

STATE WATER STRATEGIES FOR THE FUTURE

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The New Mexico water strategy can be capsulized in seven points: (1) keep New Mexico water in New Mexico for use by New Mexicans; (2) if we have to let some of it out, sell it by the gallon, not by the acre-foot; (3) keep our water from becoming contaminated; (4) let the market be the primary allocator of water rights; and (5), (6), and (7) plan, plan, plan.

Let me re-cap our water situation here in the state. Our supplies are finite. Our surface water supplies of 1.3 million acre-feet are fully appropriated; we're not going to get anymore. There are strict limitations, and our demands are increasing. Projected water demands to the year 2020 indicate we are going to be in a deficit situation of over several hundred thousand acre-feet per year. The supply and demand curves are going to cross somewhere about the turn of the century, and that's only thirteen years away.

Our options are limited on water importation. No matter which scenario you look at in terms of significant water augmentation to the state of New Mexico, we are at the bottom of the pipe. Economics and politics would have to change significantly for importation to be a reality in my lifetime.

Desalting is another option. We have 15 billion acre-feet of brackish ground water in the state. You could cover up the state 200 feet deep with it. You can desalt water right now, but it is expensive. Costs exceed \$500 an acre-foot. There are very few ways to exploit saline water given that it is very, very expensive to utilize. You're not, for example, going to make the deserts bloom with desalted water unless there are major breakthroughs in reducing energy costs.

Weather modification (cloud seeding, and snow augmentation) have been tried without apparent success. Even the experts can't agree on this technology and even if they could, the lawyers would argue for the next 50 years as to who owns that extra water.

I have to conclude, and have concluded for a number of years, that we must learn to live with what we've got; there's no way around it. We have to use water more efficiently. We need to conserve water more. Conservation has taken on a whole new meaning to me since 1980, and when I think of conservation, I think of new dimensions. Within the law, we need to be able to conserve what water we have in New Mexico for use in New Mexico. We're in a whole new ball game right now. We now have an

interstate market in water because of recent court decisions. We do have a certain amount of unappropriated ground water left in New Mexico. If we don't have a plan for its use, it will be up for grabs. Keep that thought in mind while I review two pieces of legislation passed in the last session that are significant to this particular issue.

The first is House Bill 337 which directed the Interstate Stream Commission (ISC) to do a number of things. First, it authorizes the ISC to appropriate ground water or purchase ground water rights on behalf of any of the various regions of the state. It also provides the authorization to make grants or loans for the purpose of regional water planning, and it gives a certain amount of funding to the ISC to do this. The activity that led up to this legislation was primarily the result of a massive undertaking led by Chuck DuMars at the University of New Mexico Law School. The study, which culminated in this legislation, can perhaps be characterized as the most exhaustive analysis of policy options related to a particular water issue that has ever been conducted in the state of New Mexico.

A second piece of legislation (really three pieces of legislation: (1) a house memorial, (2) a senate memorial, and because it received attention too late in the session to become a regular law, (3) a capital outlay appropriation) involves the Energy, Minerals and Natural Resources Department. Essentially it directs our department to get involved with the inventorying and cataloging of existing water plans and planning activities in the state of New Mexico and begin the process of developing what is termed a comprehensive state water plan. The legislation also instructs the department to serve as a repository for this information.

These two pieces of legislation are a direct outgrowth of issues that were stimulated and spawned by the El Paso water litigation, with which I am sure you are familiar. A United States Supreme Court decision has essentially said, aside from the fact that ground water is an article of commerce, that state ownership of water is legal fiction. The study team lead by Professor DuMars explored that concept and came to the conclusion that if a state were to participate in the market rather than just regulate the market, then you could, in fact, have bona fide state ownership of ground water. We could probably spend the next five hours talking about that concept. Suffice it to say this legislation was a result of that concept.

The second element of that court decision had to do with the concept that a state has a limited preference to its internal waters. There are various schools of thought among attorneys who have been examining this concept. Basically, the argument is that if a state can document and demonstrate on a statewide basis that it is going to have water

shortages in the future, and if a plan to alleviate that deficiency in the future has been developed, there is a certain amount of water that is reserved to the state to alleviate that projected shortage. The documentation must come from local, regional, and state levels in some detail. This concept has not been tested in the courts. It is a theory that has yet to be upheld, but I think it has a lot of merit. It is essentially the basis of many of the arguments that are currently being made in the dispute between the city of El Paso and the state of New Mexico, in which El Paso is trying to acquire ground water from New Mexico.

