

PANEL

Municipal Water Quality Problems and Information Needs

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Those of us at the municipal level realize that it is a monumental task to assimilate and compile all of the water quality data that we've heard about today. Ultimately, however, it falls on the shoulders of local elected officials and city staffs to implement the water data that is collected. We are the ones who must provide our residential and commercial users with potable quality water and I think it behooves us as city staff people to find out all we can. Carlsbad, like many other cities and communities in New Mexico, has had its share of water quality and quantity problems. In listening to some of the other problems today, ours seem minor in comparison. However, I want to share with you just briefly, some of the problems we have encountered as a smaller city in New Mexico in providing potable quality water to our citizens. In the late 1950s, the city's ground water source was becoming increasingly depleted by the increased pumping brought about by the city's growth. The city began looking eight or ten miles southwest of the city for better quality water in the Capitan Reef Formation. By 1962, the city had acquired a leased right-of-way for ten new water wells. The water quality was much better and by early 1963, the city had six new wells and two new 5-million-gallon reservoirs on line. As the city's population grew and pumping increased, there was the problem of acquiring the additional

water rights necessary to legally pump the water needed to satisfy the demand. The city has, through the years, continued to acquire additional transferable water rights. During this period, by the way, the city administrator has become well acquainted with representatives of the State Engineer Office regarding inadequate water rights. Since 1963, the city has purchased two farms for their water rights. One of these farms had priority on Pecos River rights and part of these rights was used to control water levels on two recreational lakes within the city of Carlsbad. In 1976, the city purchased a privately owned water system in the Ogallala Basin to the northeast of the city. This system included 27 water wells which had a reservoir storage capacity of approximately 1.8 million gallons in approximately 18,000 acre-feet of water lines. The Ogallala Basin also contains a better quality water than that of our original Capitan Reef aquifer to the city's southwest.

To assure that we meet all the water quality standards, the city has maintained, with U.S. Environmental Protection Agency (EPA) support, a monitored water quality laboratory. The laboratory, certified through the the New Mexico Scientific Laboratories Division, conducts bacteriological and limited chemical analyses on potable and waste water. We do all our own biological and chemical analysis with the exception of heavy metals and radiochemical monitoring and most organic analyses. Our water quality laboratory is a part of a recently completed wastewater treatment facility. We are now able to produce a good quality wastewater effluent which is presently discharged into the Pecos River below Carlsbad. The effluent now meets all EPA discharge permits standards which it did not before. It took the city several years to overcome the problem of an

outdated wastewater treatment plant. It's a problem that many cities have faced through the years. The problem has become more urgent since the establishment of the discharge permit system in the state and throughout the country. Carlsbad has been able to resolve some of our more pressing water quality problems by utilizing every available source of funding. Any time you provide the capital improvements necessary to meet the standards, it becomes an expensive problem for many cities and municipalities. Several sources of funding were used to build the plant, including local revenue bond issues, matching funds from the state, EPA and federal Community Development block grants; we even requested that federal Housing and Urban Development (HUD) declare our block grants as real property which could be used for the purchase of water rights. It was a peculiar request but HUD granted it. In order for municipalities such as Carlsbad to continue to provide quality water for residential and commercial use, I believe that the following are needed:

1. The state of New Mexico should continue to maintain effective water quality regulations and laws regarding the use of state water basins. We often complain about the water quality standards that are imposed, but overall, we appreciate the fact that the standards help our citizens realize that things must be done to meet quality water standards and to protect the environment.
2. Continued strong leadership and equitable apportionment of water use regulation from the State Engineer Office is very much needed. Steve Reynolds has provided that leadership. I believe the State Engineer Office, in our opinion, even though it has ridden us some during the past 10 years, has been equitable and good for New Mexico because of the water problems that exist.
3. Enforcement of standards to protect water basins and water well fields from oil and gas drilling and pipeline activities is needed. As was mentioned this morning, studies are being undertaken regarding petrochemical

contaminants of our water basins around the state. I think this is very much needed in view of the oil and gas drilling and pipeline activities that are taking place around and within cities' water basins and well fields. Due to the geology in our area, we are very concerned about some of the blasting and fracturing activities that are taking place among five drilling companies.

4. Increased availability of state and federal funding programs which will allow municipalities to make expensive capital improvements affecting water quality in compliance with state and federal standards is needed. Many cities cannot, on their own, provide the capital improvements necessary to meet these standards. There always will be a continuing need for water quality data so that municipalities in New Mexico can properly manage, plan and fund quality control programs, including providing adequate water rights.

We also think there's a need for continuing local, state and federal support for flood control programs which is a water quality problem in many areas of the state. In our instance, we request the continued support of the construction of the Brantley Dam and Reservoir in the Pecos River Basin. The dam will protect Carlsbad and provide the flood control and the agricultural irrigation water necessary for some 25,000 acres of irrigated farmland in the Pecos Valley. There is also a continued need for water quality data affecting our water basins from the various state and federal agencies that we have heard from today.