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. He has experience in hydraulic design, acequia rehabilitation, water resource management, and water policy development. John 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 also worked for the U.S. Army Corps of Engineers for 15 years 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, John received a bachelor's degree in civil engineering from the University of New Mexico in 1979 and pursued



graduate coursework in water resources engineering, hydraulic structures, and water resource administration. John was a member of the Governor's Blue Ribbon Task Force on Water Issues from 1998-2002. He is chairman of the Water Trust Board for the State of New Mexico, New Mexico Commissioner to the Rio Grande Compact, and the New Mexico Commissioner to the Costilla River Compact.

OVERVIEW OF HOW WATER PLANNING IS BEING FORMULATED IN NEW MEXICO

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New Mexico's Water Future: There is a Plan

As most of you know, the governor mandated that we do a statewide water plan by the end of this calendar year. The focus in Santa Fe, and especially this legislative session, has been on water issues. A state legislative bill passed, which the governor signed on April 4 of this year, requiring a State Water Plan by the end of 2003.

As far as regional water planning goes in New Mexico, currently we only have six plans that have been accepted by the Interstate Stream Commission (ISC) (Fig. 1). We anticipate having another two or three plans to go in front of the ISC for approval at the December 17 meeting. We might have as many as nine plans that have been approved by the end of this year.



Figure 1. Regional plans accepted by the ISC

The process for developing New Mexico's first State Water Plan is already well underway. Our first public meeting was July 9 and the last of 29 public meetings was held on September 11. Then, a New Mexico First Town Hall meeting was scheduled September 23-25, which gave us a lot of input from people in this room for the consensus document. The timeline (Fig. 2) shows we have to provide certain deliverables and we must meet certain milestones.

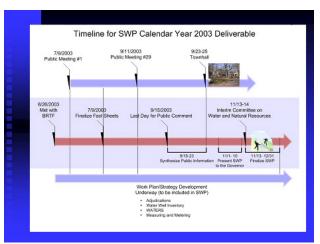


Figure 2. Timeline for Statewide Water Plan

We plan to present the statewide water plan to the governor sometime this month, within the next week or two, depending on his schedule and my schedule. The plan should go before the ISC by the end of December.

We received a lot of public input from every corner of the state as we held our public meetings. Locations were well dispersed around the state (Fig. 3), so we could listen to everybody's needs in every area. Our first meeting was held in Clayton. The Las Cruces public meeting drew the most people, about 200.



Figure 3. Public meeting locations throughout the state

We also met at several Native American venues during this process including: the Pueblo of Isleta, the Pueblo of Acoma, the Pueblo of Jemez, and we also held a meeting in Shiprock. Their input was important to include in the State Water Plan.

In all, more than 225 communities participated and over 1,400 people attended the meetings (Fig. 4).



Figure 4. Over 225 communities participated in the public meetings on statewide water planning.

In advance of the public meetings, ISC Director Estevan López, our Public Information Officer, and I traveled the state visiting with local news media (Fig. 5). We made a total of ten visits to different communities, which would be hosting the public meetings. We visited newspaper editors, television assignments editors, and radio news directors as well as reporters covering water issues to promote the statewide planning process in an effort to get as much

public participation as possible at the meetings. As a result, we got a tremendous amount of coverage for the public meetings as well as having good attendance. My Public Information Officer, Karin Stangl, who is here today, has been a great addition to our staff. She carefully tracked the earned media attention for our efforts, which resulted in \$145,000 in earned media attention, which is what it would have cost the agency had we purchased paid advertisement for these efforts. Our news media coverage exceeded our expectations as a result of these targeted media visits.



Figure 5. State officials visited news media prior to the public meetings

Figure 6 shows our statewide planning team standing by the state plane after arriving for the Las Cruces public meeting. I call this slide, "*Planners Gone Wild*." These guys were instrumental in the success of those 29 public meetings held across the state.



Figure 6. The statewide water planning team

The New Mexico First Town Hall meeting also provided great input into the State Water Plan. Figure 7 illustrates that process.



Figure 7. New Mexico First Town Hall meeting focusing on water planning was held on September 23-25.

