and women concerned with supplying water to rural communities and small towns--came to the 1978 Water for Texas Conference on the Texas A&M University campus. Many came because they are involved in the day-to-day tasks of managing a water supply system. Others came to learn how to organize and finance a system to serve their community.

They heard seventeen different speakers representing state and federal agencies as well as private firms and water supply systems and associations. During the two-day conference, participants heard speaker after speaker offer encouragement and assistance to rural systems. Speakers also presented down-to-earth advice on solving common problems at the conference sponsored by the following organizations:

- Texas Water Resources Institute
- Texas Association of Rural Water Corporations
- Texas Water Conservation Association
- Texas Department of Health
- Water and Wastewater Training Division, Texas Engineering Extension Service
- Farmers Home Administration

George Paz, representing the National Demonstration Water Project, began the conference on an optimistic note. He told the group that there is no rural water problem

which cannot be solved. The solution might be expensive, and it might be tedious, but it is possible according to Paz.

He listed six potential roadblocks to a water system and suggested ways to minimize each one. The roadblocks mentioned are

1. Inadequate funding.
2. Too many state and federal regulations.
3. Too few innovative engineers.
4. Too little effort to use new methods or materials.
5. Not enough planning for future.
6. Too little interest in a community.

Engineering and funding roadblocks, according to Paz, are small compared to human problems such as agency regulations and institutional limitations.

First and Foremost

Most conference speakers named financing as the number one consideration for a rural community needing a water supply system. Financing is also first and foremost in solving other problems such as implementing expansion programs, meeting water quality requirements, and hiring trained employees.

Rural systems are eligible for loans and grants from the Farmers Home Administration (FmHA), National Demonstration Water Project (NDWP), Housing and Urban Development (HUD), and other federal agencies. Private lending agencies are also possible sources of funding. In addition to these sources, small towns can apply for financing from the Texas Department of Water Resources (TDWR).

The FmHA, headquartered in Temple, has financed 684 rural water systems in Texas since 1957. These systems represent loans and grants totaling $185 million and currently serve 160,000 rural Texans. FmHA has the authority to finance systems in towns with as much as 10,000 population, but communities under 5,500 are generally given priority, according to James Criswell who represented FmHA at the Water for Texas Conference.

Rural water supply systems have faced many new problems during the twenty years they have been in the state: population growth, state and federal drinking water standards, operator certification requirements, Public Utilities Commission (PUC) certification and record requirements--not to mention inflation. Criswell explained that a community system now cannot receive financing from FmHA until (1) the construction plans and water source are approved by the Texas Department of Health and (2) the rate structure is approved by the PUC.

Drinking Water Standards

Tom Tiner, from the Texas Department of Health (TDH), told the group: "Water problems can be broken into five categories--quality, quantity, construction, operation, and economics. Actually, with the right amount of money, you can solve the first four."

Tiner's discussion of water quality problems was of great interest to many participants at the conference. Chemical contaminants in ground water--specifically fluoride and nitrate--are major concerns to supply systems in certain areas of the state.

The Department of Health has established maximum contaminant levels this year in order to meet federal standards set by the Safe Drinking Water Act. These levels mean that many systems will have to find alternative sources of water because it is not economically or technically feasible for small systems to treat water high in fluoride or nitrate.

The Safe Drinking Water Act, a federal law since 1974, also requires that all public systems must be operated by trained and certified operators.

Leon Holbert, head of the Water and Waste Water Training Division, Texas Engineering Extension Service, spoke at the Conference on operator certification for rural water supply systems. Holbert explained that a special temporary certification is available to help small rural systems meet the certification requirements.

The training school which Holbert initiated in 1963 on the Texas A&M University campus has led the nation in certification training of water and waste water operators. Special courses for rural water supply operators have been offered since 1975.

Systems Taxed

One frustrating problem rural systems face is that they are taxed as private corporations while municipal systems are free from taxation. This assessment of property taxes is a primary concern of the Texas Association of Rural Water Corporations, according to the association's manager Ken Green. This organization is working on ways to change Texas laws so that the nonprofit water supply corporations can be exempt from property taxes.

Since the creation of the Public Utilities Commission in 1975, rural water supply systems are certified to serve a specific area and to charge specific rates. Systems must maintain much more precise records than in the past; and any changes in rates or services must be approved by the PUC.

Two speakers from the PUC--Joe Cavness and Nick Classen--explained to conference participants that their agency has primary jurisdiction over rates and service of all water supply systems outside incorporated areas. Cavness estimates that there are approximately 2,000 such systems in the state.

The PUC requires rural systems to supply water to anyone in the specific area unless the connection would be detrimental to existing members.

