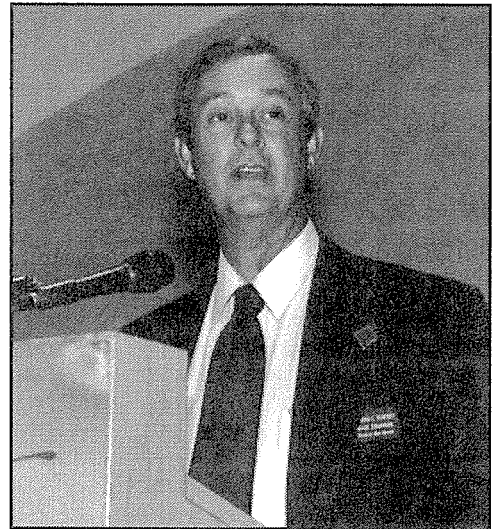


*Tom Turney is a home-grown and educated New Mexican. His roots go back to Jornada, New Mexico where his grandfather settled in the 1880s. A professional engineer for 25 years, Tom is licensed in the fields of civil, electrical, sanitary and architectural engineering and is registered in New Mexico, Colorado and Arizona. Before becoming state engineer, he worked for many cities in northwest, central and northeast New Mexico as well as with the Mescalero and Apache tribes. Tom earned bachelor's and master's degrees in civil engineering from NMSU. Although Tom has assumed an enormous workload as state engineer, he continues to be involved in professional and social community activities. He is especially proud of his Eagle Scout Award. He brings to the State Engineer Office a fresh new approach to government and management of the state's water resources. Perhaps his most significant goal is to work with his staff and water users in New Mexico to make the State Engineer Office the best, most public-responsive and most efficient organization in state government.*



## PLANNING FOR NEW MEXICO'S WATER FUTURE

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It is a pleasure to be before you this morning in Las Cruces. I graduated from New Mexico State University with both bachelor's and master's degrees in civil engineering and it's always a pleasure to be back in southern New Mexico. My father was born in Mesilla Park and my grandfather ranched on the Jornada del Muerte—the Agricultural Experiment Station located out there actually used to be his old ranch headquarters.

I would like to pay tribute to John Clark, who was a director of the New Mexico Water Resources Research Institute. He paved the way through my junior and senior years and all the way through graduate school. John Clark was an exceptionally wonderful

person and an outstanding asset to the engineering community.

Since graduating in 1974, I have worked around the state primarily dealing in water quality and quantity issues. Before being appointed as state engineer, I was working on an application for about 30,000 acre-feet of water in northwestern New Mexico. I have chosen not to handle that particular application because it would be considered a conflict of interest and we have appointed a decision maker who will be making decisions on that application in the future.

I would like to describe a bit about my general philosophies as I approach water rights issues. I will try to base my decisions on the facts as they are pre-

sented to me while following state law as closely as I possibly can.

We are trying to modernize the State Engineer Office (SEO). Twenty-five years ago, in 1970, the SEO handled in the neighborhood of 9,000 applications each year. This past year, we processed 17,000 groundwater applications and over 2,000 surface water applications. The number of SEO employees has not grown—about 60-70 people staff the office. Their workload is staggering. We are trying to purchase additional computers and develop a water rights data base that would indicate where water rights are located and how many water rights have actually been issued on a stream system in a given area. We also are developing an imaging system whereby you will be able to view the actual application as it is submitted. Each application is a little different with permit conditions usually stated on the back of an application and it is important that you be able to see the entire application. We also are attempting to put all our filing maps onto some sort of imaging system.

At the SEO, we are trying to institute a log control procedure. Currently, when something is sent to the Santa Fe office, it typically is not logged in and therefore we often have difficulty locating information. Just this morning I met with a group who submitted an application in late May for an emergency well in Doña Ana County. To date, they have not received any action. I was informed that their application had been advertised and hydrologic investigations were underway. Yesterday when I checked into the matter, I found out that the application had not been advertised. The problem may have been that the application was not logged in at our Santa Fe office as it should have been and so it was difficult to track down the paperwork. Over the next few months, we will initiate new logging procedures which will result in better efficiency and responsiveness on our part toward water rights applications.

The backlog of applications at the SEO is rather large. I believe I have in the neighborhood of 2,000 protested applications pending and some of them date back at least 15 years. Some may be even older than that. I intend to look into hiring a full-time hearing officer to help us work through our enormous backlog of applications.

Many people complain that they cannot gain access to their files. We hope that computerizing records will help address this problem. The data base with imaging system will allow you to see the status of your application.

Concerning SEO policies, I intend to develop standardized internal policies. Thus, as you go from office to office around the state, the administration of water rights will be uniform. In the past, many facts on how water rights decisions were being made were carried in Steve Reynold's head. I have tremendous problems trying to understand what the former policies were. Steve Reynolds did leave speeches behind from which I discover little pearls of information. It will be an enormous help when we are able to provide our district offices with a written policy for evaluating applications.