The State Water Plan will be a broad-brush framework for a future policy within our state office. However, it is going to be an ongoing process. This plan is not by any means in final form. It is a draft that will become a strategic plan for our agency. We are not going to throw it on a shelf and forget it. The work will continue.

We need to plan for public input, continual public input. We need to be able to communicate better to the legislature about our funding needs. As a state agency, we need to communicate better just what resources we require to do our jobs more effectively. We need state legislative support. The State Water Plan will be a good document for this purpose.

There must be sound science behind the decisions we make. With the drought expected to continue for the next few years, we need sound science to help us make our decisions. Helping decision makers to better understand the complexity and the breadth of the issues we face within our state is immensely important.

Now, I'd like to talk about the Act itself. There is information within the Act that we had to follow for creating the plan. The State Water Plan is going to cover four areas in the first phase. The plan format will include discussion and background information relating to specific sections of the Act, and relevant Town Hall and public participation statements. It will also include specific policy statements to assist in developing a broad-brush framework as well as list some implementation strategies to support the policy statements.

Sections A and B of the Act describe the elements of vision and stewardship. We had a lot of discussion on Stewardship and how immensely important it is to us in terms of how we look at the importance of water to everyone in the state.

Section C of the Act has 13 elements. I'm going to quickly go through them in bullet form. These are the items that we are addressing:

- Common priority, goals, and objectives
- Active water resource management
- Inventories and water budgets
- Water conservation
- Drought management
- Water availability and land use decisions
- Watershed restoration and ESA mandates
- Water rights transfer policies
- Governmental coordination
- Integration of regional water plans
- Water supply purveyors planning
- Water infrastructure and investment
- Technological approaches to water supply and management

We are looking at these components in terms of background paragraphs that relate to each and every key item. We will then include relevant comments from Town Hall meetings and public participation. We will list the actual policies that we come up with and their implementation strategies for each and every item.

Sections D, E, and F elements of the Act refer to adjudications and databases. Iwill be spending a lot of time talking about adjudications and our databases this morning. Coordination with Indian Tribes and Pueblos is included in Section E. Public and stakeholder input is included in Section F.

Implementation will be key. I have some project management background from my work with the Corps of Engineers, which I think will be important to impart to the Water Plan. There must be accountability in state government. It must be laid out in terms of being able to explain to the general public and to our legislative body how we schedule things and what our issues are. The schedules typically used for water project management are Gantt charts with timelines. We also want to identify key milestones, deliverables, and assign resources effectively — both in-house and contractual resources. This requires accountability and setting priorities. Most people would be surprised to see our day-to-day activities and how we spread our

resources so thin to cover what we have to do as an agency. John Romero, who is my director of the Water Resources Allocation Program, will be coordinating activities and schedules with the rest of my division directors.

Proper implementation will require project management and more active water resource management than ever before. The continued drought will force us to manage times of shortage effectively. We must be able to go in and establish rules and regulations, put in measuring and metering devices, and hire water masters for priority basins that have been identified around the state. We are putting together timelines to try and accomplish this. We hope to have this accomplished in several areas of the state before the start of the next irrigation season.

Adjudication of water rights is a key issue. We have accountability schedules set up for all the adjudications in which we are involved. These are going to be a part of the appendix of the State Water Plan.

The population of the WATERS database is a critical component in doing everything that we need do to within our agency. Database population, being able to access that data, and understanding what and who owns what water, and expediting the processing of applications are all important.

Active water resource management is another initiative that I want to mention today. It is really a key component of planning efforts for the future of priority administration. Here is a quick recap of the drought situation we are in now. We have gone through the meteorological drought and have been there for at least four years in the state of New Mexico. Most of our agricultural communities and irrigation districts are only getting a percentage of what they are allotted. We are actually in the hydrologic phase and may have passed that stage essentially because our surface water supplies are so low. We cannot augment those needs for everyone around the state because our current water resources are so low. We are in a phase, which I consider the socioeconomic phase of the drought, which translates into an administrative drought for our office because our guys are out there everyday dealing with dry holes and with people who are potentially and illegally diverting water. There are also shortages everywhere, and our office is the first line of defense. I really have to take my hat off to those who are dealing with this daily out in the field. You who live in the city and can turn on the tap and get water are doing really great. A lot of people cannot do

that and we are dealing with this situation on a priority administration basis.

