



**Texas Water
Resources
Institute**

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Water Development Drama

By Lou Ellen Ruesink, Editor, Texas Water Resources

Starring

Texas Department of Water Resources and Other State Agencies

Featuring . . .

Federal, Interstate, and International Agencies

River and Regional Authorities

Produced by . . .

Taxpayers and Water Users

Directed by . . .

Texas State Legislature, U.S. Congress, and Other Elected Officials

Also Appearing . . .

Cities and Private Suppliers

In many ways, water development in Texas is drama. Its action is as light as kids in a swimming pool, as complex as legal battles over water rights, and as tragic as a contaminated water supply.

Water development is the story of available, usable water in Texas. It begins with Indians damming spring flow and trailriders fighting over watering holes. Its plot includes hand-dug wells, windmills--even horsedrawn water wagons. The drama, as it unfolds, depicts man-made reservoirs, modern treatment plants, and stiff laws to protect Texans from water-borne diseases. Futuristic scenes promise innovative ways to augment Texas rainfall, to treat Gulf waters, and to conserve present water supplies.

The Texas water development drama portrays sorrow when there is not enough water to save thirsty crops, burning buildings, or dying communities. It shows joy as reservoirs provide boating and fishing pleasures to millions of Texans; triumph as dams control and store flood water until it is needed downstream; and pageantry as communities complete their first water distribution systems.

The Texas water development drama is an especially exciting performance because the final acts are yet to be written. There are reservoirs to be built, streams to be cleaned and protected, water rights to be granted, conservation measures to be adopted, and new technology to be introduced.

Current and future action on stage will greatly determine:

- How safe your drinking water will be.
- How much your water will cost.
- How your rivers and reservoirs will look and smell.
- How much your city, industries, and agriculture will prosper. You should, therefore, follow the action and let the stars and playwrights know how you feel about the plot's development.

No audition is necessary to take an active role in water development, but you will need to pay careful attention to players, parts, and subplots, for the water development action in this state is extremely complex.

Local Suppliers

To begin, you should know who plans, develops, treats, and distributes the water you use everyday-- unless, of course, you have your own well. Your city is most likely your local water supplier if you live within an incorporated area.

Cities play a vital role in planning and developing water supplies in the state. They generally own and operate wells or reservoirs, as well as treatment and distribution facilities. Cities must provide enough water--at the right quality and pressure--for domestic, fire protection, sanitation, and landscaping purposes.

They must also assure enough water for present and future industrial and commercial demands.

Many cities--especially those dependent upon surface sources--buy raw or treated water from water supply districts. Districts also sell directly to some urban dwellers and to even more rural Texans.

There are over 1,000 water supply districts in the state--500 in Harris County alone. The most common types of water supply districts are called Water Control and Improvement Districts (WCIDs) or Municipal Utility Districts (MUDs). Districts in the state have the authority to hold water, store water, pump water, sell water, treat water, and protect water. They can also build dams, drill wells, require permits to drill, and construct water and wastewater treatment plants.

In addition to cities and districts acting as water suppliers, there are 850 private nonprofit corporations which develop and distribute water to rural Texans. These nonprofit corporations are organized by local residents and financed by the Farmers Home Administration, U.S. Department of Agriculture.

Truly a "cast of thousands," local water suppliers also include private suppliers throughout the state who are treating and distributing water for profit to individuals, industries, and irrigators.

As you watch your local drama unfold, you will find that much of the action takes place in a larger setting and that your cast of characters expands to include regional, state, federal, and maybe even interstate and international players. Don't let the large cast dampen your interest in the drama, however. With just a little effort and training, you can identify the actors involved in the scenes involving the entire state.

State Agencies

State level scenes involve water development planning, water quality protection, and water rights issues. Almost all water development in the state must be reviewed by the Texas Department of Water Resources, which plays the lead role in the drama. This state agency, with primary statewide water planning and administration responsibilities:

- Maintains a comprehensive state water development plan.
- Monitors and protects quality of water in the state.
- Collects and manages water resources data.

Sharing the lead role are the Texas Water Commission and the Texas Water Development Board, both part of the Texas Department of Water Resources. The Commission decides who has the right to use the state's surface water and also issues and enforces permits to use water, discharge wastewater, modify weather, and construct dams. The Texas Water Development Board administers the Water Development Fund designed to help finance local water supply projects.

