WATER, GROWTH AND SUSTAINABILITY: PLANNING FOR THE 21ST CENTURY
DECEMBER NEW MEXICO WATER RESOURCES RESEARCH INSTITUTE 2000

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Southwestern New Mexico Water and Growth Issues

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People often ask me what I've learned while being on the Interstate Stream Commission. I have learned that you can do anything in an instant that will give you heartache for life. Sometimes when reviewing issues before the Commission, I wonder exactly what is happening. I have learned that you can keep going long after you think you cannot. For those of you who have seen the agenda for the Commission, I do not need to say more. I have learned that you can either control your attitude, or it will control you. The Commission faces many conflicting water issues and I have learned that your life can be changed in a matter of hours for people or conditions that you do not even know about. A few years ago, I didn't even know there was a silvery minnow.

Southwest New Mexico is a very diverse part of the state. Primarily I will be talking about the area of Luna, Grant, Hidalgo, and Catron counties. The area has very high, steep mountains with narrow entries into the watersheds that continue down to the every flat fluvial planes at the bottom. Temperatures in the winter time are very mild in the southwestern area but it is quite cold in the mountains. Major surface flows in the area include the San Francisco, Gila, and the Mimbres rivers. Average rainfall in the Deming area is about 9 inches a year, which contrasts with the higher elevations that receive 18-plus inches yearly. These facts are important to consider when you look at the water resources in the area.

Figure 1 depicts the area's three rivers and nine underground water basins. The yellow area is the Mimbres. You can see the small area comprising the Animas Basin as well as the Gila-San Francisco Basin to the north. The Office of the State Engineer has declared the closed basins, meaning that you must obtain a permit to drill a well in those basins.

Populations are increasing in all four counties– Hidalgo, Catron, Luna and Grant. Catron and Luna

