Water Update by the New Mexico State Engineer

Scott Verhines, New Mexico State Engineer

Prior to his appointment as State Engineer, Scott Verhines served as program manager for the Eastern New Mexico Rural Water Authority, overseeing a $500 million regional water supply project that provided municipal and commercial water to communities throughout Eastern New Mexico. He has extensive experience with water issues both in and outside New Mexico. Verhines has a managed and participated in over 200 hydrologic and hydraulic studies ranging in size from individual residential lots to over 500 square miles of watershed and has planned and designed over 60 major transportation projects. He earned his his B.S. in civil engineering from Texas Tech University, as well as his M.S. in civil engineering and M.B.A. from the University of New Mexico.

Editor's Note: The following paper represents a transcription of the speakers' remarks made at the conference; no follow-up papers were submitted by the speaker. Remarks were edited for publication by the editor. The speaker did not review this version of their presentation, and the editor is responsible for any transcription and editing errors.

Thank you for having me speak this morning. It's wonderful to be back at this annual conference.

Since one of the themes of the conference is the Statewide Water Assessment, I'll target my comments on related activities in the Interstate Stream Commission and State Engineer's offices. I'd like to thank Sam and his team for meeting with us early on to talk about the work that they are doing and how it relates to the day-to-day work of the Office of the State Engineer (OSE).

The other day I heard a comment from someone who asked why they needed to engage with the OSE. They felt the office only provides permits and water right transactions. Whoever made that comment needs to spend a few hours wandering the halls of our agency. We are inherently a technical group of folks - we are scientists and engineers, and we certainly have a large legal component to what we do, but the data and how we use data and modeling to make our decisions is critical to New Mexico. We make decisions that are technically based.

The OSE is not just about permits. We have many other responsibilities, and we work with all of you. Our mission: The State Engineer has power over the supervision, measurement, appropriation, and distribution of all surface and groundwater in New Mexico, including streams and rivers that cross state boundaries. The Interstate Stream Commission (ISC) has broad powers to investigate, protect, conserve, and develop New Mexico's waters including both interstate and intrastate stream systems.

From the OSE/ISC perspective, how can the Statewide Water Assessment (SWA) benefit New Mexicans and our activities? Two weeks ago we had a chance to meet with Dr. Fernald and his team in Las Cruces to get an update on much of what you are going to hear about today. I appreciate that they took the time to do that with us.

From our perspective, the SWA can turn into something very valuable: data collection, evaluation of that data, research behind the data, and how data are communicated to all of us is critical.

Sam Fernald mentioned that the administrative water that we deal with in New Mexico is roughly 4 million acre-feet a year. Of course, it depends on the year and how well we're doing with the drought, but according to the 2010 Water Use Report, roughly half of that 4 million acre-feet is in surface water diversions (2,041,844 ac-ft; 53%) and groundwater withdrawals are about 1.8 million acre-feet (46% of total withdrawals). The Water Use and Conservation Bureau also works with communities around the state on conservation programs including municipal conservation.

Figure 1 shows water use categories in New Mexico. We are continually evaluating consumptive use by basin. That evaluation is data driven, and data are very important to our administrative decisions.

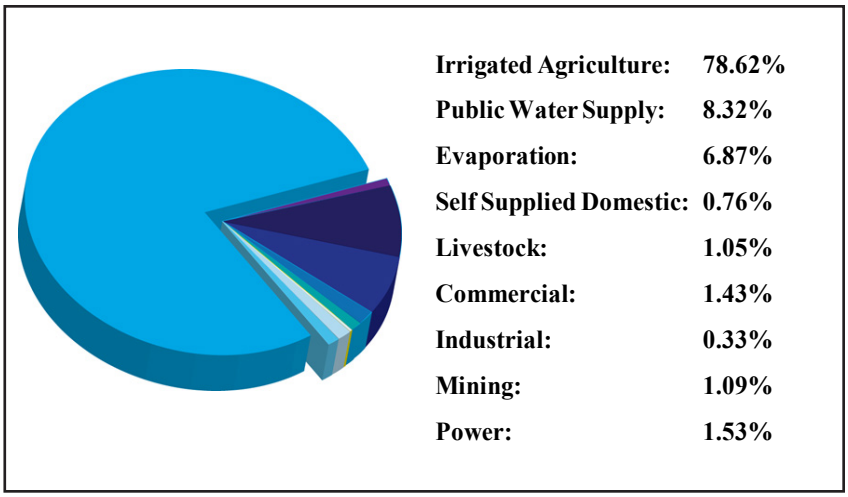

Figure 1. Water Use Categories.

