John D'Antonio *was appointed as the New Mexico State Engineer by Governor Bill Richardson in January 2003. He also serves as Secretary of the Interstate Stream Commission. John is a registered professional engineer in New Mexico and Colorado and has experience in hydraulic design, acequia rehabilitation, water resource management, and water policy development. He was Cabinet Secretary of the New Mexico Environment Department in 2002. Before that, he was the Director of the Water Resource Allocation Program for the Office of the State Engineer from 2001 to 2002 and served as the District 1 Supervisor in Albuquerque from 1998 to 2001. John worked 15 years with the U.S. Army Corps of Engineers as a hydraulic design engineer, as the Chief of the Hydrology, Hydraulics, Sedimentation, and Floodplain Management Program, and was the project manager for the Acequia Rehabilitation Program. A native New Mexican, he received a bachelor's degree in civil engineering from the UNM in 1979 and pursued graduate coursework in water resources engineering, hydraulic structures, and water resource administration. John is chairman of the Water Trust Board for the State of New Mexico. He is also the New Mexico Commissioner for the Rio Grande Compact, the Costilla River Compact, and the Upper Colorado River Basin Compact.*

ACTIVE WATER RESOURCE MANAGEMENT

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Good morning, everybody. Thanks for being here today. I want to touch on our Active Water Resource Management (AWRM) initiative. People understand and know that it is something essential for the state of New Mexico. We are not going to settle for the status quo. We are not going to manage water for convenience's sake. That is what we have done in the past. We had a large amount of rainfall from 1980 to 1995. We had a six to seven year drought period before last year. We had good snow conditions, probably better than average snow conditions last year as well. It is easy for complacency to set in and for all New Mexicans to go back to thinking that the drought is over. The monsoons were late in arriving. We have had some good rain lately. In my estimation, we are technically still in a drought. There are still management considerations that need to be understood. What has happened in many areas is over drafting

groundwater. There are limited surface water supplies in some areas. Some of the reservoirs have come back. The reality is that if we have another period of sustained drought, water shortages again are inevitable. Our agency needs tools in place to manage our water resources for the next drought.

I have heard that AWRM might be just a new program driven by Santa Fe. I want to assure you it is for the benefit of the entire state that takes into account what we have to deal with – the physical availability of water, the variable water cycles, and the understanding that drought cycles are going to continue to happen in New Mexico. We have to be able to put a mechanism in place with which to manage the drought cycles we are going to inevitably see in the future. I think Em Hall made some interesting comments on regionalization and recognizing that even in New Mexico, we have different needs on how to manage water. We are in the process of developing basin specific rules and regulations. My job as State Engineer is to balance, maintain, and protect water needs throughout the state of New Mexico.

Active Water Resource Management (AWRM) refers to a broad range of activities, including transfers, monitoring and metering diversions, and limiting diversions to the amount authorized by existing water rights.

As you know, our agency put together a State Water Plan that had about 11 common goals and priorities within the state of New Mexico. I am going to run through these quickly, so that it just refreshes everybody's memories as to what we are doing and what we are using as a blueprint for how to manage our future water resources.

First is the vitality of economic development. We all know we want our children and grandchildren to have jobs here when they grow up. For that reason, we have to grow in a way that is smart. We need water so we can accommodate that growth. A safe drinking water supply obviously is a major concern. We need water resources to expand available supply.

Other concerns include the enhancement of watersheds. We must look at desalination technology. And, of course, conservation is the cheapest form of obtaining additional water supply. We must promote drought planning. At our agency, we take our jobs seriously. We must enhance the quality of state waters. Environment Department Secretary Ron Curry, who spoke earlier today, said some kind things this morning about our agency's interaction with his agency. Water quality and quantity are integrally linked. We are concerned about water quality within the state. We are also concerned with providing for fish and wildlife habitat preservation. I will talk a little bit about what we are doing in that area. Also, my concern is to continue to protect the senior status of water rights. The last three areas of concern for our agency include: maintaining and enforcing interstate stream compact compliance, preserving state administrative authority over the state's waters, and completing water rights adjudications. Believe it or not, each and every one of these areas is interconnected. If all issues are not kept in balance, the whole fabric of the system can begin to unravel.