I have mentioned priority administration. We are inadequate in this state in our preparation for priority administration. We do not have the tools in place. We do not have the rules and regulations. We do not have the water masters in critical areas. We will get there with proactive steps toward active water resource management. We are going to try and share shortages to extend supplies. These are steps down the road to enforcing priorities, when we are actively measuring and metering, when we have rules and regulations in place, and when the adjudication process is further along.

This will require regulation development. We are going to use existing statutes to come up with these regulations. We already have a statutory scheme in place. The regulations are going to provide for the creation of water districts and appointment of water masters. We can do this in two different ways. If there is a request from the majority of the water users within a district, we can set up a water district. Or, by order of the Office of the State Engineer, in an emergency situation, we can create a water district.

The rules and regulations will provide for the publication of a water master manual drafted to benefit the water users by providing water management to extend supply to avoid a "priority call." Yet, if there is a priority call in some areas, we will want to make sure that the junior water right users are restored as soon as possible.

The water master manual will provide water masters with instructions for the sharing of water through a structured informal "water banking" system. We will be talking a lot about "water banking" this year. In the near future, I think water master manuals in several areas will be developed.

A "one-size-fits-all" manual will not work in terms of the differences we have in the state. Really, the ultimate goal is to protect the senior water right holders and to make sure due process is followed in terms of transfers of water rights.

This manual will provide enforcement mechanisms to prevent illegal use and/or waste, and the regulations will provide for where hydrologic models exist to support some decisions that we make and make sure current issues are addressed. Then again, it will allow for expedited transfers, appeals of decisions of the water master to the State Engineer, and modification of the manual and regulations.

Again, due to the drought, the goal is to promulgate rules by the next irrigation season. We have legal and water rights staff committed as a priority. If we do not get additional help in terms of funding and resources, I may have to ask our water rights administration staff in our districts to put a hold on some of the application processes. We may actually have to go out into the field and administer water and we will sign contracts with former employees to do this. Water rights are very complicated and we can't pull just anybody off the street to manage these issues.

Adjudication of water rights – this is a big issue. The simple definition of adjudication is "who owns what water . . . and in what amount." It sounds very simple, but it is not. It involves doing hydrographic surveys and field verifications of points of diversion and places of use. Our office must be more user-friendly by talking to people in the field who are involved in doing these adjudications.

If we look at the state overall, less than 20 percent is fully adjudicated. But, if you look at the entire state in terms of areas where adjudications are in progress, the amount is about 60 percent of the state.

We have been working with an ad hoc committee of the Supreme Court to look at the New Mexico concept of water courts. The Colorado concept of water courts is different from ours and will likely not work in New Mexico. Colorado adjudicated water rights as time went along during the last century. We didn't do it that way.

The Supreme Court has approved the way we plan to approach water courts. What makes a lot of sense is having one judge in each judicial district that would be designated as a "water judge."

Water courts provide several benefits. There is "water rights" expertise and continuity with one judge. The water cases are heard in a timely manner and negotiations promoted over litigation. The judge and court personnel would be familiar with New Mexico water law and state water rights in particular areas of the state, which would also serve to expedite the process.

House Bill 744 was introduced last year during the legislative session, and it falls right into the development of this water courts concept. There was about \$2.1 million in funding associated with this bill. The bill made it all the way through the process, but did not get funded. Yet, we still want to concentrate on that procedure. There were three components of this bill. One was a web-based information system so that everybody in the state could have access to the

water rights cases from their particular area. Of the \$2.1 million, roughly \$300,000 to \$400,000 was going to that component. We were planning to hire more technical staff and more hydrographic survey people within the Office of the State Engineer. That would have taken \$1.3 million and was essential to our office. Right now we have hydrographic survey staff who are pretty smart, but they are distributed to every corner of the state in terms of supporting adjudication efforts. We do not have the flexibility within our office to send personnel to northern New Mexico, or to help finish the Lower Rio Grande, or to go to other places in the state where they are needed.

The balance of that \$2.1 million included another \$300,000 to \$400,000 for funding of public education initiatives and mediation to make landowners more comfortable with the process. We need to make a better effort to communicate with people and to educate them on how the process works, so that they will be more likely to come in and work with our office. If that is done, we will not have cases that end up going the full term of litigation, and more cases could be settled out of court.

