PANEL - WATER IN LAND DEVELOPMENT

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Good afternoon. I wish to express my sincere appreciation for the invitation to participate in this Seventeenth Annual New Mexico Water Conference. As State Planning Officer and as a citizen and rancher in New Mexico, I am deeply concerned about the quality and supply of water in our state. The topic "Water in Land Development" is both timely and crucial. As you may know, the governor attempted in the last legislature to pass legislation which would have begun to approach the problems created by growing needs for water. This legislation, after much debate and many revisions, was never passed. Instead the legislature, in its wisdom, created a land-use task force which will report to the Environmental Health Interim Legislative Committee. Hopefully the coming "long" session will have the facts before it and pass strong but reasonable legislation.

Some may not realize the magnitude of the problem and the long-range decisions which must be made soon or they will be made for us. Population projections for the years 1980, 2000, and 2020 indicate that the population of New Mexico should reach between 2.7 and 4.6 million.

If the population increases as projected (and I do not particularly accept these projections), the demands for water for municipal, industrial, domestic, and recreational purposes in New Mexico will greatly increase. Even, if as I hope, the population does not increase at the projected rates, water demands are substantial right now and must be dealt with.

Presently, agricultural depletions account for about 90 percent of all water depleted in the state for beneficial uses. The largest depletions of the water of New Mexico are for agricultural purposes, including the amount needed for livestock. Increasing acreages of irrigated cropland and the development of new agricultural areas in some regions of the state have resulted in increased annual depletions. The acreage of irrigated cropland increased by about 40 percent from 1940 to 1950, increased from 1950 to 1960, and increased from 1960 to 1970. The water resources of the state are almost fully appropriated under the doctrine of prior appropriation under the state water laws. Increases, therefore, in the use of water for municipal, industrial, and recreational purposes must, in general, come from agriculture which in most cases presently has prior rights for irrigation purposes. We must recognize the impact of our water allocation decisions and think long and hard before we allow such a trend to take over. Once it is started, the turning back is painful and sometimes impossible. Many overpopulated states will bear witness to this fact.

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Over one-third of the total land area of the state is public land held for the use of federal agencies. State lands account for about 12 percent and Indian lands about 10 percent. The land in private ownership accounts for about 44 percent of the total land area of the state. Land ownership is important both from the standpoint of the rights to the use of the land resource as well as the use of water in the state. The management of the land and forage resources affects the quantity and quality of water flowing from those lands available for other uses.

Water import proposals seem to be a long way in the future. However, in 1971, water from the Colorado River Basin started flowing through the canals and tunnels of the San Juan-Chama project into the Rio Grande Basin. The flow through this system will average about 110,000 acre-feet per year under present allocation agreements.

Water, Inc., an organization of citizens in west Texas (Lubbock and Amarillo area) and in the several eastern New Mexico counties, is working with the Bureau of Reclamation and the Corps of Engineers, U.S. Army, on a plan to bring water from the Mississippi River to the high plains of west Texas and eastern New Mexico. A report on this proposal is due to be completed in 1973.

The North American Water and Power Alliance, a development of the Ralph M. Parsons Company, proposes to bring water from Alaska and western Canada to the western United States, including Utah, Arizona, and New Mexico. This proposal has not received very favorable comments from the people in western Canada. They believe it would interfere too much with the timber, mining, power development, recreation, and transportation industries in that area.

The Central North American Project Proposal was developed in concept by Dr. Roy E. Tinney in 1967. This proposal would bring water down through the lakes and rivers to Lake Winnepeg and then into the United States to either the Mississippi or the Missouri rivers, or both. Water would flow down these rivers to about the South Dakota-Nebraska state line before diversions would start to bring this water up to the plains area and then on to the high plains of Texas and New Mexico.

It seems unlikely that either the North American Water and Power Alliance Proposal or the Central North American Project will be developed as a single project. However, there appear to be possibilities for various portions to be developed and ultimately joined together as a more or less coordinated unit in the course of 40 to 50 years.

The surface water use and its relative effect upon ground water brings out another facet of the problem -- water pollution. The pollutants are sewage pollution of both surface and ground water, and industrial pollution of both surface and ground water, sediment pollution of surface water streams and rivers, and salt water encroachment in ground and surface waters. In many areas of the state septic tanks and domestic wells are spaced too close together in subdivisions and trailer parks,

resulting in pollution from septic tanks being recycled into domestic wells. Some sewage plants discharge improperly treated wastes into rivers and streams. This is largely due to improperly designed, installed, and operated sewage plants. In many areas the population is increasing faster than sewer facilities are installed.

Many municipalities are faced with shortages of water. Provisions will have to be made to ensure an adequate amount of water for municipal uses in the future. If population increases, there will be increased pressures for more water for municipal and industrial uses and for water-based recreation. New Mexico now has only a small allocation of water for recreational purposes. Water for recreational purposes affects both the enjoyment of activities by New Mexicans and activities by out-of-state tourists. Currently a few new projects are being developed to increase water recreation sites, notably Cochiti Lake, between Albuquerque and Santa Fe.

One means of conserving water is recycling. Recycled water, properly treated, can be used for golf courses, swimming pools, or put back into the municipal water systems. In some systems in the nation, as much as 40 to 50 percent of the city water supply is recycled water. By recycling water, the gross amount of water for city needs -- either surface or ground water -- can be reduced.

With this background in mind, I have several recommendations for state policy.

I recommend:

1. That the State Planning Office be included on the Water Quality Council for long-range resource planning and coordination of State Government Planning to this end.
2. That the Environmental Improvement Agency be given the power to control any dumping into waters of New Mexico.
3. That developers in rural areas be required to provide adequate water and sewage systems for their housing developments.
4. That the current proposed legislation in congress providing for interstate environmental compacts be supported which could provide for regional water quality controls.
5. That immediate attention be given to methods of recycling water.
6. That methods be developed for the orderly transfer of water rights for alternative uses.
7. That the apportionment and control of water in New Mexico by federal agencies be carefully studied to determine the impact.
8. That the production of electrical power and of fuel for that production be related to water quality and water quantity and the affect and long-term impact be determined.

The people of New Mexico must recognize the reality of our water situation and encourage leaders on the local, state, and federal levels to be cognizant of the following:

1. That New Mexico is not seeking a large increase in population. Our number one priority is to establish and maintain a quality of life for all New Mexicans. This quality of life must include both developing a sound economic base and the protection of our uniquely beautiful environment.
2. That protection of our water will step on some powerful toes and will take some decisive leadership to accomplish.
3. That there are no alternatives to the protection of our water supply and water quality and the need for action is immediate. We cannot wait until the situation becomes a health threat.
4. That legislation is the only method of control which will provide a rational and effective approach to the problem.

The State Planning Office will be working with legislators, state agencies, and local units of government to formulate reasonable and comprehensive land use laws. We feel it is crucial for the coming legislature to act in these areas and the State Planning Office will be available to assist in any manner needed. I can assure you that the Governor will be watching the progress of the land-use task force closely. The Governor, along with all the people of New Mexico, will be looking to the legislature for positive action in water and land use problems this session.

As State Planning Officer, I will also be supporting such positive action, and I hope each and every one of you will also. Thank you again for the opportunity to speak today.