



Middle Rio Grande Water Assembly

P.O. Box 25862 Albuquerque, NM 87125-5862

November 2005

9th Annual Assembly Examines 'Over-Allocation'

Since its inception in 1997, the Middle Rio Grande Water Assembly has constituted a public forum for valuable discussions about water. Through 2004, attention was on creating a regional water plan with extensive grassroots input. Once that monumental task was completed, the Assembly vowed to continue educating the MRG public about relevant water issues, and to support local governments as they begin to translate plan recommendations into action.

During the planning process, mid-basin residents learned that the basic problem facing the three-county region is over-appropriation of water resources. The 2002 Annual Report of the State Legislature's Water and Natural Resources Committee makes the problem very clear: "New Mexico is over-appropriated. There is less water available than there are legal claims to the water, and the state appears to be in the midst of a drought cycle, according to tree ring studies of past climate conditions. If this drought worsens, legal, economic and political water problems will become more severe."

Given the seriousness of such assessments, the Assembly selected 'over-allocation' as the topic of its annual gathering in June of 2005.

Over Committed: How Bad and Since When?

According to former State Engineer **Tom Turney**, the Rio Grande has been 'fully allocated' since the 1930s, when a compact was

signed to apportion the river's flow between Colorado, New Mexico and Texas. Concerned with meeting the predominantly agricultural needs of the day, the compact's authors did not take into account the unspecified amount of water promised to tribes by federal mandate, other than to stipulate that the agreement would in no way interfere with that pledge. Neither did they set aside water for ecological purposes, since they had no idea 'the environment' would become a critical factor in the river's future. Finally, the compact failed to anticipate the enormous municipal growth that would blossom in the Rio Grande corridor during the next sixty years.

Those omissions alone assured indebtedness on the Rio Grande, and the situation was soon compounded by ill-advised policy. Turney noted that stream adjudications are generally based on "historically irrigated acreage," which in low water years can result in an inability to service all lands that have rights. Also he acknowledged that early on, the crucial link between groundwater and surface flow was not well understood. "For every gallon of water pumped from a well," he explained, "there will be one less gallon flowing in the river somewhere." This process often involves a time lag, so that the effects of groundwater pumping on a stream may not be apparent for years. Other factors leading to the over-appropriation of water in the Middle Rio Grande include unknown numbers of pre-basin wells; the continued issuance of permits for

new domestic and supplemental wells; the total amount of water earmarked for urban and suburban development via dedications, which postpone the acquisition of wet water for offset purposes; and the leniency with which the state has administered municipal groundwater pumping permits.

As first revealed by the Middle Rio Grande Water Budget, the cumulative result of all these oversights is a regional deficit of some 70,000 acre-feet per year.

A Spate of Concerns

The over-commitment of our limited water supply affects every resident in the MRG. Representatives of tribal, federal, state and local governments, and from various water use sectors in the region, offered the Ninth Assembly audience food for thought about what the impacts of over-allocation will be.

The basin's first inhabitants, the Pueblos and other Native Americans who are accorded the most senior water rights on the river, see over-allocation as a threat to their communities. New Mexico's Native American population is growing, and water that has long been promised to support that prosperity simply may not be there when it is needed. Governor **Everett Chavez** of the Pueblo of Santo Domingo noted that it isn't just people who will suffer the reality of too little water. "Many of us feel that were it not for over-appropriation, some of these species would not be endangered. I think

that's a clear indicator that the water is over-appropriated. Certainly there was a point in time in the past when animals and human beings were able to live in harmony with one another."

Steve Farris, of the New Mexico Attorney General's Office, also sees over-allocation through the lens of endangered species. Farris was New Mexico's chief counsel in the legal battle over designation of critical habitat for the Rio Grande silvery minnow. The federal prescription for healthy minnow habitat included a prohibition against the formation of 'isolated pools' in the river channel, a near impossibility in a water short year. Farris said, "...in October of 2000, it took nearly a hundred thousand acre-feet of released water to achieve this, and there just isn't that much water stored upstream. If you take Heron, El Vado, Abiquiu, Cochiti, and Jemez Canyon Reservoirs and combine them all, the maximum allowable storage is about 789,000 acre-feet, so you can see there's a train wreck coming."

Interstate Stream Commission hydrologist **Kevin Flanigan**, referring to the Middle Rio Grande Water Budget, noted that, "...new uses are trying to wedge their way into the pie. These include supplemental flow requirements for endangered species; habitat restoration activities for fish and wildlife that might increase depletions; historic groundwater pumping that is ultimately going to affect the river; domestic wells whose impacts on the river are not required to be offset; and possibly, the increased use of San Juan-Chama water, as well as quite a bit of urban growth and demand for economic development."

