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To promote the wise stewardship and ensure the availability of water resources for future generations of New Mexicans through support of community-based planning and creation of inclusive forums for education, communication, and development of common ground.

Water Planners Look Ahead to "Next Iteration"

by Lisa Robert



Estevan Lopez, ISC Director, gives an upbeat update of the state water plan. Panelists ISC water planner Angela Schackel Bordegaray (l.) and Judith Espinosa (r.), Chief of Staff for Lt. Gov. Diane Denish, also spoke.

ith the last of 16 regional plans due to be completed in 2007 and a review of the State Water Plan scheduled for 2008, attendees of the New Mexico Water Dialogue's annual meeting, held in January 2007 at the Indian Pueblo Cultural Center in Albuquerque, paused to take stock after nearly two decades of water resource planning. As speakers from around the state recapped their local efforts, two worrisome themes surfaced again and again: the difficulties associated with implementing existing plans, and the need to make revisions to them soon, in light of enhanced hydrologic data and shifting climatic conditions.

Planning in the Face of Uncertainty

To set the stage, University of New Mexico Professor of Earth and Plan-

etary Sciences David Gutzler presented a sobering look at global climate change, and what it may mean for growing populations in the arid and semi-arid Southwest. "My punch line," he said, only moments into the lecture, "is a pretty simple one...we are watching a climate change happening that may make 'water dialogues' more difficult as the years go on."

Using a series of maps and graphs, with emphasis on the central Rio Grande basin, Gutzler sketched the importance of even a few degrees rise in temperature, a global trend that is clearly already occurring. "The projected temperature change for the state of New Mexico is something like 4°C, on average," Gutzler says, which has the potential to alter climate in very significant ways. "We should anticipate much less snowpack feeding into the rivers that drain down

into New Mexico from the north... We should expect a decrease because there's less snowpack to begin with and because evaporation rates [will] go up upstream. Open water evaporation will go up, and because the growing season is longer and the climate is warmer, I expect riparian ET rates to go up as well. The bad news from a budget perspective is that all of these principal effects make managing water harder for us. We have less coming in upstream, and we have bigger depletions, and of course, this is not everything that's going on here. We have other anthropogenic changes that have nothing to do or at least not directly—with climate, like the City of Albuquerque taking water out of the river much more actively than they have in the past... So there's a challenge here." Gutzler also warned, "The Colorado River Compact is in trouble due to climate change. It's over allocated to begin with, but the net effects of climate change are going to make river water management on the Colorado system much, much harder over the next few decades, and there's nothing in the physical system that leads me to suspect that the answer would be any different if we looked at the Rio Grande or the Pecos or the other systems in New Mexico."

Over the next few years, Gutzler hopes to "put some numbers to the trend arrows. To my knowledge, nobody has examined in a quantitative way the effects of climate change on expected stream flows and reservoir levels in New Mexico basins."



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Updates from ...

Consuelo Bokum, President, Board of Directors

he December 2006 issue of the *Dialogue* was John Brown's last issue as Executive Director. Fortunately, he is far from gone. John has joined our Board of Directors, continued to head the Water Conservation Incentives Project with Dick Kreiner, participates in the Upstream-Downstream Project, and is doing the Dialogue's web page as well. Please visit it at www.nmwaterdialogue.org. He also became a grandfather last summer.



Chris Nunn Garcia's son Ben Jones and Michele Minnis. Chris' husband and daughter also were present for the tribute to Chris.

Two other people joined our board during this last year: Lisa Robert who DID the *Dialogue* in the beginning and gave the *Dialogue*, and by extension the Water Dialogue, its voice; and Simeon Herskovits from Taos who has been working actively on the Taos Regional Water Plan.

This issue contains a report from the 13th Annual Statewide Meeting. The reason this issue of the *Dialogue* which features that meeting is so late is because Lisa Robert actually transcribed the entire event – a long, grueling and we hope occasionally inspiring task. The transcription is available on our web site. Very important parts of that meeting were the awards to Lisa Robert and Elaine Hebard and a commemoration of Chris Nunn Garcia, a founder, director and editor of the Dialogue. I read through that transcript looking for a way to summarize it for this issue. But I decided not to. The whole event was too full and touching to try and summarize. I

urge you to go to our website and read the full transcript.