I want to mention some of the State Water Plan highlights. Obviously, we still oppose the federal "taking" of water. We have been successful in dealing with our federal counterpart within the state. They have obtained state permits for federal actions, and when I say "dealing with federal government," it is always in terms of dealing with the Bureau of Reclamation and the U.S. Fish and Wildlife Service providing water for the endangered species. We are going to work with research institutes and universities on desalination, conservation, watershed restoration, water reuse, and weather modification projects and any other area in which we can use the expertise we have at our universities and our national labs-Los Alamos National Laboratory and Sandia National Laboratories provide a very good resource for us.

We are going to continue to resolve our Native American water-rights claims through negotiation, and initiating government-to-government contacts with the tribes and pueblos. We are really putting forth an effort to continue that communication. We have had six or seven meetings with the pueblos and tribes. We do have issues because of the sovereignty of the pueblos and tribes. They want to be treated on a sovereign-to-sovereign basis, and we do need to try and understand what they are doing with their water and what their plans are. The adjudications that have been pending for decades will be a priority. We are negotiating in

several areas of the state. Of course, the cultural significance of water will be respected and senior water rights will be protected.

I have not mentioned the acequia community yet. The acequias are very important in the state of New Mexico. They have important cultural uses of water. We recognize that those cultural traditions must be respected. There were some laws passed this last legislative session that will help in that area. Again, it is not just acequias, it is all senior water right holders, irrigation districts, and farmers that have been here for a long time. We need to continue to protect the senior water right status.

As I mentioned earlier, our agency attorneys and the hydrographic survey technical staff need to work more collaboratively to complete adjudications around the state. We need a commitment from staff to provide the technical hydrographic survey component and come up with a workable product in a shorter period of time. The data management component is critical. We also need to be able to schedule our resources and plan for use of our resources, so that we do not have any down time. For example, when technical staff has to wait for a three-day period while attorneys are working out a particular aspect of the process, we need flexibility in scheduling to allow them to keep working on data management and collection in other parts of the state. We need to have resources to allow for that situation.

Efficiency will involve each adjudication bureau. Currently, we have a northern New Mexico Bureau, a Lower Rio Grande Bureau, and a Pecos Bureau. We have three different adjudication bureaus in operation because of the active adjudications in those areas. The bureaus will develop stream system plans to be adopted by the court as well as four-year strategic plans.

We have a Hydrographic Survey Bureau that will develop a hydrographic survey plan as well as a four-year strategic plan for initiating and completing surveys for both pending and future adjudications. Adopted measures should reflect performance by the completion of specific milestones. Adjudication plans will provide an estimated completion date based upon existing resources. We need to communicate better with our legislators where we are in the process and what resources we need to be more effective. The integration and coordination of the bureaus with workable plans will maximize agency resources.

We can work on data collection and get up to 75 percent of the data needs in different areas of the

state without our data going stale. When you do a hydrographic survey too soon and complete it, that data can go stale before other personnel have time to act on it. With effective data management plans, we can collect up to 75 percent of our needs in certain areas, completing the last 25 percent when personnel is available to finish the job.

Another thing we need to do is to get to an EGIS framework to link all data within our agency. We are working on it as I speak. We have the water rights administration database (WATERS) that links all the paper files that we have in the district office with files in the databases for imaging and abstracting. As the adjudication process goes on, we have the WRATS database that the hydrosurvey group uses, as they input data. We are trying to get these two databases to match, so information is input just once for both databases. That is key in terms of getting the EGIS component and its framework in place.

The EGIS framework will provide easily accessible data inside and outside the agency. Yet we want the public to be able to access it through a web interface to obtain any data they want and in terms of technical data. We also want to create a queriable database on a GIS platform. We want to do this as soon as possible. We want to get rid of corresponding files, so that we have just one file where data are entered one time only. This will greatly improve efficiency within our staff.

In the future, there is going to be an electronic data exchange instead of a paper file exchange. Single tasking will be shared among the groups without any duplicated efforts. Then we get into the steps toward approval.