Water issues in 2014 in New Mexico include the following:

- Expanding water demands
- Watershed health including catastrophic fires and their impact on water supplies
- Ecosystem health and environmental mandates
- Increasing consumptive use, administrative constraints
- Outside threats to NM's jurisdiction and authority
- Infrastructure investment needs and limited resources
- Drought and flood resiliency
- Interstate compact delivery credits
- Competition for water resources
- Economic impact and job creation

Concerning competition for water resources, every day we see people trying to leverage their point of view. Relying on data and modeling—whether groundwater modeling, river modeling, or stream system modeling—is how we make decisions. We try to be very credible, thoughtful, and data driven about the decisions we make.

Water is the root of almost any economic activity you can envision in New Mexico. In June, we sat down as an agency, and asked ourselves, "What priority do we need to focus on—both ISC and OSE—for the benefit of New Mexicans over the next couple of years?" We identified seven priorities for New Mexico.

State Regional Water Planning

Many of you are participating in regional water planning activities. We are in the process of updating all 16 regional water plans. Currently, ISC state water planner Angela Bordegary is working with steering committees to create the water plans.

Adjudication of Water Rights

Over the last couple of years, we have been challenged on the pace and cost of the adjudication of water rights around New Mexico. We have asked for additional resources to keep pace with adjudications. The state legislature will hand those resources to us with one hand and take an equivalent amount away from us with the other hand. Thus, we have been at a net zero in terms of being able to move the adjudication process ahead faster. But we are working through that, and the next few years will be critical.

Active Water Resources Management

Given the outcome of the Tri-State case, we are currently working on implementing Active Water Resource Management (AWRM), the District Specific Rules in the Lower Rio Grande. I think we are getting pretty close to having a draft that can go out for public review and comment in the relatively near future. We will want feedback and, if nothing else, we are cutting our teeth on AWRM in the Lower Rio Grande. Each basin is going to be a little bit different. We will have to address the way each basin functions physically and administratively – they are all different. We will make sure that AWRM rules reflect the intricacies specific to each basin.

Arizona Water Settlement Act and the Gila Program

One of our most controversial issues in New Mexico today is the Arizona Water Settlement Act. Statutorily under the Act, the Interstate Stream Commission has a decision to make on or before December 31 of this year. As we get closer to that deadline, we have escalating rhetoric over the proposals to develop the water by both proponents and opponents. It is unfortunate that we are not having a more civil discussion about the proposals. We were in Silver City on Friday, and we had an ISC meeting for a good part of the day. The day was devoted to public comment on studies conducted in order to inform the Commission and assure that the Commission is making an informed decision by the end of the year. We are also under a temporary restraining order that was brought about by certain members of the opposition who are trying to prevent us for making a decision by the end of the year.

Capital Investment in Water Infrastructure

We are working diligently through the Water Trust Board and with other sister agencies to look at how to improve our water infrastructure. How do we spend our money on capital investment? Looking at the life cycle cost, it is not just about building something today, but how we keep it running for the next 50 or 60 years. How do we improve the way we maintain our infrastructure?

Managing Environmental Mandates

Almost every river basin in New Mexico has some sort of environmental condition that we are trying to balance between our water users and the ecosystem. New Mexico, I think, does a really good job at being out in front of that issue with a collaborative process to make those balances take place between water right holders and the ecosystem. It is a difficult issue, and there has been a lot of press on it in the news lately.