This issue has three Reports from the Regions which we expect to continue in subsequent issues and reports from two on-going Dialogue projects: Water Conservation Incentives Project and the Upstream-Downstream Project.

The Board of Directors has been meeting more frequently than I think it ever did.

We are talking about a number of projects: the State Water Plan, updates for Regional Water Plans and Consistency among water plans. I expect you will hear about these at the next Annual Statewide Meeting on January 11, 2008. Save the date. We would love to see you there.



Rob Leuthauser was one of many in attendance who knew and misses Chris Nunn Garcia.

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Regional Water Plan Implementation Successes and Failures

With the elephant in the room now clearly delineated, planners from four regions—the Lower Rio Grande, Socorro/Sierra, Southwest New Mexico, and Taos—reflected on the varied challenges they face, and on local strengths and shortcomings identified largely through regional water planning.

Gary Esslinger, manager of Elephant Butte Irrigation District in the Lower Rio Grande, said his region's specific objectives are to eliminate illegal diversions and over-diversions within their recently declared watermaster district. "Certainly within EBID, we're doing that as we speak.

We're putting meters on our farmers' wells; we're putting meters on our diversions; we're putting meters on our turnouts so we know both what surface water is being used by our constituents and what groundwater is being used." In regard to the state's Active Water Resource Management program, Esslinger noted, "We're trying to work out our differences with the State Engineer... Conflicts arising right now from AWRM are: the duty of water; domestic wells have not been curtailed; issues about a high impact zone, which takes away the whole process of priority dates; and of course, we've worked out the metering order problem. The Lower Rio Grande Water Users have the duty to try to formulate the alternative administrative rules to help take away some of those conflicts in the regular statewide rules."

Socorro/Sierra representative and hydrologist Peggy Johnson told fellow planners, "Our region really felt strongly that we needed autonomy; that our interests were separate, politically, from upstream and downstream; and that to have any say and any authority over our resources, we needed to stand on our own and do our own plan. So that's the way it went forward, and in hindsight,

I've moved more away from the hydrologic arguments and in favor of the political, social and cultural arguments...

Our region has a water deficit inherited from upstream. Now that we've done a little bit of budget reconciliation between the regions, Socorro/Sierra shows about



John Brown, Janet Jarratt and Elaine Hebard catch up during a break ... Elaine was awarded Volunteer of the Century at the meeting.

a 40,000 acre-foot deficit at the bottom of the system outflow from Elephant Butte. That reflects the 70,000 acre-foot deficit inherited at our county line from upstream users, so we can see that we do have water in the Socorro region, and it is acting to offset some of that regional deficit... The main thing that we as a region are concerned about is the

'My punch line is a pretty simple one... We are watching a climate change happening that may make 'water dialogues' more difficult as the years go on."

—David Gutzler, UNM
 Professor of Earth and
 Planetary Sciences

separation of our land and water. There is a very strong water market right now, pulling water north to urban areas upstream, and it is driving the separation of land and water resources... The only way we are going to preserve our agricultural resources—and they're just as

important in the big picture as the water resource—we have to be able to preserve our soils and our productive agricultural lands and make those areas continue to produce food, and produce it locally. In the large picture, in the long term, or even in the intermediate term

considering the energy problems that we're facing, it's a benefit not only to our region, but to the valley and I think the state as a whole. Our agricultural lands, our soils, our fertile bottomlands are what feed us, and if you take that and abandon it, it is an environmental, it is a hydrologic, it is an economic, it is a social catastrophe."

Former Interstate Stream Commissioner and current State Game & Fish Commissioner Dutch Salmon of the Southwest New Mexico region said, "The Gila is the last free-flowing river in New Mexico. There's obviously going

to be people, like myself, who favor these instream flows and consider the Gila the last river in the state that can teach us what a natural river should look like and how it should function... At some point I think that not only water managers but civic leaders and political leaders are going to have to take up the issue of growth, which is the wild card in all of this. I think the main problem is that we view growth kind of like the weather—it's something that you can't stop; it's just something you react to when it gets here. And yet there are countries in the world today that do not grow. There are 30 or 40 countries that are at or near zero population growth, and they're not poor countries for the most part - they're among the most well-off countries in the world. We don't need growth for prosperity, and since we don't need growth for prosperity, I'm not sure why we need it. Eventually we're going to have to confront it, or all our conservation practices and all our water development schemes are going to come to naught."