Active Water Resource Management (AWRM) refers to a broad range of activities, including transfers, monitoring and metering diversions, and limiting diversions to the amount authorized by existing water rights. We have designated basin managers. We have also made some progress in each of the seven critical basins within the state that we will be administering as part of this initiative, which include: the Lower Pecos, the Lower Rio Grande, the San Juan, the Upper Mimbres, the Rio Chama, the Nambe-Pojoaque-Tesuque Stream System, and the Rio Gallinas in order of priority.

Effective communication is essential to furthering these initiatives. A communication plan has been prepared and is now being implemented. Already, we have held several public meetings, which have generally focused on the top, three priority basins: the Lower Pecos, the Lower Rio Grande, and the San Juan Basin as well as in the Rio Gallinas. We held a public meeting in Las Vegas, New Mexico in April of 2004 for water users in the Rio Gallinas Basin. We held public meetings in the cities of Roswell, Carlsbad, Ft. Sumner, Hondo, and Weed, New Mexico in August and September of 2005 to further AWRM in the Lower Pecos Basin. We met in public forums with water users, we talked with them, and we allowed them to ask questions and express their concerns. Most importantly, we listened.

This is a very public process. It is an open process of communication and exchange of dialog. We typically go in to meet with the key water stakeholders within those various communities before we even put together a draft set of rules and regulations for basin-specific

areas. Meeting with key stakeholders before the public meetings means that we have a well-vetted version of the rules and regulations before it actually goes before the general public for review. We always have a public comment period for the rules and regulations. At the present time, we are taking public comments in those areas of the Lower Pecos Basin.

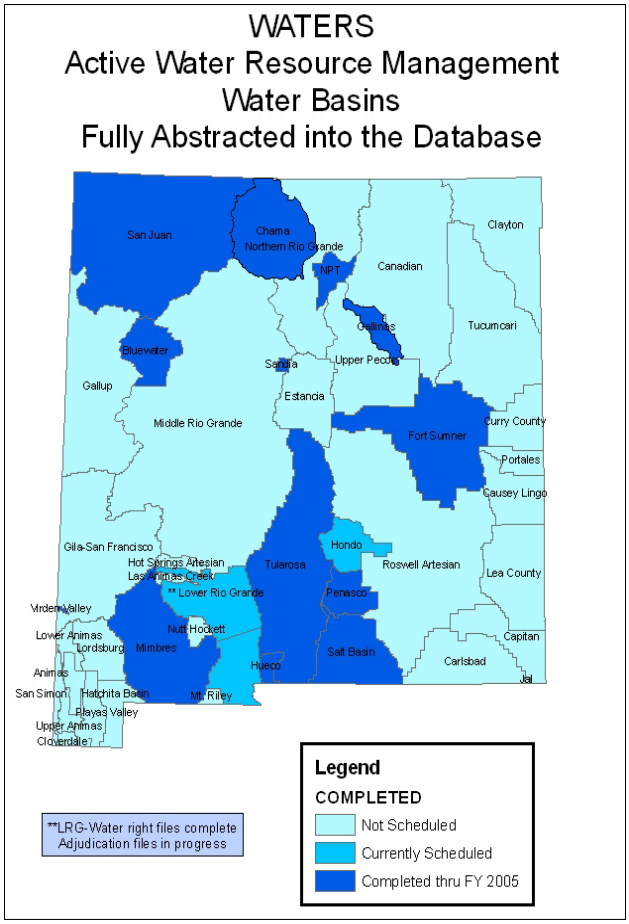
What Active Water Resource Management does is provide a mechanism to explain what priority administration is and how we plan to administer water in the future. If I have to call priorities because we have limited water supply in a given year, I have to do that. That's my job. I must have the tools in place to make that happen effectively. I need to have subdistricts defined, Water Masters hired, the rules and regulations defined, the metering and measuring devices in place. Currently, we do not have readily available information or tools necessary so that we can manage our water supplies by priority administration. I am also providing for a mechanism in which the local groups can come up with their own alternative forms of administration, which is a preferable option. There will be problems when the state goes through future drought cycles, because much of the state is over-appropriated or fully appropriated. We know that there are additional depletions to many of the systems from just domestic well usage. My challenge as State Engineer is how do I get the general public to understand that we have to be prepared for those future drought cycles? We need to be able to manage by priority – which is the law – but also to allow for that alternative administration among water users. When everybody is on the same page as to how to manage their water resources, we can have a much better way than to administer by priority administration, which can often be very ugly when you get right down to it.