Systems Stimulate Growth

System expansion is a common problem facing rural water supply systems throughout the state. SmalI systems are generally organized by well-meaning individuals who see a need for a community water supply. Once water is available, however, it attracts new residences and businesses to the area. Soon the original organizers who have more than likely donated their time, their land, and their energy to the system are faced with supplying water to subdivisions, schools, and shopping centers.

Manager of the Johnson County Rural Supply System Bill Parnell has watched his system grow from 250 connections in 1963 to over 3,300 connections today. He entertained the conference with some of his "learning experiences" as the system expanded. Some of the problems Parnell cited which are common to most rural systems are

- Easements must be donated. Initially, they are donated because landowners need water and because of community pride; easements for expansion purposes are not as easily obtained.
- Expansion in connections means more revenue for the system, but the system must buy more equipment, hire more employees, and spend more time on record keeping and office management.
- Original customers are proud of "their" system and are willing to make sacrifices in time and money for it; later connections are city people who have moved to the country, but who still expect to be "served" by the system.
- Rural connections are much harder to locate than those on a city block.

Management Service

The mushrooming effect described by Parnell has occurred to some degree all over the state, and many a corporation board has found the need to turn over the management of the water system to professionals.

Peck Horton reported to the conference that his firm in Temple, called Certified Water Service, manages ten rural water systems in the Temple area. Horton's firm provides professionals to keep records, manage, send bills, and plan expansions for systems totaling 5,000 connections and representing millions of dollars.

Horton maintains that consolidation of managerial responsibilities helps everybody involved in rural water supply--users, directors, and employees.

He is also involved in a plan to change many of the systems in his area from ground water which is high in fluoride, to surface water from Stillhouse Hollow and Belton Lakes.

The system, to be financed by FmHA, will treat 3-4 million gallons per day from the two area lakes. The treated water will then be distributed to rural water supply corporations.

Horton admits that he is fortunate to be in an area where the topography is such that water can be pumped 150 miles from the treatment plant without the need for additional pumps between systems. Cost of the treated water to the customer may be as little as $.65 per 1,000 gallons and could be available to the systems within three years.

Conference participants were reminded over and over that innovative systems such as the one proposed by Horton depend upon community interest and enthusiasm. The drive for new supply systems or new sources of water must come from the members of the community.

Danny Burger, executive director of the Municipal Advisory Board, recommended to small towns needing to augment present supplies or look for new ones that they seek professional help from the Texas Department of Water Resources, consulting engineers, bond lawyers, and financial advisors. This is the only way to know that a town is getting the best system, for the most reasonable cost, to fit that town's specific needs.

Burger uses, as a rule of thumb, a maximum of $1,000 per connection for a system to cost and still be financed with revenue from water sales. If it costs more than $1,000 per connection, according to Burger, the system will probably have to be financed by bonds or a federal grant.

Mergers Encouraged

Consolidation of systems is the answer to many problems facing small systems, according to several conference speakers. Consolidation can take many forms. It can mean a complete merger of systems, connecting some lines for emergency backup, or physically separate systems using the same administrative personnel. An example of this last form of consolidation is the managerial firm in Temple described by Peck Horton.

James Criswell, FmHA, told the conference participants that FmHA encourages systems to combine their resources and offers financial aid for consolidation. The four resources which can be improved by consolidation according to Criswell are water, finances, managerial ability, and human resources.

He pointed out that small systems have volunteers willing to work, but when systems merge, volunteers must be replaced by paid employees. Criswell used as an example a county in East Texas with 28 separate water systems--28 boards, 28 billing procedures, 28 storage and distribution systems, and so forth.

Ken Green, manager of the Texas Association of Rural Water Corporations, announced at the close of the conference that his organization would sponsor area workshops so that more rural water supply systems will have the opportunity to learn about the wide range of help that is available to them.

Possibly the most important message of the conference was that there is help available for rural water supply systems:

- Help in financing from federal agencies such as Farmers Home Administration, from Texas agencies such as Texas Department of Water Resources, and from private lending agencies.
- Help in organizing and managing systems from county offices of the Farmers Home Administration and from private consultants.
- Help in meeting state and federal water quality regulations from Texas Department of Health and the Environmental Protection Agency.
- Help in meeting growing demands for water from Texas Department of Water Resources, river authorities, and other suppliers.
- Help in understanding and influencing legislative acts affecting water supply systems from Texas Association of Rural Water Corporations.
- Help with record keeping from the Public Utilities Commission and the Texas Association of Rural Water Corporations.
- Help in training operators from the Texas Engineering Extension Service and from the National Rural Water Association.
- Help with expansion or consolidation from Farmers Home Administration, Texas Association of Rural Water Corporations, and National Demonstration Water Project.

Judging from questions and comments heard during the conference, those in attendance will take this message back to their water supply systems and will take advantage of these offers of assistance.