Defending New Mexico's Jurisdiction Over Water

We are seeing several instances where federal agencies are attempting to do what is really a states' rights issue. Where appropriate within our priorities, it would be helpful if the WRRI and the State Water Assessment could help us on the issue. We are engaged with many western states in making sure what is statutorily our authority and responsibility in order to defend our jurisdiction.

Concerning state regional water planning, I think there are a lot of opportunities. We understand that the institute is engaged particularly with the planning underway in the Lower Rio Grande region. WRRI has been a participant and very supportive of the planning activity, and we appreciate that as well. We look forward to expanding their participation outside of the Lower Rio Grande.

Regarding water adjudications, we have twelve active adjudication suits underway in New Mexico. Completion of pending water rights adjudication suits remains a priority, but progress is very much resource driven.

I talked a bit about managing environmental mandates. We have worked very hard with collaborative programs to manage those mandates in order to make sure that the processes support both the water users and the ecology.

I talked a little bit about capital investments for water projects. How do we look at the long-term? How do we make sure that as tax-payers, we are investing in something today that does not break down in ten years? We discussed this at the first New Mexico First Town Hall. I see many people here today who participated in that Town Hall. Two recommendations in this regard came out of the Town Hall. One recommendation was to invest dollars wisely. A lot of the discussion that we have had was on that recommendation and the strategies for implementation. Another recommendation concerned expanding water funding sources in New Mexico and encouraging public-private partnerships as a means to increase funding.

After the New Mexico First Town Hall, former State Engineer John D'Antonio, who headed the implementation committee, asked how to begin implementation of the recommendations. Discussion revolved around working with the legislature and with the investment community. At a Western States Water Council meeting a couple of years ago in Phoenix, the investment community was present along with a lot of water managers. Bloomberg, RBC Capital Markets, and Deloitte were among those present. Their message to us was that the single largest investment risk in the United States today is deferred maintenance. If we look at investing in the Albuquerque Bernalillo County Water Utility Authority and the authority comes to us and says, "Here are our assets to back up this loan" (and I'm not picking on John Stomp), what we see are mostly liabilities because of deferred maintenance. We will have a hard time with the bond rating, and we will have a hard time with how we engage in that community investment.

A few more comments on the Arizona Water Settlement Act. This is a federal Act that allocates to New Mexico up to 14,000 acre-feet per year and between $66 to $128 million dollars in non-reimbursable federal funding; $66 million is guaranteed payment and may be used either to develop the water for water utilization projects or related watershed activities in the Gila Basin. The state may receive up to an additional $62 million only if it chooses to construct a physical works to develop the water.

Active Water Resources Management, as I mentioned, is critical. We are actively formulating the District Specific Rules on how AWRM will be implemented in the Lower Rio Grande and engaging with water user groups to develop their specifics. We are receiving a lot of inquiries on other basins around New Mexico. How do we begin to put this in place? It is largely a resource issue for us. If we could do all seven priority basins at once, we would, but we are going to have to step through those one at a time, and we are going to learn some lessons as we go.

The value of the Statewide Water Assessment is in what we use it for and here are some ideas:

- New Mexico Water Code, the laws, the framework in which we work
- AWRM Implementation
- Aquifer Storage and Recovery. We have just permitted a full-scale operation of the first large-scale ASR project in New Mexico with the Albuquerque Bernalillo County Water Utility Authority. We had a very nice press conference on the project the other day.
- Aquifer Recharge Areas
- Brackish water. Because of the drought, there is more interest in brackish water development than there has ever been. There is a great effort underway to look at how we do that in New Mexico. We are not seeing a lot of applications for that water, but we expect that will change.
- Regional Water Planning. I encourage all of you to participate in regional water planning as I think that this is how regions are going to balance supply and demand over the long haul.
- Investment of the State Resources. This activity can help inform innovative approaches to how we deal with water.
- Water Administration is what we do all day long. Water administration can be effected in a basin in many ways: state engineer policies; state engineer orders; water right adjudications; court ordered administration, priority call; Indian water right settlements; permitting of water right transactions; and groundwater permitting (which is largely priority administration on the front end).

Thanks again for having me speak this morning. I am looking forward to all the presentations.