Here is a picture of three of our agency's Water Masters working out in the field. We have actually hired seven new Water Masters as part of the AWRM initiative – one for every basin. Some basins will require more than one to effectively manage water supplies. Our next steps are drafting the district-specific rules and regulations followed by getting the necessary measuring and metering installed.

I signed a metering order requiring the Lower Rio Grande to meter groundwater use by March of 2006. There are going to be other metering orders to follow in other basins. Putting together the Water Master manuals for each priority basin will come as a next step, which is a critical one. The Water Masters manuals are essentially the Bible that the Water Masters can take out into the field and clearly indicate which people own water rights in the area, their priority dates, the point of diversion, and the place of use of that water.

How are we going to physically make that happen in the field, if we have a 10 percent shortage, and we know that 10 percent of an area needs to be cut-off or at least curtailed for specific use in that year? Again, getting back to the AWRM plan, if that were to happen, we would essentially have an individual curtailed user that could then go out into the marketplace and acquire a short-term lease for water from a more senior user to help facilitate that market need on a temporary basis. This may be necessary for a junior user who needs to provide jobs for an area, or to provide drinking water, or other beneficial needs to a community.

The figure below is a map that indicates the progress we have made on the WATERS program, water information and data can be accessed via the



Internet. You can see the dark blue areas are completed for fiscal year 2005. Currently scheduled are the areas that are in a little lighter blue. The ones that aren't scheduled yet are just a shade lighter. The dark areas you'll notice are also the keys areas and the priority basins for Active Water Resource Management. All the money that the state legislature gives us is being geared towards making progress in those priority basin areas.

There are other efforts within the state to make sure we balance our water resources and manage them effectively. We have just recently declared new underground water basins and basin extensions. I can go over some of those quickly. Extended or declared basins are in Tularosa, the Canadian River, Clayton, Curry County, Ft. Sumner, Causey-Lingo, Lea County, Nutt-Hockett, Mt. Riley, Cloverdale, Aqua, Animas Upper, Animas Lower, Lordsburg, and the Playas Valley. All of those areas amount to, believe it or not, 9 percent of the surface area within the state of New Mexico that was not declared. People did not have to go out and get a permit from the State Engineer's Office to use groundwater in these areas. We have just recently declared all of those areas as basins, and they will be the subject of a public hearing on December 9, 2005, held in Santa Fe. All of those areas are going to come under State Engineer jurisdiction. I want to make sure that to use groundwater in New Mexico, you will need the benefit of a permit. You will have to go to the State Engineer's Office and get those water uses permitted throughout the state.

...conservation is still very important.

What progress have we made in protecting our state's waters? I am going to go through these really quickly. Interstate Stream Commission Director Estevan Lopez talked about the Arizona Rights Settlements earlier today, so I won't talk about that again. The Strategic Water Reserve legislation passed last year, which gives us an additional tool essentially to help us deal with compact deliveries and endangered species act issues. The goal is to protect New Mexico's water for use within the state of New Mexico. That is how the regional planning concept came out. Regional planning areas needed to show they were going to use their water for use within New Mexico, so that surrounding states could not take that water. We have 13 of the 16 regions completed, and we are trying to integrate the best parts of those plans into our State Water Plan as we move forward. What progress have we made with respect to adjudications and settlements? I will not talk about the Pecos settlement, since Estevan Lopez addressed that in his talk earlier. The state of New Mexico and the Navajo Nation signed a historic settlement agreement on April 19, 2005, but since we have a speaker coming up on that issue, I'll let him cover that progress made in more detail. We had an Aamodt settlement conceptual proposal agreement signing on June 1, 2005. That settlement process is back at the negotiating table at this time to work out details. The problem with these water rights settlements, especially with Native American water rights settlements, is the federal obligation on funding, which we are finding is more and more difficult everyday. We also have settlement talks ongoing in Taos. We made progress with the last state legislative session on getting an Indian Water Rights Settlement Fund established. This session, we will be seeking money for that fund.