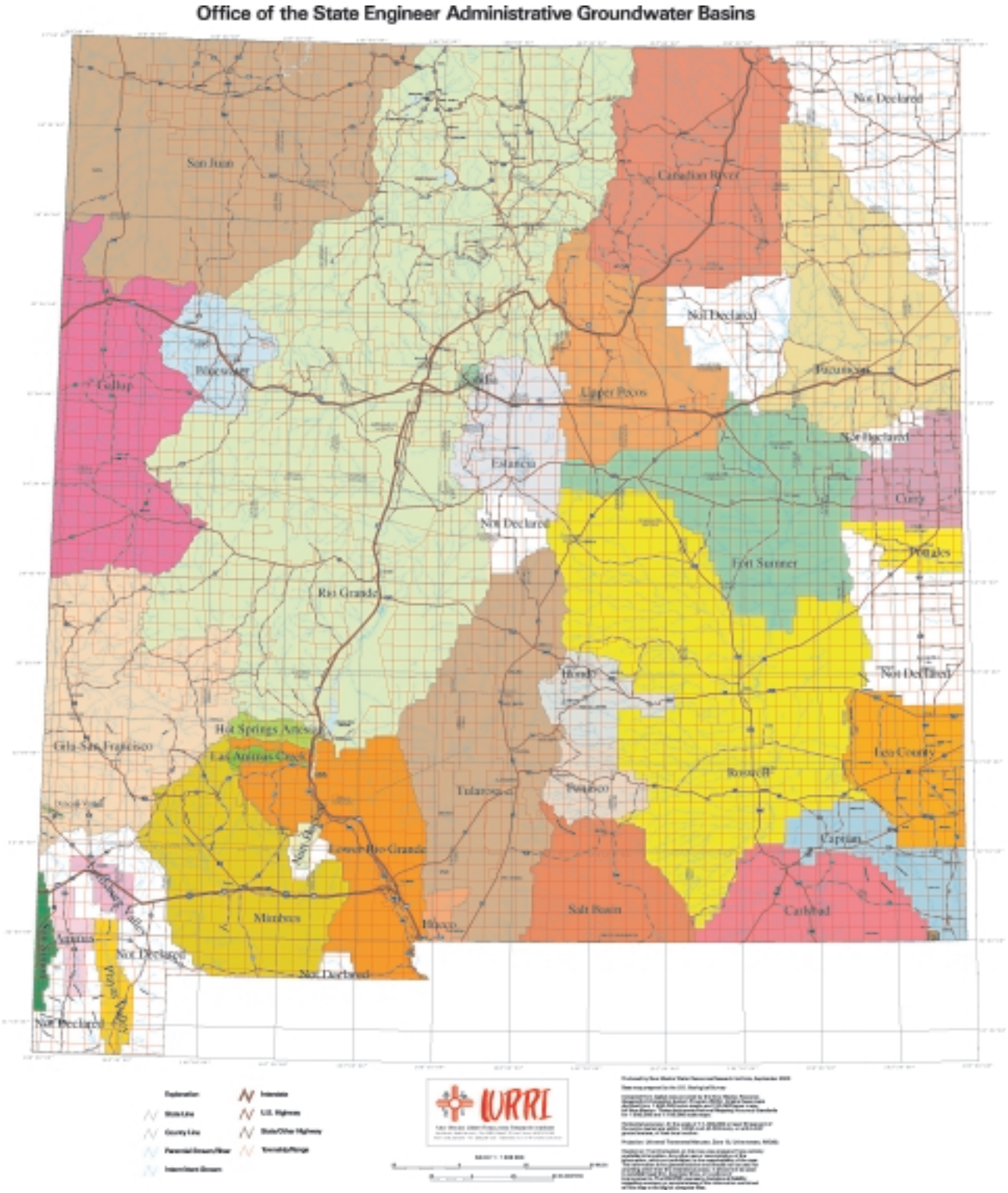

Figure 1. Office of the State Engineer Administrative Groundwater Basins

counties are growing a bit faster than Grant and Hidalgo. Water use for domestic wells remains at about 2-3 percent of total water used. Our part of the state is predominantly irrigated agricultural with the exception of Grant County, which has the mining industry. The mining industry consumes about 76 percent of the total water use of Grant County.

I think that sets the scenario for what is happening concerning economic development in southwestern New Mexico. For example, Deming successfully recruited a truss manufacturing plant. The plant utilizes very little water compared to some of other types of industry that could come into the area. Border Foods operates in Deming and they use a lot of water for 2-4 months each year; after that, they utilize little water especially compared to some other kinds of food processing plants that operate on a year-round basis.

Most of the livestock grown in our part of the state are exported somewhere else. We do not have large feedlots so we do not have large quantities of water going to those operations. Let me share with you quickly the relationship we do have with the ranching and meat industry. We have a plant in Deming that takes meat from the slaughterhouses off the rail, cuts it, wraps it, and sends it to market. This plant uses very little water compared to slaughterhouses.

These are the types of industry I think the economic development folks in the southwest part of the state need to continue recruiting. They are labor intensive activities but use very little water. I think that is the direction southwestern New Mexico must go, not only right now, but in the years to come.

Recently I talked with city officials in Deming after we had our water rate increase in March. I wondered what percentage of that rate increase would be going to activities that increase the efficiency of the well-pumping plants and storage facilities that store water for the city of Deming. Fifty percent of that rate increase will go for those purposes.

You'll recall seeing the closed or "declared basins" from Figure 1. Obviously, water resources in this part of the state are fixed. Towns are doing what they can to improve the pumping efficiency for storage facilities while customers who buy their water have the opportunity to share in improvement costs. Municipalities in the southwestern part of the state are also starting to use tertiary treatment for sewer fluid. Some of you may be familiar with an entity that may be coming to Deming, a power plant facility called Globe Energy. If they do locate in Deming, they will buy some tertiary treatment water from the City. Some local golf courses are being irrigated with that kind of water. When water is not used for human consumption, I think it is a wise use of our water–it certainly benefit us because it reduces our pumping of the aquifers.

Although you might not think about it a lot, ranchers in our part of the state are certainly contributing to water conservation. I don't know how many of you have ever listened to an old-time rancher, but if you have, you have probably heard him say that a windmill pumping a stream the size of a pencil, or maybe a little bigger than a pencil, all day long will water roughly 100 head of cattle. You may say, "Well, Stan, what does that have to do with this water conference and water conservation?" Folks, it does not take long for that to amount to a lot of water if you continue pumping from a windmill a regular basis. Let me give you a little food for thought. A few years ago the Office of the State Engineer published a brochure called "Aqua Action." One fact that it presented had to do with turning off the water every time you brush you teeth, instead of letting it run. Each person would save roughly 6 gallons per day, or an estimated nine million gallons statewide per day! Do you realize what 9 million gallons of water will do? According to this publication, it is more than enough to supply the city of Carlsbad for one day! Folks, a little conservation of water can go a long way in a very arid state such as ours.

