

Do We Need
Water
Markets?

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Do We Need Water Markets?

The title of my talk, and that of Lee Brown who follows me, is “Do We Need Water Markets?”. The answer is, absolutely yes. Water is a scarce commodity. The rules that we have inherited for managing water resources in New Mexico are those that have come down from Hispanic and territorial years. The administrative procedures provided, particularly those related to the doctrine

of prior appropriation, and the superior right of senior water-right holders, clearly show that water has always been a limiting factor to growth. Anytime you have a scarcity in an essential product, you're going to need some kind of market. And the reality is that we already have an active market in water rights. Lee Brown wrote, in a paper he prepared for the Middle Rio Grande Conservancy, that “when water becomes scarce, it acquires economic value often reflected in price, but always reflected in trade-offs in that one use must be given up in order to gain another.” That's a simple, but powerful statement. Water transfers are worse than a zero-sum game as there are built-in inefficiencies that result in water losses that take place when you transfer water from one place or one use to another. There's even one other thing that's inherent in Lee's statement—through any type of a transfer process whether through a water bank or the purchase of an irrigated farm, one or more current uses must be forgone to make water available to the new user. I emphasize the fact that one or more existing uses will have to be forgone, because in all water transfers, water losses to some uses are very likely to be encountered.

If at least one or more uses have to be forgone, you can provide compensation for the principle economic use of the water that's going to be transferred to a new use. But there will be

trade-offs that take place with respect to other water uses that are lost in this process. The State Engineer has a set of rules for administering water transfers that are complex. Any process designed to compensate for the other losses in water use that occur will be far more complex than the process used currently by the State Engineers Office.

Let me describe some of the inefficiencies in water transfers and talk about some of the associated losses in water uses that may occur. Steve Hansen of the Bureau of Reclamation talked about this yesterday afternoon. He said, "continued irrigation is an essential element to the Middle Rio Grande Valley" and "you have to continue irrigation for a number of reasons." He said in essence, if farms are abandoned, non-beneficial uses of groundwater to phreatophytes will occur anyway. The system of native vegetation will continue to use water even though you cease to farm a piece of land. Evapotranspiration will continue. A second issue is that if irrigation is discontinued, recharge of the groundwater system will be reduced. That recharge is essential to the maintenance of flows in the river during periods of the year. If irrigation is discontinued in the Middle Rio Grande Valley, irrigation return flows will not be returned to the river to keep it alive. I don't know how many of you understand how important those irrigation return flows and the waste-ways leading back to the river are to keeping the river alive from place to place. They are a fundamental part of maintaining the endangered species from Isleta Dam on down to Elephant Butte.

Trying to find a means of compensation for discontinued water uses due to water transfers is going to be difficult. How do you do it? I'm going to suggest one of those ways. I believe it is the responsibility of the State Engineer, in hearing water transfer cases, to assure that the public interest in these other uses is somehow protected.

Water banking may include two processes. Professor Al Utton discussed two of these processes in the paper titled, *Alternatives and Uncertainties in Interstate Groundwater Law*. He identified two processes that are in conflict with each other. The first one is based on the commerce clause, which is really a statement of a free market and provides for free market applications. The other process he talked about in his paper

was equitable apportionment. Equitable apportionment deals with how you take into account competition between water uses and the judicial or quasi-judicial process needed to provide equitable distribution between uses. In processing a water transfer, there must be some kind of equitable apportionment—equitable sharing of public interests in water with other uses is part of the responsibility of the State Engineer and his administration. Professor Utton said, "There will always be a conflict between equity and efficiency arguments that will lead to disputes and uncertainties."

Steve Reynolds believed in the free market approach with oversight of water transfers by "Steve Reynolds." That was probably a pretty good process. I don't think any of us have an argument with that. In the 1950s I worked for Steve Reynolds and during that period he was subject to criticism and to lawsuits that occurred as a result of the closing the Middle Rio Grande Basin to further appropriation. His action in the mid-1950s allowed for a free market operation in the basin that still continue to function.