Taos spokesman Simeon Herskovits, a private attorney practicing in Taos, said it was premature for him to address

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Left to right: Simeon Herskovits, Gary Esslinger, Peggy Johnson, and Dutch Salmon talked about lessons learned in implementing regional water plans.

"implementation successes and failures" since the Taos Regional Plan has yet to be adopted. In Taos' case, however, last may be anything but least considering the attention northerners are giving to one major component of their regional plan. "It was pretty clearly apparent from the outset," Herskovits says, "that people in the Taos Region were very, very focused on the issue of the public welfare in New Mexico water law, and the historic failure to actually give any meaning and impact to that criterion in the law... We want to create a counterbalance to what is perceived as the almost overwhelming tendency of water and resources to be drawn toward growing urban and suburban centers. Those are the magnets that cause water to run up and over hills." After three waves of meetings in different communities, Taos planners developed a set of criteria that "captures, at least from our region's perspective, what constitutes the public welfare when that phrase is applied to water." The document includes "ten substantive criteria that make up the public welfare, with a statement on each one, and then a separate statement regarding a threshold or standard to be borne in mind when analyzing whether any water transfer or water appropria-

tion is consistent with or contrary to the

public welfare as pertains to water in the

state of New Mexico."

Water Planning's Role in the Future

Meeting participants indicated there is more work to be done by both state and regional water planners. Among the issues raised in a discussion about planning's role, were these:

- "How can we allocate water for something that doesn't have short-term economic payoffs and doesn't show up as a positive 'benefit-cost ratio?""
- "To what extent are issues of urban development, the pending energy crisis, and the need for food security coming together in water planning? Have we started to think about these things and how are they woven into the

"The main thing that we as a region are concerned about is the separation of our land and water. There is a very strong water market right now, pulling water north to urban areas upstream."

—Peggy Johnson, Socorro/Sierra representative and hydrologist

conceptualization of water plans or the updates of water plans? Also in practical terms, how do water plans relate to the state watershed and forest health plans?

- "We have a concept of protecting public welfare, but we've never developed the guts to define what that means."
- "The fact that decision makers in our community are not engaged in water

management issues is a public awareness problem. When there is any kind of meeting, powerful statements [are made] surrounding water issues, but they're woefully uninformed. That generates a lot of conflicts within and between regions."

- The Rio Grande Compact is very vital to this state, but the public has no perception as to what it is, what it means to each region, what supply of water comes from it, and what has to leave your area to go to someone else's area. Where we're lacking is a great educational process to make the public aware of these institutional things."
- "There isn't or hasn't been funding from the state or other entities to implement water plan recommendations on a serious basis. Just like the Water Dialogue helped to create a template for regional water planning, we need a template for implementation. What does it mean to implement a plan? How do we show success or non-success? How can we keep on making sure there's adequate educational opportunities, so people can continue to participate?"

How Close We Came to Disaster in 2006

The first thing Interstate Stream Commission engineer Rolf-Schmidt

Peterson's predecessor Norm Gaume told him was, "Variability is what your job is about." says Schmidt-Peterson, "We live in a place that has highly variable stream flow. Most of us don't see that variability because we get water from a tap. If you live in a city, it's a groundwater-supplied situation so you barely even notice if there's a drought."

Two thousand six was a year in which a little more than half a mil-

lion acre-feet of water flowed past Otowi gauge. "It's a low number," says Schmidt-Peterson, "not out of the ordinary for New Mexico, yet it says *nothing* about the seasonal variability that we experienced." The winter of 2005-06 resulted in almost zero snow pack for the state. Spring runoff was negligible and summer supply predictions were dire. Then, beginning in late June, an unusual

amount of precipitation turned the system around. Essentially, explains Schmidt-Peterson, "It rained, and it rained in the right place... There was a time period in there, starting from maybe mid-July and almost going into early September, where we had, on average, something on the order of 2,000 cfs (cubic feet per second) passing San Acacia gauge every day, with something like 500 cfs passing the Otowi gauge! For a Compact junkie, that's the best situation you can be in: low delivery obligation and you're delivering a heck of a lot of water. In effect, we put 250,000 acre-feet more water in Elephant Butte Reservoir last year than required for delivery under the compact."