Back to the State Water Plan — here's where things stand now. We will present a draft plan to a joint meeting the Water Trust Board and the ISC. The draft will be presented to the State Legislative Interim Committee on Water and Natural Resources Committee on December 13 and 14. There will be an extensive public comment period on the draft plan. Then it goes before the ISC meeting for final approval, which is scheduled for December 17.

I encourage you to stay involved and stay informed on this process. We need your input on these critical water issues affecting our state.

I have time for just a few questions. I have to be in Santa Fe for a meeting in Governor Richardson's office by 10:30 a.m. with Mexican President Vicente Fox. I'm not sure what water issues that meeting will involve, but I'll share with him this saying we have in

New Mexico: "mi casa su casa, pero mi agua es mi agua."

Question: Would you discuss the relationship between the regional plans and the State Water Plan?

Response: The regional planning process is very important in my eyes as well as the public welfare issues that the regional plans address. Some of the regional plans have been much better funded than our State Water Plan. What we may do is cull out the best information we can from the regional plans and see how those plans fit in our overall framework. Certainly, if it is within the regional plan, it is going to be important to consider, and we will see how it is accountable with what we are trying to do. Regional plans may be more detailed on water issues that are important to specific regions. We are going to incorporate as much as we can and continue to support regional planning efforts while our statewide planning efforts are ongoing.

Question: Will there be any difference in interpretation on "use or lose it?"

Response: The "use it or lose it" issue tends to get overplayed. Within the State of New Mexico, the Office of the State Engineer has not really forfeited water rights that I can think of. After 1965, there was a new law passed that said the Office of the State Engineer had to provide a one-year notice if somebody had not put water to beneficial use before it could be forfeited. Over time, we have made progress on our adjudication processes. We look at historical use, current use, continuous use, and where water was put to beneficial use. We are certainly not out to forfeit people's water rights. We give them the opportunity to put that water to beneficial use. I think there are some issues-conservation issues-where people feel like they have to go out and use the water so they don't lose it. With respect to conservation in agriculture, if you put in a drip system and spend half a million to a million dollars, you ought to get some tax advantages or other benefit. There is a water savings to the system since you don't have to divert so much water, but you are out a significant amount of money. What we need to do is create some incentive for agricultural conservation. "Use it or lose it" seems to be brought up a lot, but I don't see it as a major issue, because we are not actively going out seeking to limit people's water rights through forfeiture.

Question: I want to address the issue about tribes. As you know the tribes are sovereign governments and have rights to water resources in the area of their jurisdiction. Regarding the State and the Native American water rights issues, will water rights and tribes be addressed in the State Water Plan? Will the solutions in the plan be mutually beneficial to both governments?

Response: It is a difficult problem, and we want to make sure that we are listening and that we understand what the public issues are. In terms of quantification, the tribal and pueblo water rights involve use of future water and as such is a different process than the state based prior appropriation system, which is based on historical use. Typically, there has to be a negotiated agreement. We negotiate with the tribal entity and the federal government, which provides funding for infrastructure improvement in exchange for limiting tribal claims. We are actively looking at these negotiation processes with the Navajos in northwest New Mexico. We have to modify claims to those rights and determine available water supplies based on New Mexico compact apportionment and existing uses. I really need to have a better understanding of what those future plans are to help us evaluate boundary situations. That is, if water rights applications are filed next to a pueblo or tribe, we need to look at the effects to the tribal water rights. In the absence of an adjudication, pueblos and tribes don't have to file an application for a new water use, so there could be impairment based on their water use with existing non-Indian water users. It really should go both ways in terms of protection. We need to be able to go out and obtain master plans in these areas so that we can take into consideration the pueblos' and tribes' needs, and what the government's plans are, so we can look at how we authorize water use and development especially within those boundary areas. We also have to consider water quality issues of Native Americans and their use of water. Governor Richardson signed a GPA with nineteen pueblos, and he has mandated that all cabinet secretaries will have an open-door policy. Water settlements with tribal and pueblo entities are a priority for our agency. And, we will continue to meet. At this juncture, we have met with one large pueblo/ tribal group. After the first of the year, when we have some time, we will start meeting with those pueblos and tribes individually to make sure that we consider their needs and future plans. I think that the process of sovereign-to-sovereign governments will continue, and we choose to recognize those sovereignty issues.