I have a few suggestions I think are not only very pertinent to southwestern New Mexico but to other parts of the state as well. The Interstate Stream Commission is an entity on which I serve and from which I try to assist in the leadership of water resources in this state. Regional water planning is at various stages of progress around the state and depends upon the participation of local folks. Everyone, whether you are a business owner, a municipal official, a state citizen, an irrigation district official, a water district person, and whatever your expertise, needs to take the opportunity to be involved in this program very seriously. We must have grass roots participation and a broad spectrum of people involved in this effort if we are to consider the differing views on water issues that exist. We have already seen here today many differing views.

Do not leave our future water planning solely in the hands of special interest groups. Some state statutes may benefit you now but being passive to our current water situation may not be in your best interest. The Interstate Stream Commission is in the process of developing data for inclusion into a state framework water plan. We need your assistance in preparing accurate data.

Second, I personally think it is high time that all of us sit down across the table from county planners, real estate people, landscape designers, and contractors to implement some form of rules for the increased application of xeriscaping. Here's a question for you: do you think it is time for those who live in town, and have two yards, to be required to have one of those yards desert landscaped? Now before you react, I want to acknowledge that there is a point of view that says government does not have the right to tell me what to do with both of my yards. And I can understand that, but there is another point of view from the perspective of water resources–conservation efforts should benefit the total welfare of our state. If you figure the amount of water saved from irrigating only one yard for each home in all the towns in New Mexico, you might find that the welfare of the state is greatly benefitted from that kind of conservation. It certainly benefits the aquifers in southwestern New Mexico as well as other aquifers around the state.

Third, I think we must continue to develop realistic and beneficial education programs related to water. Not only in the public schools–and I certainly applaud teachers and others who are involved in that educational effort–but of our citizenry, also. I have been surprised as I visit with people around the state how little knowledge they have about what our interstate compacts provide. I think it is time that we have some type of educational program to post-high school, post-college, grownups if you will, on the economic development efforts and the resources involved in interstate compacts and how they may affect each other. We certainly do not want to repeat the situation we have on the Pecos River–there is no sense in that type of litigation if we can prevent it.

I would also like to encourage you to support expenditures for conducting hydrologic investigations in our state. The Commission spends a fair amount of money on these investigations as does the Office of the State Engineer, and it is very much needed. We must know how much water we have and hydrologic investigations are our best avenue, at least at this point, to determine the extent of our water resource.

As I look to the future of water resource's management in southwestern New Mexico and the rest of this state, I find that the agenda looks pretty full and it's very complicated. There are lots of opportunities for folks and the private sector to conduct water planning and water planning implementation. New technology will assist in resolving some water issues. There are various activities going on around the state that you should be aware of including those in conjunction with the Governor's Blue Ribbon Task Force, the New Mexico Water Resources Research Institute, and the newly formed water task force at New Mexico State University. Legislative efforts will be important and I'm glad to see some legislators in the audience today–thank you for taking the time to be here.

I hope I've provided you with helpful information about the water situation in the southwestern part of the state and a bit about what is happening statewide. I can assure you that the Interstate Stream Commission is ready and willing to do its part in resolving New Mexico's water problems. Thank you very much.

Len Stokes *is President of Progressive Environmental Systems, Inc. He consults in the areas of water, wastewater, and environmental issues. Len is originally from the Roswell area where his family has been active in the ranching and farming industry for many years. He attended New Mexico Military Institute and NMSU. He has managed the design, permitting, and construction of four major solid waste landfills in southern New Mexico. He also has served as project manager on three wastewater treatment plants. For the past six years, Len has focused primarily on water supply and water rights issues. He serves as consultant, facilitator, and as a legislative lobbyist for his clients on those issues. Currently his clients include the City of Las Cruces, the City of Alamogordo, the Lea County Water Users Association, and the Village of Ruidoso.*

WHAT'S HAPPENING IN THE LOWER RIO GRANDE BASIN IN NEW MEXICO?

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The answer is, a whole bunch of things. For the next fourteen minutes, I will attempt to bring you up to date.

FEDERAL QUIET TITLE SUIT

As many of you know, the United States filed suit in Federal District Court a couple of years ago in an attempt to gain legal title to, basically, all of the water in the Lower Rio Grande Basin. Mediation was attempted and abandoned, as no one was willing to give up his or her water to satisfy the Federal Government's claim. Motions to dismiss the federal action based on jurisdictional and other issues were filed and briefed by the New Mexico entities. The United States and the Texas entities argued that the Federal Court was the proper jurisdiction. I can happily say that Judge Parker agreed with us and dismissed the federal action. We won the first round. The U.S. has appealed. We will now see what happens in round two.