When I talk about planning, I'm talking about a process whereby the theory and facts of a plan must survive strict judicial scrutiny. You've got to have your act together. Your figures have to be accurate and your analysis must be sound. A significant amount of planning has been conducted in the state of New Mexico, but most of it has dealt with surface water. We have about \$1.5 billion worth of planning and development for surface water supplies in the state of New Mexico. By and large, our surface water supplies are fully developed.

Ground water is another story. Ground water planning has been left primarily to local and county government. It's been a very localized type of activity with little state financing.

The last overall water plan for New Mexico was completed back in 1976. The plan was called the "Water Resources Assessment for Planning Purposes." It was a \$2.5 million undertaking, and for 11 years served as the primary document used by the planning community.

The approach that we're going to take goes something like this. The appropriation we have is not large: we have \$150,000 to start this thing called the comprehensive water plan. The first step is to get a handle on what a plan is all about, and I picture it in three phases: (1) You must have a data collection phase; you need mapping and analysis of the situation as it currently exists. (2) You need to have projections on where you're going to be down the road. These projections must be evaluated very carefully and appropriate goals formulated. (3) You have to develop a program to implement policy. Policy options are going to emerge from the planning process at some point. Options must be selected and translated into actual policy.

As far as data collection is concerned, I don't see a need at this time to do a whole lot more collecting of new data. There's a lot of information already available. The U.S. Geological Survey, the Corps of Engineers, the Bureau of Reclamation, the State Engineer Office, county and local governments, and a host of agencies are sitting on a ton of data.

The information needs to be pulled together in a compatible format and automated. Also, we need to take a very careful look at projections. There are many different projections that have been made at the local and county level. Projections need to be made again at the state level.

Ultimately, we're going to need to come up with a host of options. For example, to solve the water problem in Otero County, one option might be to take a pipe from Dona Ana County over to Otero County. You might have some folks in Las Cruces not real keen on that idea. Implementing water conservation is another option. Should conservation be mandatory or voluntary? How about having the Interstate Stream Commission appropriate ground water in the Lordsburg area and pipe it over to Silver City, given Silver City's shortage? That is one option and again, some folks might not support this proposal. Another option is to let the problems be solved in the market place. This is the kind of exercise I'm contemplating.

The last careful look at an assessment was done 11 years ago. We need to update it and determine from what base we're starting. The previous assessment took planning up through the projection phase and presented the conclusion that we must live with what we've got, since it's clear we're not going to get anymore.

New uses are being accommodated in the market place, with water being reallocated from the irrigated, agricultural sector into the municipal and industrial sectors of the economy. Currently, some consider this to be the most appropriate option, but additional analysis needs to be done because of the existence of an interstate water market.

When I talk about planning, I'm not talking about a plan coming down from the city of Santa Fe prescribing what needs to be done, who gets the water, and how much they get. That will not work. It'll never work, and I hope it isn't even thought about. What I'm talking about is a bottom-up type of approach. After options for solving problems are identified, the plan must be turned over to the legislature and the political process.

Where are we right now in the process? We're getting tooled up. We are trying to determine where we might obtain additional funding, as \$150,000 will not get you very far in an undertaking of this magnitude. The Corp of Engineers has expressed some interest in participating in the process through some of their cooperative programs.

The two seemingly innocuous pieces of legislation described above have received little public attention. There was some debate in the legislature, but I would guess not many people know much about it. But think about the implications of the state of New Mexico being authorized to appropriate water to itself, and actually getting involved in a comprehensive water planning process. These are very significant changes to the state of

New Mexico, and I would simply caution that we need to proceed very, very carefully. We have, I think, some of the best water laws in the western United States. They have worked extremely well as long as we have had a high degree of control over our internal waters.

The courts have now thrown us into a whole new arena, and planning is the name of the game. We can't ignore conflicts when they arise; they must be identified and analyzed. Once evaluated, the public and their representatives are going to have to get involved in the process. As I said before, the democratic, political process has to take over. The big concern I have is that when the political process takes over, it better go into the process with its eyes open. In other words, informed decisions must be made.

The New Mexico Water Resources Research Institute's annual conference is perhaps the single most important educational forum on water issues in the state of New Mexico. These conferences have been going on for 32 years and, knowing of the intensity of water resources issues, I'm sure these conferences will be going on year after year after year. Thank you.