But variability can lead to less felicitous outcomes. Between the 1950s and 1980s, average stream flows of less than 10cfs were recorded at some mid-Rio Grande gauges for a hundred days or more. "If you get involved with managing the river, you realize that 10cfs is nothing. We get fluctuations in an hour that are greater than that, and in a day, we get fluctuations of fifty or a hundred cfs. These red bars [from his power point presentation] mean to me that during that time period, somewhere in that

Albuquerque area, the river was dry." Given minimum flow requirements for endangered species, a similar situation would prove dire today.

Fortunately, state and federal governments now work with a number of other agencies to manage reservoir releases and stay ahead of system problems like sedimentation.

Schmidt-Peterson believes

"the potential disaster that's out there relates to groups like Upstream/
Downstream or the Dialogue not talking through these more difficult issues and not getting together to implement things that you can agree upon...
Your strength is in diversity," he said, "and in the interests that you represent. If you can come forward with

mutual goals, bring them to your legislators or to the ISC [for funding], and there are fifty or sixty of you in the room, that's very strong."



Rolf Schmidt-Peterson, MRG Basin Manager at ISC, says about precip that it's not just how much, but when it comes.

Upstream/Downstream: Dead End or Model for the Future?

Three planning regions that comprise the geographic middle Rio Grande are currently exploring basin-wide issues through a forum known as Upstream/Downstream. Former Dialogue executive director John Brown said the problem of basin deficit is "a collective one for the three regions, realistically requiring collaboration among all

".... Not only water managers but civic leaders and political leaders are going to have to take up the issue of growth, which is the wild card in all of this. ... We view growth kind of like the weather—it's something that you can't stop; it's just something you react to when it gets here."

—State Game & Fish Commissioner Dutch Salmon of the Southwest New Mexico region

interested parties. The regions could choose to engage proactively in finding mutually acceptable solutions, or risk ceding control of their water destiny to others... The idea here is sort of the Tragedy of the Commons: if each entity pursues its own self-interest...the ultimate effect could be ruin for all. The compact default threat is like a hammer hanging over our

heads, but it's also a symbol and symptom of a deeper issue, which is the unsustainably of the current pattern of water use in the basin."

Panelist Conci Bokum said the Jemez y Sangre planning region was one of two that are participating in the Upstream/Downstream discussions. "What bringing the three regions together did was to make us recognize that [looking for low-hanging fruit] is not enough—we're going to have to start dealing with a lot harder issues, and some of them are at the level of, "Is it fair or right that we should go to Socorro/Sierra, or even to the lower Rio Grande, and expect them to solve our water problem?" Some way, we're going to have to learn to live with less water."

Elaine Hebard of the Middle Rio Grande Water Assembly urged regional representatives to focus on commonalities. "One of those is: we do not want to violate the compact, so what could we do about the fluctuations that Rolf has shown us? How are we going to deal with the variabilities, as well as the vulnerabilities, of climate change? Food security and global warming impacts—the need to import food versus raising it here—those kinds of issues, I think, can keep us at the table. So always keeping our commonalities in mind as we work

toward trying to balance the budget is really important."

Peter Pino, tribal administrator for the Pueblo of Zia, and a participant in both regional water planning and the Upstream/Downstream project said, "The water table—the water bowl that's underneath Rio Rancho and Albuquerque and Zia—is all one bowl... Nobody gave us the right to exploit all the resources that are available to us. We need to think about the

past, the present and the future. We can all learn from what the Dialogue is doing in trying to compare the plans and documents from the three different regions. Let's be respectful to one another. Let's look at the diversity of us as people and truly listen to one another... The state is *us*, members of the state of New Mexico. We need to be part of the solu-

tion. I think that's what we're starting here."

[See page 10 for an update on the Upstream-Downstream Project.]

Updating the State Water Plan

Estevan Lopez, Director of the Interstate Stream Commission, summarized the funding being sought at the 2008 legislative session, including an appropriation to pursue an update to the State Water Plan. "If we can get these appropriations, we then will be able to go back out to you who make up the state, and at least identify the issues we ought to be trying to address... We've completed the first iteration of regional water plans. This will be the first time that we try and create a state water plan where now we've got regional plans to draw on; we will also be at the beginning of updating regional water plans, and for the first time, we'll be able to draw on the framework of the state water plan... The value of regional water planning, in my mind, and planning processes generally, is in the fact that we do get feed-back from the grassroots level... We the bureaucrats get input about what's important to you. Similarly, as we come up with initiatives and want people who know how to talk knowledgably about water issues, there's a ready-made audience out there that can help us disseminate this and give us feedback about what we're doing wrong or right."