Bernalillo County Commissioner **Teresa Córdova** warned against addressing the water supply problem piecemeal: "You

definitely want to think about it in an integrated way, and definitely want to think about it long term, and you don't want to wait until we're in such a crisis situation that our options are much more limited."

United States Senator **Jeff Bingaman**, in a video address to the Assembly, raised the issue of global climate change, and how it may affect already-pinched water supplies. "One projection estimates that global warming will cause significant changes in water resources because precipitation patterns will change. For instance, a warmer climate will result in more rain and less snow pack, and that could wreck havoc with agriculture, industry, and hydroelectric power, all of which rely on the water supply made available by the mountain snow pack."

Valda Terauds, of the U.S. Bureau of Reclamation, agreed: "...we're always dealt jokers and wild cards. Some of our wild cards are climatic variability. We've got precipitation, snow pack, temperature, evapotranspiration, drought cycles—all of these come into play. These are things we don't have a good ability to predict very far out into the future."

The increasing demands on our over-allocated river raise water quality concerns, too. **Jennifer Ickes**, from the New Mexico Environment Department's Surface Water Bureau, suggested that we do not have all the answers we need to ensure a safe water supply. "If you've driven on Alameda, you've seen the big steel pylons going up to create [the regional water utility's San Juan-Chama] diversion dam. The unfortunate thing is we really don't know what that's going to do to the river... That's one of the reasons we're sampling the Middle Rio Grande this year, along with a whole slew of other agencies—Fish & Wildlife, UNM. People are out

there sampling the river this year to come up with a baseline."

Jennifer Nelson, an Environmental Planner with URS Corporation, reported that the Albuquerque reach of the Rio Grande was included on the state's 2002-2003 §303(d) list of impaired waters. "The reach did not meet New Mexico's water quality standard for bacteria (fecal coliform), apparently due to the significant presence of avian, canine, human and other E. coli in the river." That concern has prompted formation of a watershed group for the region.

Terese Ulivarri, a Belen City Councilor, also expressed concern for water quality due to the problem of failing infrastructure as it can impact the groundwater. Ulivarri said another worry for Belen is new development. "The City of Belen will not incorporate any new developments until they have acquired water rights; we don't just take people on. We're trying to have infill happen in our town, as opposed to new development."

Westside developer **John Black** said he has tried to "pay more attention to elements of water conservation in terms of land use. I have a personal goal of trying to work with densities and density transfers. I'd rather see people living on smaller lots, but have access to nice open spaces nearby. I don't want to see anybody dictating to people that they can't have a one or two-acre farm and live on that—I don't think that's right—but I think we can promote and actually encourage people to use less land where they live, and leave more land for open space..."

Marcia Fernandez, President of the Coalition of South Valley Neighborhoods, noted that neighborhood associations can influence land use choices at the local

level. “We have been working with the County of Bernalillo Planning and Zoning Department and with the County Commission to try to drive development in certain ways so that water is always something that’s being considered when we talk about land use issues. You can’t separate water and land use—I don’t think anywhere, but especially not in this valley.”

But development and population growth threaten both agriculture and the environment. For those in agriculture, over-allocation raises the issue of re-allocation, the redistribution of water among user groups via transfers or water markets. **Steve Lucero**, Mayor of the Village of San Ysidro, was unable to present at the 9th Assembly but asked that it be noted that, “The San Ysidro Ditch has a ditch priority date of 1786. Water rights to twenty percent of that ditch have just been sold to Rio Rancho. There will be impacts to the community as a whole, not just to the seller and the buyer.”

Valencia County farmer and New Mexico State Farm & Livestock Bureau board member **Janet Jarratt** added, “People say, ‘If we’ve gotten over-allocated and we have all these new uses, then we’re going to have to re-allocate from old uses to new uses.’ One thing that needs to be stated is that these are water rights that are *owned*, and this is a prior appropriation state. The reason you have people talking about agriculture is that [agricultural water users] own the water rights, and we’ve spent generations perfecting those rights, putting the water to beneficial use, and maintaining stewardship of the land.” Jarratt also addressed the issue of ‘irrigation efficiency.’ “If you have a supply that’s diminished to the point where you cannot efficiently deliver the water to the land, then you also prevent the irrigator from being able to water efficiently.”