I did some research into the interstate stream compacts and how they might affect water markets. The most interesting article I found was a defense of Steve's closing the Middle Rio Grande Basin. The article was about the Rio Grande Compact and was written by Dee Lynford. I don't know how many of you knew or remember him, but Dee was a remarkable historian. He worked for Steve as head of his report section and he was a class act—what a marvelous person. Dee was a good writer too, but I'm sure Steve rewrote parts of whatever Dee wrote simply because whenever Steve took out his pen, he would rewrite stuff whether the author liked it or not, or whether it needed it or not. He rewrote some of my text way back when. Dee Lynford defended Steve's action in declaring the Basin in order to preserve the Rio Grande Compact. Dee was right.

Steve Reynolds talked about free markets and free market transfers of water. In today's more complex world, can water transfers be accomplished in the Middle Rio Grande Valley? Yes. I'm going to refer you to an unpublished paper prepared through the New Mexico Water Resources Research Institute for the Bureau of Reclamation on forbearance; that is, how the

farming community of the Middle Rio Grande would forbear using their water. I'm sure that there are farmers who would forgo their use of water for transfer to instream flows for the Rio Grande Silvery Minnow.

My paper lists eight different ways to proceed with forbearance transfers. I'll just give you one of those eight different ways. One way is for the U.S. Fish and Wildlife Service to buy water rights on the open market. Water rights could be bought from farmers on certain ditches, or from a district water bank.

There are a couple distinctions made in that paper you should know about. There is a difference between "native Rio Grande water" and "contract water," that is, San Juan/Chama water. You must have different rules for dealing with each of these. The other one is that "wet water" is the only water you can really transfer. These two concerns must be recognized in water transfer processes.

Reclamation has provided a wonderful guide for representing their interest in water rights on the Rio Grande. It is a contract between the Bureau of Reclamation and El Paso Water Improvement District #1. It is based on a 1920 law. I'll read one provision to you from that contract: "Project water, subject to contract, may be used to supply miscellaneous uses, and other uses than irrigation subject to certain conditions. Project water for these other uses may come from a number of different sources. Project water may be attached to the land, or a land owner may wish to change the use of their land from irrigation to a purpose other than irrigation. Project water may be assigned to the irrigated lands where the land owner is willing to forbear the use of their water so that the water may be supplied to a third party. Other project water that has been used in the past for irrigation, or beneficially used in making irrigation deliveries may be available for other uses through conservation, recovery and improved efficiency measures." In effect, the Reclamation contract states that El Paso farmers can buy and sell their water. I think this is terrific.

There are some proposed water banking acts that have been discussed. I have some criteria that may not meet all those proposed acts. The purpose of a water banking act is to provide a mechanism for buying, selling or leasing water rights and to provide a means for being assigned

to a qualified water bank. A water banking law should specify the criteria for qualification, and qualification requests would have to be approved by some state agency, perhaps the Interstate Stream Commission. A water bank should be a quasi-governmental entity similar to acequia associations, irrigation districts, and universities. Approval for a one-year water transfer from one water user to another could be made by a qualified water bank, with notice to, but without permission from, the Office of the State Engineer. That is, you could transfer the water for one year to any other user after providing notice. The State Engineer could not halt the transfer during the one-year period, except with a court injunction.

A transfer for more than a one-year period would require meeting all the current state law criteria for a water transfer. Public notice and hearings should be a part of that criteria. All economic interests in water must be allowed to have a significant voice in the process. That includes farmers, Pueblos, irrigation districts, federal interests like the Bureau of Reclamation, and the environmental community.

I'll close by saying that water banking is less than a zero-sum game. There is only so much water out there and anytime you take it and change it from one place to another, it's got to be a zero-sum game where one or more existing uses will be lost, and that "more" has to be taken into account.

Transfer processes are inefficient, trade-offs are complex, and the mechanistic administration followed by the Office of the State Engineer in the past may not produce equity in future water transfers. All parties having economic interests in the transfer of water in the Middle Rio Grande must have an opportunity to be heard. Public interests must also be heard. In considering water transfers, the State Engineer should accept his responsibility to protect both the private and the public interests in water.

Thanks very much.