Judith Espinosa, former Interstate Stream Commissioner and Chief of Staff for Lt. Gov. Diane Denish said, "When we talk about the governance of water, as Estevan says, it's not just the state engineer and the bureaucrats: it's you. You're part of that governance structure. The advocacy groups, the public interest groups, and all of the business and industry groups are part of that governance structure. You have to keep banging on the doors. You have to keep telling us what we've missed. You have to keep telling us what is right, and what our vision should be for New Mexico. I think that's what the state

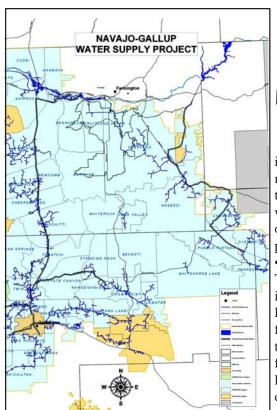
water plan is going to be about, that what it *is* about, and what the next iteration is going to be about."

Interstate Stream Commission water planner Angela Schackel Bordegaray offered one final reminder: "A plan doesn't implement itself; a plan is an inanimate object. Implementation of a plan comes from decision makers pushing for what's in the plan... You can have the best minds and the best resources and put out a really great plan, but it's not going to go anywhere if the people making the decisions and the people with the power haven't bought in, or haven't been at the table."

New Mexico's bottom-up process for determining how water will be protected and shared has clearly not outlived its usefulness; to the contrary, a well-established grassroots network is ready for round two.

[For a complete transcript of the 2007 Statewide Meeting proceedings, visit the Dialogue's website at *nmwaterdialogue.org*]

—Reports from the Regions—



Water for Navajos, At Last

By Michael Benson, Navajo Nation Department of Water Resources

he Navajo Nation in New Mexico is experiencing a tremendous amount of water development activity. To the thirsty Navajo citizens, many of whom do not have access to running water, the activity is welcomed, appreciated, and long overdue. The major waterline projects include:

• Farmington to Shiprock Pipeline: The Ute Settlement Act as amended in 2000 authorized the Animas La Plata Project to provide 2,340 acrefeet of depletion and the construction of a municipal water pipeline from Farmington to Shiprock. The Pipeline is under construction and is expected to be completed by 2012.

It will more than triple the municipal water supply for the Shiprock area. As recently as last summer the Navajo Tribal Utility Authority restricted water deliveries to their customers due to the inadequate facilities. Navajo Nation Chapters from Farmington to Shiprock, including Upper Fruitland, Nenahnezad, San Juan, Hogback and Shiprock, will be served. The water will be treated by the City of Farmington at the Farmington treatment plant. The pipeline will be an upsized version of an existing pipeline that was constructed in the 1970's. Another positive aspect of this project is that it continues and expands on the cooperative relationship between

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the Navajo Nation and the City of Farmington.

• Eastern Navajo Nation Water Pipeline: The 2007 New Mexico State Legislature, with Gov. Richardson's leadership and active lobbying, appropriated \$12 million to regionalize the water system serving the Chapters on the eastern edge of the Navajo Nation. The State Water Trust Board also approved more than \$5 million for this work. The contracts and RFPs are in process to connect water systems serving Burnham, Huerfano, Nageezi, Counselor, Ojo Encino, Torreon, Pueblo Printado and Whitehorse lake Chapters. In the future, a lateral may be built to serve the southern portion of the Jicarilla Apache reservation.

The concept for this project grew out of the planning for the Navajo Gallup Water Supply Project (NGWSP) which is a major component of the Navajo Nation/New Mexico San Juan River Water Rights Settlement. The NGWSP includes two pipelines. The main pipeline will run along Highway 491 between Shiprock and Gallup. The smaller of the two pipelines, referred to as the "Cutter Lateral," would convey San Juan River water from Cutter Reservoir near Bloomfield to the Eastern Navajo Nation Water Pipeline systems.

