## ALBUQUERQUE'S PLANNING FOR THE USE OF SAN JUAN WATER

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As I was coming over to the meeting, I stopped for a cup of coffee. I sat down next to a little old lady and we struck up a conversation. We were talking about what a fine school New Mexico State is. She seemed very much impressed by the fact that the school is working on a project connected with the space effort. As a result of the overpopulation scare, some people have suggested that we send man to other planets. But, man has to eat whereever he is and here at New Mexico State, they're breeding cattle especially for outer space. This little old lady is looking forward, she said, to the first space shot of this herd of dairy cattle, especially bred right here in Las Cruces. "Really?", I said. "Oh yes," she said. "It's just wonderful. It will be the 'herd shot' around the world." There's only one guy I know who can tell worse jokes than that, and luckily, he's not here.

The City Commission of Albuquerque has a problem which I'm going to talk to you about today. The City of Albuquerque, back a few years ago, contracted with the Department of the Interior for a 45,800 acre feet of the San Juan-Chama Diversion water. The City Commission began to realize that 1971, the completion date of the project, is drawing close and the city will be getting this water if it can be put to beneficial use. Also, the time for paying for it is close at hand. Well, the city fathers asked, "How are we going to pay for it? What are we going to do with this water?" And the more they looked at the problem, the more complex it became to themso they solved it in a very unusual and unique manner - they appointed a committee. Someone heard that I'd talked to Steve Reynolds a couple of times, so they assumed that I knew all about water, and put me on this committee.

When the committee first got together, we learned there were many astute people on it, but we knew very little about water and especially about the San Juan-Chama Project. It has taken us about 3 months to reach an understanding of the situation and it's been very difficult for us as laymen to do.

Albuquerque will be allowed to take 17,700 acre feet of water, beginning the first year after completion of the project. By not taking more than that figure the first 10 years, the city receives the privilege of not paying interest on the balance of the 45,800 acre feet of water. This reduces the payment schedule considerably, interest is deferred, and the first year's payment works out to only \$300,000. Well, the city doesn't have enough money on hand to pay its portion - so they were hopeful that our community would come up with some way to have this water, pay for it, and put it to some use where we might derive a little revenue.

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After looking at the city's required payment schedule, one person asked, "You mean it's going to cost this much money? Where's it coming from?" Well, it's going to have to come from increases in water bills apparently. "You mean we're going to have to raise everyone's water bill, and we can't even use this water, or we won't even need this water for industrial and municipal purposes until the year 2000 approximately? And, in the meantime, for 30 years, we're going to have to charge the people for it?" And we were told - "It looks that way." So, we went into the contract and learned that the project was built in reliance upon the word of Albuquerque that they would pay for about half the cost of the project. We learned that having this water assures the growth of our city, in fact it is even stimulating our growth we think, because we have it, and certain industries will hear about it and seek us out. Thus, we have a competitive advantage over our sister cities in Southern Arizona who are running short of water.

In the meantime, the committee had to find a way to pay for this water and play with it, putting it to good use. Otherwise, it would not be diverted, but would flow on to California, while we paid for it anyway. We learned that we couldn't commit all of it to recreation, because we're going to eventually need it to drink. But we felt we could commit some of it to recreation and then hopefully, in the interim between now and the time we're going to need it for municipal purposes, acquire additional Rio Grande water rights, so that the recreation projects will not have to be abandoned.

We agreed that having the new water was indeed good, and we soon learned that the Bureau of Reclamation was not going to amend the contract and give Albuquerque 100 years to pay, instead of 50 years, or reduce the payments when they had several other users on the drainage who would take the water on the same basis, or even on less favorable terms than Albuquerque took it. Also, it was learned that initially, the increase in water bills per city residence would be something like 43¢ a month. In the later stages, when our payment gets to be as high as \$1,400,000 per year, allowing for projected population increases, it would be 93¢ monthly. So, it isn't something that is impossible to pay for.

There are several things suggested that we do with this water. The first one was that we make recreational lakes within the city limits, perhaps within the confines of the levee system of the Rio Grande. It would be nice, but I know some of you are thinking like we did, and soon found out, that it is very difficult, expensive, and the silt problem could be immense.

Then there was an idea which we haven't fully explored concerning the development of the conservancy ditches, perhaps widening them, making some ponds in certain places after we have acquired the necessary land.

There was the suggestion that dams be constructed in Tijeras Arroyo, a tributary of the Rio Grande, and some of the other mountain arroyos. That was pretty much shot down because of the cost, because of the seepage, and so many other difficulties.

