

Setting the Stage: WRI 2013 Water Conference

John Shomaker

John Shomaker and Associates, Inc.



John Shomaker is President and a Principal Hydrogeologist of John Shomaker & Associates, Inc., in Albuquerque. He has over 48 years of professional experience in geological and hydrogeological studies in New Mexico and surrounding states. John holds BS and MS degrees in geology from the University of New Mexico (1963, 1965), an MA in the liberal arts from St. John's College in Santa Fe (1984), and MSc and PhD degrees in hydrogeology from the University of Birmingham, England (1985, 1995). He worked as a hydrologist for the U.S. Geological Survey (1965-1969), and as a geologist for the (then) New Mexico Bureau of Mines and Mineral Resources (1969-1973), before starting the consulting firm in 1973. Shomaker & Associates specializes in ground-water data collection and sampling, ground-water flow modeling, drilling technology and field supervision of drilling projects, water-supply planning, water-rights issues and expert testimony (including in interstate litigation before a U.S. Supreme Court Special Master), and environmental studies.

The presentations in past Water Conferences have tended to fall into two categories: they have been either explanations of some hydrologic fact, almost always accompanied by bad tidings, or arguments for one position or another in one of our on-going water controversies. This conference is going to be different—having recognized that we are facing some difficult realities in terms of future water supplies, every speaker is going to offer proposals for meaningful change. I will start to set our stage by defining a “meaningful change” as one that has some chance of being accepted by almost all of the people that would be affected by it. To propose a solution that means I get water and you don’t, even if I give a very good reason, may not really offer meaningful change.

I have been tempted to say that prior appropriation is dead in New Mexico, but prior-appropriation can’t really have died here, simply because it was never actually born. It is often urged that we must pursue the adjudications of water rights, and finish them, so that the rights can at last be administered according to our State law. But, of course, what we really do when things get tough is negotiate settlements that don’t resemble the state-law prior-appropriation system very much at all. Simply to recognize that might qualify as a meaningful change.

Adjudication establishes a winner or winners, and a ranking of losers, which sounds like a rational way to allocate water, but what seems to have some promise of actually working an enforceable

arrangement in which everybody gets most or all of what he or she needs, most of the time, or some acceptable substitute. The adjudication process provides a context in which that arrangement can be established, but simply completing an adjudication doesn’t get us anywhere close to the goal, and takes up a lot of time. I admit that even the settlements are under pressure, and when real shortages do loom, we can understand that senior appropriators look wistfully at the rigid prior-appropriation system, and would like to actually try it.

Even if we finish an adjudication, we have not settled the allocation of water. There really is just no point in assuming that the losers in an adjudication, the juniors, will simply go away, or engage in some other line of work, maybe spend a few months in the south of France, because it happens to be a water-short year. As long as the due-process clause prevails, the actual distribution of water cannot be regularized, as we have learned through experience. We are in the thrall of what the economist Moises Naim refers to as “choking on checks and balances.” He invented the word “vetocracy” to describe a situation like ours, in which almost everybody has the power of the veto, or at least the ability to create endless delay, and there really is no process for reaching a decision soon enough to be useful.

Most of us have read Judge Matthew Reynolds’ very thoughtful paper presented to the New Mexico Geological Society last April, titled A

Proposal for Responding to Sustained Drought as New Mexico's "New Normal." Judge Reynolds suggests that the Legislature undertake some profound changes in our water law. When a law just doesn't seem to have worked after 106 years of trying, it is tempting to try something else.

But Judge Reynolds' paper has led me to two thoughts. One is a question: is it easier to begin all over again and try to craft a new set of laws and regulations, given the fact that we live in a vetocracy—or to negotiate comprehensive settlements within the existing legal framework as we have shown we can do. I can't help wondering what new legal structure would have brought us to the highly diverse settlements already completed, with any less struggle. In the Pecos, the Compact itself requires that New Mexico invoke priority when and as needed to meet our obligations to Texas, but what we really did was to hammer out a settlement that reduced the risk of a call by buying out a lot of farmers, and providing for augmentation pumping. That agreement hasn't solved all the problems for ever, but it's a big step toward that. In the San Juan, the settlement turns prior-appropriation on its head by giving the most senior appropriator a very junior priority in exchange for a lot of assistance for development.

Getting to the settlements so far has also provided some lessons that we can build on. For example, we might learn from the way the Lower Rio Grande operating agreement has worked out that a settlement that doesn't include the State is on an uncertain footing.

Of course, people being what we are, only a dire threat, and one that is perceived as a dire threat to all of the parties, must be in place before negotiation can be fruitful. A dire threat that just affects wildlife or the natural environment, or only junior appropriators, to choose a few random examples, is not enough. One category of dire threat is the devastating effect of a real priority call, but another fairly dire threat is the uncertainty for everybody that accompanies an endless adjudication.

My other thought related to Judge Reynolds' paper has to do with "sustained drought." What we now call sustained drought may indeed turn out to be the new normal, but that is not our fundamental problem. We have been struggling with these same issues for decades, right through the one-of-a-kind wet period of the last quarter of the 20th Century.

The drought has focused our attention, and if what we were recently calling a drought becomes the "new normal" we may have addressed our troubles a little sooner. But it had to be done anyway.

Another elephant in our living room has to do with the fact that the most senior appropriations, as you might expect, were established in the technological context of the early 20th Century, and depend on lots of surface storage, accompanied by large evaporation losses. This "storage charge" is water that simply vanishes from the system. These appropriations were made before groundwater was considered much of a resource. Rational groundwater use in conjunction with surface water supplies, what we like to call conjunctive use, is based on the premise that the groundwater reservoir will be treated as working storage, not as a separate resource that we will gradually deplete. In this way of looking at it, we will pump groundwater to make up for below-average surface-water supply, and we will allow water to accumulate in the groundwater reservoir when surface supplies are more than average. This has presumed, of course, that we actually know the average conditions. Now, unfortunately, we are beginning to see that the average itself is moving, and a conjunctive-use plan must include the ability to adjust to that.

Another elephant is that the advent of large-scale groundwater use around 70 years ago has led to a complete mismatch between prior appropriation on the one hand, and any useful way to manage water in some basins, on the other. The slow response of the groundwater system means that a priority call by a senior surface-water user is very likely to be meaningless, a "futile call" in our jargon. And in a basin with no surface water at all, prior-appropriation is more-or-less meaningless. It's hard to imagine how a priority call would work in the Estancia Basin, for example, if the most junior rights are in wells 20 miles away from the place where rights are being impaired.

I'm looking forward to our day-and-a-half of good solid proposals for meaningful change!