Even if Congress approves the San Juan River Water Rights Settlement, the Cutter Lateral may not deliver water from Cutter Reservoir until 2022. In the interim, the Eastern Navajo Nation Water Pipeline will provide groundwater from northern Chapters, which have more access to the Ojo Alamo aquifer, to the Chapters in the south which have little potable groundwater.

Earlier, the Chapters were concerned that Congress might cut the Cutter Lateral out of the Settlement package. With New Mexico stepping up to build the Eastern Navajo Nation Pipeline, the Chapters are feeling more secure that the Cutter Later will continue to be included. New Mexico's commitment should prove to Congress that the Cutter Lateral is genuinely needed. A public high school was recently built at Pueblo

Pintado, one of the southern Chapters, and is severely straining the water system causing water pressure problems. Chapters that would otherwise be eligible for housing assistance are not able to obtain Federal Housing projects because of the inadequate water supply.

• Navajo Gallup Regional System: Through \$6 million in funding from the New Mexico Water Trust Board and the Indian Health Service, the Navajo Nation and the City of Gallup are constructing the infrastructure to convey water through the City of Gallup to the Gallup Area Chapters which lack adequate supplies of groundwater. Water delivery through this infrastructure will begin within a year.

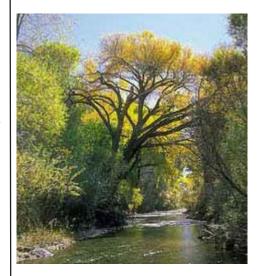
This project also anticipates construction of the Navajo Gallup Water Supply Project. In September 2007, the Inter-governmental Relations Committee of the Navajo Nation Council approved a Memorandum of Understanding allowing the Navajo Nation and the City to discuss joint development of groundwater while they await delivery of San Juan River water through the Navajo Gallup Water Supply Project. The MOU also addresses some of the longer term water supply issues.

Another recent result of the cooperation between the Navajo Nation and the City of Gallup is a change in Gallup's Ordinances to allow delivery of City water to Navajos living adjacent to the city. The pipelines have been constructed and the water should be flowing very soon.

The Navajo people and its leaders are elated by legislation in the current Congress, introduced by Senators Pete Domenici and Jeff Bingaman, that would approve the San Juan River Water Rights settlement including the Navajo Gallup Water Supply Project. Some claim the NGWSP and the San Juan Settlement are unrealistic, contrived exercises in a Navajo water grab. New Mexico's \$21 million investment in the Gallup interchange and Eastern Navajo Nation Water Pipeline, and the imminent construction of the projects are testament to the fact that concepts in the Settlement really are meant to serve a pressing human need for water.

Gila River Update

by M.H. Dutch Salmon, Silver City



n late June 2007, Gov. Bill Richardson issued a "policy statement" to govern New Mexico's management of the Gila and San Francisco Rivers under the Arizona Water Settlements Act (AWSA). This statement followed the Governor's veto of \$945,000 for "Gila Basin water development" that was brought about by hundreds of calls from the conservation community at the end of the 2007 legislative session. The AWSA provides New Mexico with \$66 million to be used to meet any "water supply demand" for use of up to 14,000 acre feet/year (afy) and up to \$62 million more should a dam or river diversion "unit" be built. Thus, for the first \$66 million, the uses are not limited to diversion and consumption from the rivers, but could include instead watershed restoration, agricultural and municipal water conservation, and new wells to tap ample underground supplies.

Previously, the Interstate Stream Commission had refused to consider or study any options that did not include river diversion to acquire the 14,000 afy. Their focus was the Consumptive Use and Forbearance Agreement (CUFA), a legal document and adjunct to the AWSA, presented by the ISC as essentially a spreadsheet showing how New Mexico might divert 14,000 acreREGION REPORTS—Continued from page 7

feet during certain months of the year while still protecting Arizona's rights under the AWSA. But in his statement the Governor noted: "I believe that a range of alternatives should be studied, with the 'no diversion' option as an essential part of the analysis." He also said: "The Gila and San Francisco Rivers are the last wild and free-flowing rivers in the Southwest. New Mexico is a state with abundant natural resources, and these rivers stand out as crown jewels. I want to protect them for future generations."