EBID ACTION

In an effort to retain administrative and operational control of Rio Grande Project Water in the Lower Rio Grande, the Elephant Butte Irrigation District (EBID) filed suit against the U.S. in Federal District Court in New Mexico on September 18, 2000. The complaint seeks to declare the contractual relationship among all parties involved with the operation of the Project, compels the defendants to enter into an operating agreement regarding the Project and the appointment of a Special Master to administer the agreement. The complaint also seeks a declaratory judgment that the 1920 Sale of Water for Miscellaneous Purposes Act is inapplicable to transfers of water and conversion of uses within the Rio

Grande Project. This is based upon the fact that the EBID has fully repaid its debt to the U.S. on the Project. It is certainly in the best interest of the City of Las Cruces and the other New Mexico entities for the District to prevail in this action.

ADJUDICATION OF WATER RIGHTS IN THE LOWER RIO GRANDE BASIN IN STATE DISTRICT COURT

The effort to adjudicate the water rights in the basin is proceeding at a fair pace. The hydrographic survey is nearing completion for the entire basin. The offers of judgment for the Nutt-Hockett Basin were well received. Now we get to the fun part, the farmers and other water users that rely on Project surface water and/or related groundwater in the basin. While offers at this time have dealt only to acreage, it is evident that the key issue at hand is the duty of water associated with the lands within the EBID, and the priority dates associated with those rights. This may take months of negotiation or years of litigation with the affected parties. It will be hard to address any of the other issues until those are resolved, solely because of the amount of water involved. Then the State Engineer can look forward to the massive number of "claims of rights" in the basin.

LAS CRUCES/EL PASO SUSTAINABLE WATER PROJECT

At this time, the Las Cruces/El Paso Sustainable Water Project is ninety percent El Paso and ten percent New Mexico. The main crux of the project for El Paso is to utilize more Rio Grande Project surface water for municipal and industrial (M&I) purposes and reduce the dependence upon non-renewable groundwater in the Hueco Bolson, which will be depleted in the near future. In short, El Paso needs to acquire surface water and build treatment capacity ASAP.

The City of Las Cruces and other entities in New Mexico, are in a different position at this time. While the City of Las Cruces has made the commitment to begin phasing in the utilization of surface water in the next ten to twelve years, the other municipal water providers in the area do not, at this time, have the information at hand to make that commitment. Therefore the money being spent at this time in the New Mexico portion of the project is going toward providing that information so informed decisions can be made.

FORTY YEAR WATER PLAN

The last item really shows the importance of having our forty-year water plan in place to protect our water for future use in New Mexico. The City of El Paso needs surface water and they would love to have ours. They have enough in the Texas allotment for their needs, but if they could get New Mexico water as well, the available supply would increase and their price would decrease.

It's kind of hard to swallow if you live in southern New Mexico. The City of Las Cruces, for example, has been planning a transition to the use of surface water over a long period of time as dictated by demand. This will enable the City to acquire the surface water rights or allotments in an orderly fashion as development and urbanization of the agricultural land occurs over time. The last thing that we want in our valley is the wholesale retirement of agricultural water rights and the fallowing of our precious farmland. If you don't agree, go see the Owens Valley in California. Our best protection from that occurring in the Lower Rio Grande is to have a forty-year water plan in place that shows the need for New Mexico water in New Mexico. I am happy to report that the forty-year water plan for the Lower Rio Grande is being prepared at this time and will be completed within the next two years.

CONVERSION OF RIO GRANDE PROJECT SURFACE WATER FROM AGRICULTURAL TO MUNICIPAL USE IN THE LOWER RIO GRANDE

The City of Las Cruces and the EBID have discovered that we can work together to make positive things happen. Over the last four years, the City of Las Cruces and the EBID have gotten together and begun to understand each other's needs and concerns about future water supply in our region. I call this the development of a positive relationship that will grow closer over the coming years. It is very interesting because we have found that we need each other for the future. To date, we have entered into a joint resolution that sets up basic guidelines for the City to acquire Project water rights and annual allotments of water. We have come together and initiated

two significant pieces of legislation for the conversion of Project water; the forty-year lease period and the Municipal Water Users Association statutes. The City has begun entering into forty-year term leases this year. The City Council will pass a resolution forming the first Municipal Water Users Association this month with the EBID Board approval coming shortly afterward. By the first of the year, steps one and two toward Ag to M&I conversion will be complete. The final step has also been started. Legal counsel for the City and the District believe that existing state statutes allow for the completion of the process and we have begun the process of protecting those statutory provisions.

The municipal water providers and the EBID will be responsible for the conversion of Project surface water from agricultural to municipal use in New Mexico.We can do this in a positive manner or we can fight for it, be assured we will do it.