David Gensler, hydrologist for the Middle Rio Grande Conservancy District, acknowledged that the agency has been under pressure to increase delivery efficiency since the late ’90s. “Everyone was saying the district needs to get more efficient to save water... One of the ways to do that is to line ditches. But recently I’ve heard that people don’t want to see lined ditches, so I’m kind of at a loss...it’s a little bit different from everything I’ve been hearing the last several years: you’ve got to get efficient, you’ve got to line.”

James Maestas of the Indio-Hispano Academy of Agricultural Arts & Sciences in Albuquerque’s South Valley, sees the community acequia as central to a revered way of life. “Our land, our water and our children are priceless resources we can do great things with... We started teaching our children what had already been lost—it only takes one generation to lose that heritage—teaching them how to plant, cultivate, harvest, and market trees, fruits, and vegetables at our local growers’ markets. In that way, we really draw that connection, so that it’s not just rhetoric that the land is valuable, it actually does create value. The crops and trees and plants and flowers that we grow have not only commercial value, but also intrinsic value.”

Environmental advocate **Steve Harris** of Rio Grande Restoration echoed those sentiments and added, “We should be extremely cautious about alienating water rights from the little bit of arable land we’ve got here in the middle valley. I think we should be talking about voluntary releases; I think we should be talking about a program that’s run by the irrigation authority that tries to recruit the appropriate amount of supplemental water each year. We’re in a global economy: our tomatoes are from

Mexico, our prawns from the South Pacific, and on and on. There may come a time when food self-sufficiency has some extreme value to society in the middle valley, and if we’ve alienated all the water rights permanently, one of the consequences is going to be that our posterity will be cursing us for letting the water and productive land get away from us.”

In reviewing two public opinion surveys done in the Middle Rio Grande in 2000 and 2004, **John Brown** of UNM’s Institute for Public Policy noted, “It is scarcity rather than an abstract concept of over-allocation that people understand... Residents know there are more demands than there is water; they do rank use values and preferences when asked in surveys; and they don’t regard all beneficial uses of water as equal in the public interest. They can and do express to their political leaders some ranking in terms of value, and public preferences have remained remarkably stable over the last four years.”

Despite public opinion, however, there’s a reluctance among elected officials to make political decisions about water. Albuquerque City Councilor **Debbie O’Malley** said, “I’m always being asked, ‘What are you going to do, wait until we turn on the tap and there’s nothing there?’ Unfortunately, I think that’s what it’s going to come to—when you turn on the tap and there’s no water... Everything is connected, but we just don’t get that. Instead, we look at little pieces of things. I don’t know what to say except that we have a *lot* of work ahead of us.”

A complete transcript of the presentations to the 9th Assembly can be found at www.WaterAssembly.org.

A Note From the Water Assembly President

Participants at the Annual Water Assembly in June identified education and public outreach as top priorities for 2005. In accord with those goals, a broad campaign is underway to raise awareness about the regional water plan, to help foster implementation of its recommendations, and to work with governmental entities and various coalitions to assure that the public remains an active component of the decision-making process.

In recent months, the Assembly has participated with the Smart Growth Summit to bring together groups devoted to land use, transportation, water and air quality; with the Mid-Region Council of Government's Water Resource Board and Water Plan Implementation sub-committee; with the Albuquerque Reach Watershed Advisory Group; and with the Interstate Stream Commission's Ad Hoc Committee for regional input to the State Water Plan. The current Assembly treasurer serves as chair of the Water Resource Advisory

Committee, a group giving stakeholder input to the Albuquerque/Bernalillo County Water Utility Authority, and the Assembly's past president is active in the Endangered Species Act Collaborative Program. In partnership with the Earth Data Analysis Center at UNM, the Assembly has proposed a GIS project to aid visualization of current conditions, and to provide information on potential conflicts and plan implementation opportunities in the Middle Rio Grande. The GIS would interface with but be independent of other models, constituting an open-source, open-access, web-based application for use by citizens and officials at every level.

The Middle Rio Grande Regional Water Plan, the Water Assembly's annual report, presentations from the 2005 Annual Assembly, and notice of all board and sub-committee meetings can be found at our website. List serve members are invited to post articles, announce events, and discuss relevant topics. To subscribe, send an email to STServ@waterassembly.org with the

words "subscribe mrgwa" in the body of the email and nothing in the subject line. To broadcast a message to the list serve, mail to: MRGWA@waterassembly.org

The Water Assembly is an all-volunteer organization. Participation and/or contributions will be gratefully accepted. Join our Education and Outreach Team, volunteer for the GIS project, or contact your local elected officials and ask what is being done to implement the regional water plan! Balancing water use with renewable supply requires the commitment of all!

Regards,

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