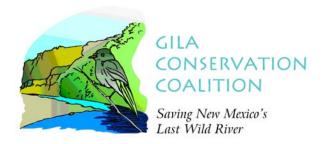
The Governor allocated \$300,000 for studies of these various "alternatives" and the Gila Conservation Coalition and New Mexico Wildlife Federation are sure to be involved. The Gila Conservation Coalition and its partners believe more water can be developed for southwest New Mexico for less money without invading the rivers. A general outline

for water development in the four counties of southwest New Mexico (Catron, Grant, Luna and Hidalgo) is available on the GCC website:

www.gilaconservation.org as well as an economic analysis of water supply alternatives for Silver City and the Mining District. Still missing from the debate is the ISC engineering design that would make the CUFA a reality. Whether the question involves river ecology, ESA protections, or economic cost/benefit analysis, comparisons and juxtapositions

are impossible until water development interests work up and publish a project design. Alternatives must be described and defined before they can be analyzed.

The Gila/San Francisco water issue is the classic standoff between the two basic philosophies governing what's left of our western rivers: a) "we must protect New Mexico's last remaining free flowing rivers" vs. b) "we can't let that resource get away and thereby 'lose' the water to Arizona." A fair and impartial study of alternatives is the only way to discover the most sensible solution; i.e., the least-cost method of providing future water supplies for the fourcounty region, including growth projections, while minimizing impacts to our last wild rivers.



Northeast New Mexico Regional Water Plan

by Kendyl K. Monroe, Steering Committee Member

he Northeast New Mexico Regional Water Plan prepared by an open-member Steering Committee was approved by the Interstate Stream Commission in April 2007. Neither the ISC nor the Steering Committee has yet taken any formal action to implement the Plan, but on the local level some municipalities have taken some actions or are discussing possible actions on some of the issues. The ISC has appointed an ad hoc committee of regional water planners to develop policy on integrating regional water plans with the State Water Plan. Two representatives of Northeast New Mexico are members of the ad hoc committee, which has recently been re-named the Regional Water Planning Advisory Committee. The Committee has been meeting monthly, and is adopting policy recommendations.

State legislation provides that the State Water Plan will be "reviewed" every five years, and 2008 is the first year for such a review. The State Water Plan is also to be "updated" as needed, and the 2007 Legislature provided for an update to be made in 2008 but left the appropriation of funds for that purpose to the 2008 Legislature. Any changes in the State Water Plan may have effects on the Regional Plans which cannot now be foreseen.

The State Engineer's Progress Report to the Interim Legislative Committee dated June 2006, makes the following statements about what the State Engineer's Office proposes to do with the Regional Water Plans:

- * Evaluate the progress of completed plans
- * Begin inter-regional dialogue between regions
- * Goal to update four regional plans each year

The Northeast Region Steering Committee has not received any information from the State Engineer about any of these proposals.



— Project Reports —

The Water Conservation Incentives Project: A Search for Solutions

ater conservation is one of several ways for New Mexico to close the gap between available water supply and demand, but assessing the benefits of various kinds of water conservation is complicated. Water conservation can be, New Mexico Interstate Stream Commission Director Estevan López has noted, a "two-edged sword." From the perspective of a state or federal manager of an over-stretched resource, conserving it is a "good" only if it results in reducing net depletions, while some private water conservation practices such as using water conservation measures to increase crop yields may actually increase net depletions.

The New Mexico Water Dialogue's Water Conservation Incentives Project (WCIP) was designed to focus attention on institutional motivations and barriers to conserving. The Bureau of Reclamation's conservation field program in Albuquerque provided partial funding for this project in September 2004. After some research and a series of meetings, WCIP focused on participation in a research project led by Dr. Brookshire at UNM to assess the behavior of individuals to use water leases and sales - that is "to conserve resources in their own interests" - to allocate scarce water resources in the middle Rio Grande. Two workshops were held in late 2005 and mid-2006.

The role of the Dialogue was to iden-

tify essential elements to any study of water leases or markets. Issues identified in discussions in 2005 and 2006 included: 1. impairment to other water rights owners and third party impacts ("externalities" in economists' language), costs imposed upon or benefits to parties or interests other than the buyer or seller; and 2.the need for evaluative criteria to be established and enforced.



