# Testimony before the US Senate Committee on Energy and Natural Resources Estevan López, NM Interstate Stream Commission Director April 27, 2011

Thank you for this opportunity to speak to you about the drought situation in New Mexico. New Mexico has just suffered through one of the driest winters on record. Snowpack conditions around the state are generally very poor and consequently, flows in the state's streams and rivers are expected to be extremely low. For several areas in the state, year-to-date precipitation is the lowest in the state's recorded history. As you might expect, this is already creating significant challenges for water management in the state and these challenges will likely grow as the irrigation season advances.

Since the start of 2011, the drought in New Mexico has been intensifying. According to the United Stated Department of Agriculture/National Agricultural Statistics Service's "US Drought Monitor for New Mexico", drought conditions worsen as you move south through the state. Currently, only the northwestern corner of the state, roughly corresponding to San Juan County, has the least severe Drought Monitor characterization—that is, "abnormally dry." The rest of the northern third of the state is experiencing "moderate" drought conditions, the middle third of the state is in a "severe" drought condition and the southernmost third of the state is experiencing "extreme" drought conditions.

Recognizing the intensifying drought, State Engineer John D'Antonio, Chairman of the New Mexico Drought Task Force convened a meeting of the Drought Task Force on March 21, 2011. This was the first Drought Task Force meeting under Governor Martinez' administration. The meeting was intended to acquaint the new members of Governor Martinez' team with the Task Force, its charge and of the need for coordination among state agencies.

At the Drought Task Force meeting, the New Mexico State Forestry Division reported that year-to-date as of March 18<sup>th</sup>, there had already been 160 fires that had burned over 91,000 acres--more burned acreage than in all of 2010. Given the intensity of the drought, the potential fire outlook is severe. The representative of the New Mexico Agriculture Department reported that the state's drought conditions are having "definitive negative impact" on the state's agricultural activities. Moreover, the Department of Agriculture has characterized soil moisture conditions around the state as either "very short" or "short", much less than what is needed for normal plant development. At this time, the New Mexico Department of Agriculture is monitoring drought and considering requesting a disaster declaration of the Governor but has not done so yet.

Some of the other challenges have begun to manifest themselves as direct water supply problems. A few examples include:

### Gallinas River

The city of Las Vegas, New Mexico relies on surface water from the Gallinas River for about ninety percent (90%) of its supply. Given the severity of the drought, the city has had to implement stage IV

drought restrictions banning most outdoor water uses. The city has begun exploring funding options to rehabilitate its surface water reservoir and replace some of its wells. The New Mexico Water Trust Board will be considering a funding request for a replacement well by the city and will take into account the current water supply emergency in its deliberations.

In recent years, the Office of the State Engineer has worked with the Rio Gallinas Acequia Association to install flow measurement stations that will be critical to managing uses on the Gallinas River effectively. More recently, the city and the acequias have agreed to a water use rotation schedule that will help minimize conflict.

## Lower Rio Grande

In the Lower Rio Grande, farmers within the Elephant Butte Irrigation District (EBID) have yet to receive any surface water this year. Although there is over 450,000 acre-feet of water in Elephant Butte Reservoir, only about half of that amount is usable for downstream Rio Grande Project irrigation purposes. Under a 2008 Operating Agreement between the US Bureau of Reclamation, EBID and the El Paso County Water Improvement District No. 1 (EP1), most of the usable project water has been allocated to EP1 leaving EBID with less than 50,000 acre-feet. This means that all irrigation within EBID is being done with groundwater the pumping of which is more and more expensive as fuel prices rise. Further, given that usable project supply is less than the key threshold of 400,000 acre-feet, Article VII of the Rio Grande Compact is in effect — prohibiting storage of water in upstream, post-compact reservoirs. This upstream storage prohibition will likely to be in effect through the remainder of this calendar year and into at least next spring. This upstream storage prohibition is likely to have minimal upstream consequence given the lack of runoff available for impoundment.

This year, Rio Grande flow past San Marcial and into Elephant Butte Reservoir is expected to be about thirty-three percent (33%) of the long term average. In spite of this low inflow, New Mexico has done what it can that to minimize natural losses in the system. In recent years, the Interstate Stream Commission has worked with the U.S. Bureau of Reclamation to construct and maintain over twenty miles of pilot channel through the sediment delta at the upstream end of the reservoir to assure that the water that does reach the reservoir actually reaches the active reservoir pool instead of simply spreading on the delta and evaporating. This has been critical to New Mexico's compliance with its Rio Grande Compact water deliver obligations and has helped build New Mexico's 164,000+ acre-foot Compact Delivery credit.