We've had people suggest that we get a fish hatchery. In exploring that, I found that we had land we could donate, and we could donate the water, but apparently no agency wants to build a fish hatchery. They are too costly to operate.

Another possibility is a scenic waterfowl refuge somewhere in or near the city. This wouldn't require much water, but it would require considerable land. This is still a possibility.

The most feasible project for doing immediately appears to be the Jemez Project. It's a Corps of Engineer flood control dam on the Jemez River about 20 miles North of Albuquerque. It would give our part of the state something that most of the state lacks, and that's water recreation close to the people.

The problems you run into in these things are amazing. There is a real nice yellow book. It cost the state I think, something close to \$50,000, and we wonder whether this Jemez Project was feasible. Well, we looked in that book and it said that it definitely was feasible! And that's when we really began to worry, and with good reason.

We found that impounding water behind Jemez Dam isn't as easy as we might have thought. Of course, if we do any development at Jemez, we would expect to charge fees. The Corps of Engineers, it turns out, is somewhat reluctant to have user fees charged. Recently, before a congressional hearing, the Commanding General of the Corps said it was alright to charge fees. He was explaining the Corps' regulation that states that no fees could be charged at Corps projects. So, there is little confusion within the Corps on fees, but I think we can surmount that.

Another problem is that at Jemez Dam, there's just one release gate. Should it break, or jam open, we could lose all of our water.

Our hope is for a 1000 surface acre reservoir. But, then we began to wonder. The Jemez River sometimes gets to be just a trickle, and what would happen to our 1000 surface acres if we had a low run-off year? It would get pretty small. So, we have found that we're going to have to impound slightly more water over and above the 1000 surface acres to assure a continuous pool of 1000 acres, even in mid-summer and in dry years.

Another problem is that we can only use the silt basin of a reservoir such as this, and there's only 40 some thousand acre feet of useable silt area available. Our 20,000 acre feet of water would only occupy about half of that initially, and there's still plenty of room for flood control.

We also have to consider the project life. How long before this silt basin fills up? The Jemez silt basin was designed to last 50 years and the dam is already 16 years old. This limits the amount of capital improvement we can do there for parks, golf course, picnic tables, motel, restaurant, and the like. We can't tie up too much money there because

we have to amortize the investment over the remaining life of the project, and we want to keep the charges to the general public, the users, as reasonable as possible.

Then we had the suggestion that this be a city project - that the city do it and take pride in it. The city planning people came up with a study of an estimate of cost. They got \$ 800,000 worth in just little things - restrooms, picnic tables, parking areas, a boat ramp, a concession building, etc. Out of the \$800,000, one little item struck me as strange. It was a \$100,000 item called contingency. It indicated that perhaps we didn't quite know what we were doing exactly and weren't too precise in our estimates. These are some of the problems that we are running in to on Jemez.

We've had a proposal that the city sell water for a recreation pool at Abiquiu Reservoir. The proposal was that the Game & Fish Department buy water from the city and charge admissions fees. The projected man days of use is such that the revenue would be sufficient to pay for the capital improvements required, the maintenance, administration, and also there would be enough money to pay Albuquerque \$5 an acre foot for the water used there and there would be enough money to establish a sinking fund with which to acquire Rio Grande Water rights so that the project would not have to be abandoned when the City of Albuquerque needed the San Juan water.

The Game and Fish Department, because of their poor experiences with user fees, turned thumbs down on the proposal. We are hopeful that the State Parks and Recreation Department will get the money to carry on the project.

The Abiquiu Reservoir would consume only about 4,000 acre feet per year of our water, and about another 4,000 acre feet would evaporate at Jemez. Remember, we have 17,700 acre feet the first 10 years and 45,800 thereafter to try to use. So, it's rather difficult. Even with two large existing dams, all we can use is about 8,000 feet per year.

So, it appears at this time that we're still very early in the planning stages and I apologize to you for not being able to tell you more of what we're doing. We've just been working on this thing a short time. However, it appears that Albuquerque is going to have a lot of excess water in the next few years and if Albuquerque does not find a use for it, it's going to flow on down the Colorado.

You gentlemen perhaps may keep in mind that Albuquerque has this water, and until Albuquerque needs it for its own use, it's probably for sale, cheap. We're paying \$31 per acre foot and we'd be very happy, it appears at this point, to take \$5 for it at Abiquiu.

Our committee has learned that these things are very complex. We, on the committee, have had a terrible time just trying to learn the jargon and to understand what's happening to us. If this thing gets any more confusing or complex, I think we're going to take a lesson from our City Commission and appoint a special committee to help us get the problem solved.