Tom W. Davis has been Manager of the Carlsbad Irrigation District (CID) for the past 12 years. Prior to his employment with CID, Tom worked for the U.S. Forest Service for 15 years. Five of those years, Tom served as District Ranger and was responsible for the management of the 289,800 acre Guadalupe District of the Lincoln National Forest. He has had extensive experience in managing natural resources in Texas, Idaho, Arizona and New Mexico. Tom is a native of Oklahoma with a B.S. degree from Oklahoma State University. He is active in the National Water Resources Association and the Family Farm Alliance.



## WATER AND GROWTH ISSUES: CARLSBAD IRRIGATION DISTRICT

Tom Davis
Carlsbad Irrigation District
201 S. Canal Street
Carlsbad, NM 88220

Thanks, Tom, for that introduction. It is an honor for me to speak to this group. I want to tell Karl Wood that I appreciate his taking on the job of Director. I wish you the best, Karl. In anyway that we can be of value to you, just contact us.

We have heard some very interesting topics this morning, but most of all I have been intrigued by the essays. Very thought provoking and a neat idea. I think it did us all good to stimulate our thinking toward just what the future could possibly be like.

Fifteen minutes is not long—so many topics and so little time. So, I'm going to brush right through these and hopefully I can make some sense to you out of what I jotted down here to say today. First, I want to remark on the comments we heard this morning. I recognized one common theme that ran through everyone's talk and that is the impact the Endangered Species Act is having on all of us. And I think that is going to be a growing concern. It is only going to

increase the tension among the people who use water, who administer or manage water, and those who develop water. Somehow the great minds of this country are going to have to bring that Act into reality, into some functional situation. No civilized people want to deliberately destroy a species. However, species have been going extinct ever since the beginning of time. Extinction has happened through the eons of time and when more species compete, including humans, some species are naturally going to go into extinction. And somehow, we have got to bring our laws and our concerns for other species into a functional reality with our needs. It is not going to be an easy task.

There are three major issues on the Lower Pecos that I want to mention today. I told Cathy last night I went high-tech this year, I have one overhead, and darn if we didn't have problems making it work. But if you look on the screen what you will see basically

is the watershed of the Pecos Basin, excluding the very upper head waters that are located in the Pecos Wilderness area (Figure 1). But you can see the area of concern for Carlsbad Irrigation District begins at Santa Rosa Dam. From Santa Rosa Dam, come down the river and you see Sumner Dam, come a little further down-Tom's going to point this out with his deadly accurate laser pointer-Santa Rosa Dam downstream to Sumner Dam, and down to Fort Sumner Irrigation District. Above Santa Rosa Dam there is a series of acequias that divert from the river. At the very headwaters of the river is Truchas Peak and Pecos Baldy. The Pecos River is primarily a rainfall generated river. There is not a large area for snowpack so the Pecos is not a snow-melt generated river like most of the rivers of the west. The Carlsbad Irrigation District basically lies along the west side of the Pecos River, southeast of Carlsbad. All the water stored in Santa Rosa, Sumner, Brantley, and Avalon reservoirs is stored for the needs of the Carlsbad Project. The Carlsbad Irrigation District (CID) storage authorization under the Pecos River Compact is 176,500 acre-feet total storage in all four of those reservoirs.

The Pecos Valley Artesian Conservancy District exists in Roswell at the Artesia reach of the river and its water is supplied by underground pumping primarily from the Artesian Aquifer. Fred Hennighausen is going to talk about this later, but I think they irrigate somewhere in the neighborhood of 90,000 acres of land. You can see the very light area I am outlining there-that is the principal area of critical habitat for the threatened minnow, the Pecos Blunt Nose Shiner. So after having given you a sort of "the lay of the land" with this map, I want to say that the Pecos has traditionally, let's speculate 95% of the time, been in a drought stage and the other 5% of the time in a flood stage. The Pecos is not a dependable, reliable, or trustworthy river from the standpoint of consistent water yield. The dams provide more certainty to our water supply.

Of the many issues affecting the CID today, I want to mention three that are paramount. First regards New Mexico's efforts to comply with the Pecos River Compact. Without getting into too much history, the U.S. Supreme Court, in the mid 80s, amended the Compact to set up a system where New Mexico must deliver a certain amount of water to Texas each year according to a complex formula. The State of New Mexico must meet its annual

deliveries to the State of Texas. However, New Mexico can accrue credits if they over-deliver in any given year. The State Engineer and Interstate Stream Commission have, in recent years, chosen to look directly at Carlsbad Irrigation District as the source of the water that is delivered for Compact purposes.

This strategy puts CID, being the senior water right on the lower reach of the river in New Mexico, in a very difficult position. There are so many junior diverters upstream, whether surface or underground, that can affect how much surface water reaches the lower end of the basin.

The Interstate Stream Commission (ISC) and CID began a water lease program in 1992. In this program, the ISC leases water from members of the Carlsbad Irrigation District who are willing to forego the delivery of their annual allotment and fallow the land on which the leased water would be applied. CID then diverts that water into the Pecos River at Avalon Dam to flow to the Texas state line. In November 1991, at the request of the then State Engineer Eluid Martinez, the Carlsbad Irrigation District Board of Directors released 41,000 acre-feet of water, free of charge to the State of New Mexico, into the Pecos River to prevent a shortfall and establish the initial credit of deliveries to Texas. At present, the state-line delivery credit is 23,000 acre-feet, but that amount of credit can be erased in one year.

Since 1994, the State of New Mexico has not had a clear policy in place that results in a permanent solution to the Pecos Compact obligations. One thing is for certain, the current CID lease program is not the permanent solution.