Also in recent years, the Office of the State Engineer has successfully implemented metering requirements on most non-domestic use wells in the Lower Rio Grande as part of his Active Water Resource Management initiative. Although the Active Water Resource Management regulations are being challenged in court thereby preventing priority administration at this time, this metering information should be useful in better understanding water uses generally. It could also provide the information that would allow for voluntary shortage sharing agreements.

#### Middle Rio Grande

Upstream Rio Grande reservoirs in New Mexico started the year with plenty of supply. Still, the projected minimal runoff will challenge water managers in meeting the flow requirements for the Rio Grande silvery minnow under the 2003 biological opinion while also meeting the demands of middle valley users. This should not, however, diminish the fact that the status of the endangered minnow is far better than it was just a few years ago and in spite of the dire water supply outlook the minnow should be able to weather this year's drought. This is the result of the collaborative efforts of the Middle Rio Grande Endangered Species Collaborative Program. There is substantially more useable habitat available at low flow conditions, the needs of the minnow are better understood, there is an experimental population in Big Bend, Texas and there are now several off-river refugia available.

## **Lower Pecos River**

Water users and water managers in the Lower Pecos River in New Mexico are fortunate to have implemented the Pecos River Settlement in 2009 and built a 100,000 acre-foot Pecos River Compact credit. The state is well positioned to meet its Compact delivery obligations. However, the settlement also calls for augmentation of the surface water supplies when water in storage for use by Carlsbad Irrigation District falls below certain threshold values. The Interstate Stream Commission is responsible for monitoring that available supply and has had to begin augmentation pumping since March 1, 2011. The current outlook is that pumping will probably have to continue through the irrigation season unless there are significant monsoons. This pumping is expected to cost the state dearly in a time of diminishing budgets.

# San Juan and Colorado Rivers

In many regards, the San Juan is the one bright spot in the state. Or perhaps I should say it's the one relatively wet spot. As indicated earlier, this area of the state is only classified as "abnormally dry". The southern Colorado snowpack that feeds this river is close to average, yet runoff into Navajo Reservoir is projected to be about eighty percent (80%) of average. Still, given that there is a multi-year Supply Sharing Agreement in effect along with successful implementation of metering and measuring of surface diversions and hiring of water masters the state is well positioned to manage through what will hopefully be a fairly mild drought in this basin.

Elsewhere in the Colorado River basin snowpack in the Upper Basin is well above average (in Colorado, Utah and Wyoming) and inflow into Lake Powell is also expected to be well above average. This in turn means that there will be additional releases to Lake Mead under the terms of the 2007 Coordinated Reservoir Operations and Shortage Sharing Agreement. The net effect is that the immediate threat of a Lower Basin shortage has abated and reduced tensions for the time being. Nevertheless, unless we get into a substantially wetter cycle than the last few years, the tensions will increase again soon. The Colorado River basin states, the U.S. Bureau of Reclamation, the U.S. International Boundary and Waters Commission and Mexico need to use this current reprieve to make progress on longer term solutions for dealing with potential shortages before they hit.

#### Conclusion

The preceding examples are but a few of the illustrations of both how New Mexicans are suffering through the drought and of the challenges facing water managers. Every part of the state is facing its own drought-related issues.

As noted previously, the State Engineer has recognized the need to actively manage and administer water rights and water uses. As the state's population and water demands grow, and given the frequency and severity of drought in the state, this will become increasingly urgent. Also as noted above, the ongoing legal challenges to the State Engineer's proposed Active Water Resource Management regulations has hampered the State Engineer's ability to exercise priority administration. Nevertheless, the advancement in measuring and metering; the hiring of water masters; and the various alternative administration schemes, including those cited here--rotation schedules on the Gallinas, the Pecos Settlement, supply sharing on the San Juan—all demonstrate that the State Engineer's ability to manage and administer water uses around the state continues to improve.

Finally, a major element of effective administration is the adjudication of water rights. Progress is being made on that front, as well. And the negotiation, settlement, authorization and partial funding of the Navajo Nation, Aamodt and Taos Indian water rights settlements are major elements of that progress.

I would be remiss if I did not take this opportunity to thank Senator Bingaman for his continued assistance in helping to improve the state and its water users' ability to manage water resources both in times of drought and in times of plenty. That assistance has come in the form of funding to the federal water management agencies, support for endangered species programs and, most recently, in the Senator's heroic efforts to secure federal authorizing legislation and direct funding for the Indian water rights settlements.

Thank you.