Technical innovation is something that is extremely important for our agency as we move forward. The way that we adjudicated areas in the past has been cumbersome, so what we are trying to do now is use digital imagery in that process. We had a contract that we signed and worked on in conjunction with some money that was routed through the Army Corps of Engineers to fly over the entire state of New Mexico. Now we'll have that database to provide a basis for our aerial imagery as we move forward. We can also use the historic satellite imagery from the early 1970s. We have some pretty good information to look at the continuous use of water, which helps define water rights and to try and put that in a GIS format that allows us to go out and actually make offers of judgment on a timely basis. Although we still have to do verifications of the data, it essentially means our personnel can spend less time in the field. Our Deming District Office took on a special project using E-GIS to map the Virden Valley in southern New Mexico, and now that same method is being applied in the San Juan Basin. Coupled with our hydrological models that get better and better everyday, we are getting these things done a lot quicker than in the past.

We are also making progress with new sources of water, including desalination. The City of Alamogordo had a permit that was authorized, and we are closely monitoring the progress. We are trying to evaluate whether or not cloud seeding makes sense. We think it does in certain areas.

We've made progress with interstate compact compliance. Compact deliveries are essential for the state of New Mexico. Work continues on the Elephant Butte Pilot Channel as well as other items on this list to keep us out of a liability situation and make sure we continue to manage our water effectively within the state of New Mexico.

We've also made strides on a lot of wildlife, habitat, and river protection areas, as well as with the ESA Collaborative Program. There is the Albuquerque refugium, and a second refugium is planned. We have to be able to make sure these environmental issues are taken care of and the water rights associated with those. When we deal with the federal government, we want a permit in place. We want there to be an acquisition of water from an existing use. We do not have additional water to take care of endangered species act needs. It has to be water that is within the system. They are going to acquire water through permits from somebody and compensate that user that they are acquiring the water right from. Also, our staff has major plans to renovate habitat along the Middle Rio Grande in the coming year.

We have made progress mitigating the impact of drought in our state. Successful drought summits were held the past three years. We have a Governor's Drought Task Force established, and Active Water Resource Management essentially addresses drought conditions and how we can manage limited supplies through drought scenarios.

The other things that we are doing within the state include looking at community water systems, as well as looking at asset management and running water systems as a business. Some of this is coming through Governor Richardson's office, in which we are a participant. With other agencies, we are looking at collaborative planning efforts, a regionalization of projects, and some capital outlay reform. Hopefully, money is going to systems, and the end users are paying the amount that they should be paying in certain areas, in order for us to really put in the infrastructure that we need to continue to improve our water systems. The infrastructure needs are billions of dollars, and we do not have billions of dollars to invest.

Preserving and enhancing water quality is an area where we are making progress. Environment Secretary Ron Curry touched a little bit on all of these areas. We are working closely with the Environment Department to ensure that quality comes into play when we talk about quantity issues also. You can see some of the areas here that we are involved with including: basin watershed management, well drillers rules and regulations, making sure regional water plans address water quality issues as well as our participation in the Water Quality Control Commission, among other measures.

Also, I want to mention our government outreach efforts with Native Americans in our state. We have 22 tribes and pueblos within the state of New Mexico. We only have one tribe whose water rights are fully adjudicated—the Jicarilla Apaches. I mentioned that we have made progress on our water settlement with the Navajo Nation. We are also close to an agreement with the Mescaleros. That leaves 19 other pueblos that we still need to be able to adjudicate water rights for as we move forward. Consultations are ongoing with these groups. Also of note, we instituted a Native American Water Institute this year, which we will meet with on a quarterly basis to discuss common issues.

This is a very public process. It is an open process of communication and exchange of dialog.

As far as updating our rules and regulations goes, our agency could not be busier. I already mentioned the district-specific rules and regulations we are looking at for AWRM and the public input process we are following. We have also updated our rules and regulations for surface water, groundwater, well drillers, and dam safety. Surface water regulations have not been updated since 1953. Groundwater rules and regulations have not been updated since the 1980s. Also, we have come up with rules and regulations for our Strategic Water Reserve. We are very busy getting rules and regulations in place to make sure that the things we do are defensible, that they make sense, and that they are moving forward.

As a final note, conservation is still very important. Our agency has come out with a new rainwater/snowmelt harvesting policy, new gray water guidelines, as well as new education materials for the public. I cannot say enough about conservation. It is the keystone for our future in New Mexico. With that, I'll close. Thanks everyone.