The Endangered Species Act is the second of the three major issues affecting the District. For the past nine years, the District has had a Memorandum of Understanding with the U.S. Fish and Wildlife Service, Bureau of Reclamation, and the State of New Mexico Game and Fish to study the habitat needs of the minnow and to what extent this habitat is affected by the traditional operations of Sumner Dam. We have experimented with various scenarios of releases from Sumner Dam and monitored the impact, if any, on the minnow and its habitat. You can note on the overhead (Figure 1) the critical habitat in the first 65 miles below Fort Sumner Irrigation District. Reclamation has been very supportive of the District throughout this process. When we incur additional depletions due to modified operations on behalf of the

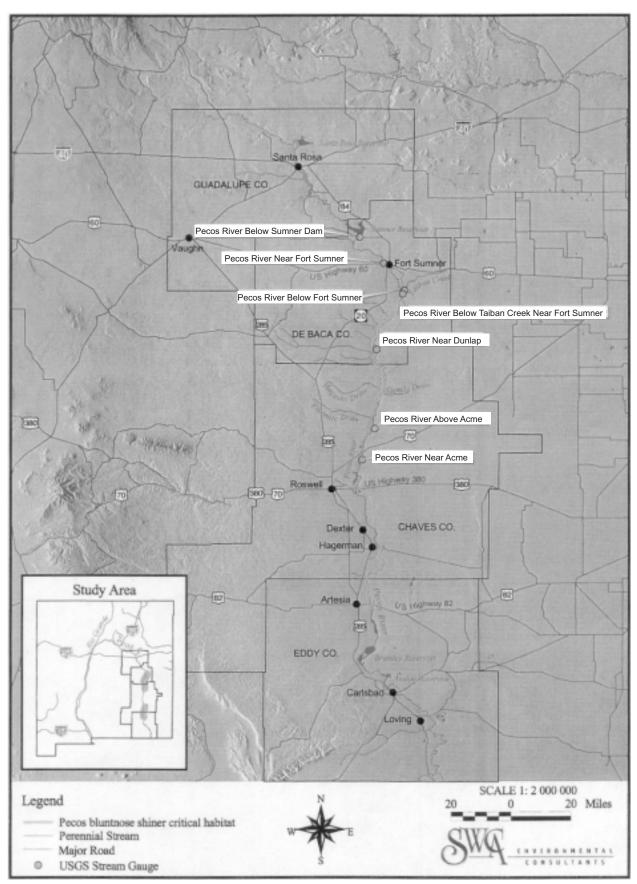


Figure 1. Pecos Basin watershed

minnow, the Bureau of Reclamation has been able to lease and/or purchase water in the system above the District to keep us whole so that the additional water depletions do not come out of our farmers water supply. At the same time, these leases and purchases by the Bureau have kept the state whole in their ability to deliver water for Compact purposes. Fish and Wildlife Service has recently come out with a new study, someone made reference to it this morning, which more than doubles the current recommended flow at the bottom end of the critical habitat necessary for the minnow. The CID and its consultants are in the process of evaluating this study. We hope to actually get some good science involved in determining the habitat requirements of the minnow. If the flow that is recommended in the latest study is instituted, it is going to be impossible in most years to have an adequate water supply for the Carlsbad Irrigation District. I don't think that there is enough available water in the basin for the Bureau to buy or lease or purchase to keep us whole. At the same time. I believe this latest flow recommendation. if instigated, is going to impair the state's ability to deliver water for Compact purposes.

The third major issue is the adjudication of the Carlsbad Project by the New Mexico Office of the State Engineer. In the mid 70s, the Carlsbad Irrigation District filed a priority call on the Pecos River because we had been short an adequate supply of water for several years. Steve Reynolds was the State Engineer at the time. State Engineer Reynolds took the position that the state would have to adjudicate the entire river basin before priorities could be enforced. Although the rights of the Carlsbad Project were adjudicated in a federal District Court decree in 1932, Reynold's position was that a state adjudication must be made of the district before a priority call could be enforced. The State Engineer's adjudication of the Carlsbad Project began in the early 1980s. The State of New Mexico had never adjudicated a Bureau of Reclamation project before. Bureau of Reclamation projects are different under state law than other irrigation districts or than individuals. There are only two Bureau of Reclamation projects in New Mexico and they are governed under the same state statutes. They are the Elephant Butte Irrigation District and the Carlsbad Irrigation District. Where irrigation districts were formed in cooperation with the Bureau of Reclamation, those statutes gave our board certain authorities normally reserved for the State Engineer. The Board of Directors of these two districts have authority over permanent transfers of water rights, authority over annual allocations of water, the authority to tax and assess private acreage, and collect these assessments. Forfeiture of water rights does not apply in these projects. Needless to say, this ongoing adjudication has been very expensive for our farmers and has been very contentious with our neighbors upstream, with the current Office of the State Engineer and even amongst our own membership.

I am going to draw this to a quick close by saying that, in New Mexico, there is not a clear legal understanding how a state water right adjudication should be carried out in a Bureau of Reclamation project. I know that the Elephant Butte Irrigation District just recently went into the adjudication phase and I think we are all learning as we go, and certainly we hope that these things can be worked out without damage to our farmer members. I can say this, it is disheartening to look at your budget over a period of five years, as I have had to do, and see about 70% of the budget that has traditionally been used for ground improvements being reduced to about 30% with the balance being spent on lawyers. It just doesn't make sense.

Karl, hopefully I hit on some of the topics you had in mind.

Thanks.