Other state agencies play supporting roles as planners, protectors, and providers of water resources even though their primary responsibilities lie outside the water resource field.

The Texas Department of Health enforces federal standards for drinking water and monitors chemical and bacteriological quality of water distributed by all public systems. This state agency also oversees all construction of treatment and distribution systems and trains and certifies operators of municipal water and wastewater plants.

Responsibility for the development and protection of water-based recreation and wildlife resources in Texas falls to the Texas Parks and Wildlife Department. The Department operates state parks adjacent to reservoirs, develops boat ramps providing access to lakes and rivers, and enforces water safety and fish and game laws.

The Railroad Commission of Texas enforces regulations to protect surface water and groundwater from wastes generated by oil and gas production. The Commission also oversees surface mining of coal, lignite, and uranium to protect water resources.

Federal Action

There is a diverse cast of Federal actors in the Texas-based water show. Five different independent Federal departments and numerous agencies under them are directly involved in water resource development or protection in the state.

The Army Corps of Engineers, U.S. Department of Defense, has long played a starring role in Texas water development. While owning and maintaining 24 major flood control dams, the Corps provides nine million acre-feet of water supply storage.

The Bureau of Reclamation, U.S. Department of the Interior, also stars in the Federal action. Five Texas dams built by the Bureau provide storage for over a million acre-feet of water for agricultural, municipal, and industrial water users.

The enforcement role for safe drinking water in public systems is played by the Environmental Protection Agency. Roles involving protection of water and other natural resources are played by the Soil Conservation Service and National Forest Service in the Department of Agriculture; the U.S. Geological Survey, Fish and Wildlife Service, and National Park Service in the U.S. Department of the Interior; and the Bureau of Sports Fisheries in the U.S. Department of Commerce.

Unique Roles

The Texas water story is made more interesting by the fact that eight of the major rivers run from their sources to the Texas Coast within the state's boundaries. These rivers have prompted agencies called river authorities to play lead roles in the Texas water development story.

River authorities give a basin-wide perspective to water development because they are formed along river basin boundaries rather than on political boundaries. Most of the 18 river authorities have the power to control, store, and protect surface waters as well as to issue bonds, sell water, and generate electricity. Many have branched into wastewater treatment and disposal as well as water treatment and distribution. River authorities own and operate 22 major water supply reservoirs in the state with the combined capability of storing over 10 million acre-feet of water.

Part of the complexity of the water development plot in Texas involves the rivers which Texas shares with Mexico, New Mexico, Colorado, Arkansas, Oklahoma, and Louisiana. An international treaty and five interstate compact agreements determine the development action involving the management of the Rio Grande, Canadian, Red, Pecos, and Sabine rivers. River commissions plan, construct, and operate reservoirs and allocate water in their respective rivers.

Play a Role

Once you have identified the characters in the water supply drama, you will want to follow the action. Chances are that your local water story involves:

- Rate increases or bond issues to finance new treatment or distribution facilities.
- Decisions about how to meet future water demands
- Safeguards to protect present sources from potential pollution.

Regional and state action includes planning water needs 50 years into the future, conserving and protecting present supplies, as well as deciding who has the right to use surface water.

The water development drama should not hold an attentive audience in suspense. Regular board and commission meetings are open to the public and are generally covered by local news media. Most projects--certainly all large projects--require years of audience participation in the form of planning, public hearings, and bond approval.

Most of the actors in the water development drama are elected; others are appointed by elected officials. Your opinion and your vote are important to them, their understudies, and their stand-ins. They should know you are following the action and are most interested in the plot's development, for even though their current actions may not affect you directly, the prosperity of your area and perhaps your future water supply will certainly depend upon their action.

You can applaud loudly, or boo and hiss, by voting in elections and on bond issues, by participating at meetings, and by contacting officials about specific scenes which please or displease you.

In other words, you can and should play an active role in future acts of the Texas water development drama.

Get Your Programs Here

Need a program to keep up with the current water development action in Texas?

One now available from Texas Water Resources Institute is called A Directory of Water Resources Agencies and Organizations in Texas. It presents names, addresses, and purposes of 30 state and federal agencies, 189 special purpose districts, and over 800 local supply districts.

For a free copy, write the Texas Water Resources Institute, College Station, TX 77843 or call (713) 845-1851.