We are under tremendous pressure from the courts to produce hydrographic surveys around the state. Many surveys have been started and worked on for years but never completed. The courts are after us to get these surveys completed. We are trying to determine if we can address more efficiently the situation by integrating various sections, for instance, a hydrographic survey section with a legal section.

The process involving dedications was one with which I was totally unfamiliar when I became state engineer. I thought I had worked on all types of water rights applications within the state, but it was not until about 12-18 months ago that I read about dedications in the *Albuquerque Journal*. I read the article several times and I still did not understand what a dedication was. I now have a slightly better idea of what constitutes a dedication. I can tell you that the first dedication was started in 1972 or 1974 for about 10,000 acre-feet of water for the City of Santa Fe. Dedications range from 10,000 acre-feet to just one acre-foot. I have a great concern for the administrative burden placed on the SEO if we continue this practice. We will be evaluating the practice. Right now I have between 200-400 dedications, depending on which staff member I talk to. Each dedication has language saying something to the effect that by the end of December, the state engineer will make a determination concerning how many water rights will be required to offset the effects on a particular stream in the following year. I am trying to evaluate what is involved in making those computations and the SEO

manpower required. If we move from dealing with 200-400 dedications today to possibly 2,000-4,000 dedications tomorrow, how much staff time will be required to administer dedications?

The backlog on adjudications is enormous. We do need one, however, along the Rio Grande from Cochiti down to the Texas state line. I realize that we do not have the staff and manpower to conduct one today although it is desperately needed. To give you an idea why adjudications are so important, let me give you an example. The Elephant Butte Reservoir has releases of about 700,000 acre-feet of water. I have about the same amount of water being demanded by Elephant Butte Irrigation District and El Paso Water Improvement District #1. I also have 1.5 million acre-feet of claims and declarations that have been filed in the region from Elephant Butte down to the state line. I also have another 1.5 million acre-feet in applications for new unappropriated water. I can tell you right now that depletions probably vastly exceed the water supply in the area. Something must be done so that we can administer water rights within the area, and adjudication is part of the answer. Another question is whether we can afford adjudications which are tremendously expensive. We will be discussing how we are to deal with adjudications in the future.

I want to address briefly the interrelationship between water quality and water quantity. The governor has appointed me to chair his Cabinet Council on Water Issues. I represent water quantity issues on the council. Other representatives on the council are from the Environment Department, Department of Energy, Minerals and Natural Resources, Park and Recreation Division, Department of Game and Fish, Economic Development Department, and the Department of Agriculture. The council will work in the direction of planning for integrated water resources management within the state. This means we will be discussing not only water quantity but also water quality issues, endangered species concerns and its affects on parks and recreation, agricultural issues, and various other water-related concerns. I believe that if we continue to focus only on water quantity issues, we are burying our heads in the sand, for in real life, water quality very much impacts on the quantity of water we have available.

For many years, the Glover-Balmer model was used for calculating the amount of recharge from the

Rio Grande to the Albuquerque underground basin. Recently, the City of Albuquerque cooperated with the U.S. Geological Survey to develop a new model. That model showed that perhaps our Glover-Balmer method was too conservative, perhaps extremely conservative. We are going to be working closely with the U.S. Geological Survey to develop an administrative model for administering water rights in the Albuquerque area. We want to have a model that will run on our computers by our staff. We also will need a model that will assist us in incorporating the water rights administration policy. Many of our basins around the state already have these administrative models. Roswell and Carlsbad will be getting models; Deming already has one for administering the Mimbres Basin. These numerical models will more accurately reflect what conditions exist in a certain area. We have already developed a model for this purpose and are now looking at the additional criteria for the Tularosa Basin.

On the subject of subdivisions, when I was at a meeting in Las Cruces three months ago, the governor kindly volunteered me to help develop new subdivision guidelines. We currently are having a series of workshops on the new guidelines and a tremendous amount of time and effort have been put into developing the guidelines. We intend to provide counties with the guidelines and hope they will adopt them. It is very important that we have similar guidelines across counties. We have 32 different counties throughout the state and if I get 32 different sets of guidelines from which to review subdivisions, it is an almost impossible burden on our office. We are receiving comments on the new subdivision guidelines. Some indicate the guidelines are way too strict while others feel they are way too lenient. We are holding a series of public hearings and are hoping that by mid-November we will have the subdivision guidelines in final form. Some of the subdivision issues we have run into will need to be addressed by the legislature next year. For example, the requirement of a 30-day turnaround time by the SEO is not realistic. We also have had heavy discussions on whether a dry subdivision will be permitted or not—another issue that will probably be addressed at the upcoming legislative session.

State statutes concerning domestic wells require the state engineer to approve well permits for domes-

tic household usage. No particular amount of water is tied to the actual legislative language, but state engineer regulations allow us to grant up to three acre-feet per person applying for a domestic well. For an isolated well, three acre-feet of water does not impact an area greatly. In fact, 50 wells will not make a significant impact. But in some areas where hundreds of wells already exist and the potential is there for thousands more wells, they no longer have a *de minimus* affect. They will start to impact the area's water supply. We have already seen this happen north of Santa Fe. The courts have told us that we must restrict water to inside household use. People in that particular area north of Santa Fe are very upset that they might no longer be able to have swimming pools or gardens or any other use requiring water outside their home. It is a very serious problem that is going to have to be addressed by the state. There will be something done about domestic wells in a number of planned subdivisions that will slow down the actual amount of water allowed to be pumped from domestic wells. What the exact numbers will be I do not know. In areas with a large water supply, we will be flexible, but in areas where the water supply is very critical, we are going to restrict the amount of water available through domestic wells.

On the subject of Change of Ownership Forms—it is very easy right now to execute a change of ownership of a water right. It does not have to flow through my office. The amount of water right does not have to be verified. The form simply has to be filed with the county clerk requesting that you want to move, say 10 acre-feet from so-and-so to so-and-so. No verification that the 10 acre-feet actually exists is done. We intend to address this problem and initiate a review process for change of ownership. Currently this is not a very big problem, but I can see that in the future, the situation will become more and more confused. If the SEO is not involved in verifying how many water rights are actually owned, we will at least attempt to conduct title searches on who owns the water rights.

The current endangered species program will have an impact on the state. We see its impact on the San Juan River, we see it on the Rio Grande, and we see it on the Pecos River. We will be evaluating the program's impacts over the next few years. We intend to become very heavily involved with endangered spe-

cies issues and are trying to understand what the impacts on the state of New Mexico will be. We want to know how endangered species requirements will impact the amount of water required to be left in the river and its effects on water rights within New Mexico. I am hopeful that after we understand the program and how it will impact the state, we can take a very aggressive stance toward protecting New Mexico water rights.

In 1985, a series of statutes was passed pertaining to groundwater and surface water that basically requires the state engineer to evaluate whether an application is against the conservation of the state. What does this mean? Hopefully on November 9 you will come up to Albuquerque and begin to learn how we will be interpreting "conservation." In Albuquerque, we will be presenting eight different evaluation items the district offices will be using to review conservation issues on an application. Many of them have been in effect for several years. Some of them, for instance, municipal conservation, will be new. Conservation is going to become an important issue to us. However, we are going to be very flexible. Conservation also will be evaluated on a case-by-case basis. We are very cognizant that in certain areas of the state we have excess water supplies, renewable water supplies, and we are trying to develop those water rights so as not to lose them to downstream states. We want to develop conservation guidelines that do not hurt the ability of those people to retain water rights they will need in the future.

I have appointed somebody to work full-time with my office on Indian water rights issues. We have been approached, for example, by the Navajo tribe. They want to settle all their water rights claims in the San Juan Basin and their claims are extensive. There are certain agricultural projects that were built that need to be discussed, and the claims established and recognized. Endangered species issues fits in the picture here as well. Up and down the Rio Grande we have pueblos that have filed water rights claims and others will probably follow. It is tremendously expensive to work with Indian water rights claims. I recently learned that the State of Arizona has spent \$100 million just in legal fees trying to settle the claims on the Lower Colorado. That is an incredible amount of money and New Mexico does not have that kind of money to settle claims. Arizona's \$100 million does

not include monies being spent by the tribes themselves or others who are a party to the actions. One way to save money in the long run is through negotiation. The federal government will look at a settlement, and if, say \$2 million is what they anticipate it will cost in legal fees to settle a particular claim, and if the tribe is willing to negotiate it, the feds will give the tribe all or a portion of that money to spend on infrastructure or the like. This provides an opportunity for the state to enter into negotiations. Federal negotiating teams are being established and we will pursue this avenue to see if we can enter into negotiations with the various Indian tribes and pueblos in the state.

Lastly, I would like to discuss regional planning. Regional planning to me is an extremely important issue. The more planning you do, the better off you will be. A number of water rights applications, claims and permits have been issued in southern New Mexico that probably far exceed the water supply. Planning is extremely important as it allows people with various views to come to the table and discuss water issues and to try to figure out how to maintain a viable water supply into the future. Doña Ana County has approximately 130,000 people. University of New Mexico population projections indicate the population will grow to somewhere near 600,000 people by 2060. If true, the numbers are just mind boggling. Water planning is extremely critical for the area's future as well as throughout the state. I realize that many people do not understand the importance of water planning, but it is essential to our future survival. It is crucially important that counties become involved in the planning process set up by the Interstate Stream Commission as well as other task forces and committees.

In conclusion, I would like to say that the last several months have been an interesting experience and a tremendous amount of work, but I really enjoy it. Every morning I wake up and look forward to going to work. The State Engineer Office is full of really great people, and we are all very interested in trying to find better ways to serve the citizens of this state more efficiently. I have an open-door policy. Anybody can come in and visit with me. We may only have 15-20 minutes to talk, but feel free to visit with me and share your concerns and ideas. Feel free to set up an appointment with Brenda Garcia, my secretary.

I enjoy traveling around the state and if you would like me to visit your area and discuss your water concerns, please invite me. Thank you very much.