WCIP Update: The third workshop and prospects for further collaboration

A third workshop to continue the dialogue and add additional substance to the suggestions explored above occurred on September 14, 2007. A few more general principles and conclusions emerged from this workshop. These included:

1. the need for a baseline understanding of the hydrologic realities in a specific place is necessary before an appropriate market model can be built;

- 2. enactment and effective OSE enforcement of leasing rules designed to encourage conservation that provides net benefits to the social-ecological system understanding that measurement of actual use and enforcement would be critical to making such a rule work;
- 3. consideration of a tithing requirement on a lease which could contribute to ecosystem sustainability; and
- 4. consideration of climate change uncertainties and the need to reinforce "adaptive governance" in crafting and administering leasing rules.

In concluding the final workshop, Professor Brookshire stated that the Dialogue group had become the researchers' "core" sounding board and he hoped the relationship could continue in a next workshop to focus on specific "regulatory changes" possibly by next summer (2008). Although this workshop constitutes the final chapter in the Bureau of Reclamation's funding of the WCIP, it may be only the beginning of a longer term fruitful collaboration in which natural resource economists. modelers, hydrologists, and issue advocates engage in a learning enterprise that contributes to sustaining social-ecological systems largely defined by the availability of water in our state.

A report on WCIP through 2006 appears in the December 2006 issue of the *Dialogue* and a full report through September 2007 is available at *www.nmwaterdialogue.org*.

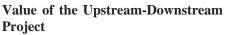
The Upstream-Downstream Project:

Report form the Fourth Workshop

Adapted from notes prepared by Lucy Moore, facilitator

he Upstream-Downstream Project focuses on the Middle Rio Grande Basin (MRGB) which faces serious deficits that could result in compact delivery failures and inadequate water supplies for the people who live there. In hopes of productive dialogue and perhaps substantive proposals, the Water Dialogue designed the Upstream-Downstream Project in

2006. With funding from the McCune Foundation and the Interstate Stream Commission and assistance from the Utton Center, three workshops were held in 2006.



A fourth workshop was held on August 22, 2007. One important discussion centered on the value of the Upstream-Downstream Project. Participants noted that this is a forum where the regions can learn from each other and gain understanding about challenges and dynamics in the system. It is also an opportunity for those usually divided against each other to "think like a basin." The project is hopefully a pilot for other regions of the state, where issues are aired, planners are educated, and conflicts resolved. Participants emphasized the importance of sharing information about plans, and successes - and failures – in implementation and emphasized that many problems and solutions are regional. The focus of this effort should always be the problems and solutions that are basin-wide, require a basin-wide approach, and have an impact on basin-wide laws and policies.

Participants discussed their hopes and



concerns about the project. Some hoped for a chance to address conflicts between regions, like the numerous water transfers from south to north, from surface to surface, from surface to ground. A Socorro-Sierra representative noted that it is easier for urban areas to "think like a basin," because they have everything to gain. The rural areas have more to risk, and their incentives are much fewer. Any effort like this project needs to understand that fact. A representative of an upstream region observed that the upstream regions also have important issues at stake in the viability of agriculture (both upstream and downstream), and that only a basin-wide planning approach can effectively address the piecemeal sale and transfer of water rights on the market. Others felt it was critical to focus on low hanging fruit, even if the "whole picture" context was sacrificed for the time being. Low hanging fruit could include education, promotion of conservation, evaluation and inventory of urban water conservation, including existing programs of institutional and commercial users.

Getting on the Same Page

Representatives from each of the three regions involved in the project

(Jemez y Sangre, Middle Rio Grande, and Sierra/Socorro regional water planning groups) agreed that the first critical steps were to adopt consistency and data standardization for the three regions, including terms, definitions, time, calculation methods, and to develop an implementation template for the three regions to measure progress in meeting compact deliveries and reducing regional defi-

cits. Participants felt that without consistency of terms and definitions among regions it would not be possible to "think" or "communicate" like a basin. The implementation template also had support from the group as an important element in helping regions communicate and compare notes.

Members of the project will re-convene to review progress on the consistency and data standardization and the implementation template.

The two presentations from the workshop, "Middle Rio Grande Basin Water Management and Hydrologic Reality" by Rolf Schmidt-Peterson, Interstate Stream Commission and "Systematic Municipal Water Use Accounting & GPCD Calculations" by John Longworth, Office of the State Engineer, and reports from the previous workshops are available on the NM Water Dialogue website, www.nmwaterdialogue.org and the Utton Center website at http://uttoncenter.unm.edu/upstream_downstream.html.

An article summarizing the project and previous workshops appeared in the December 2006 issue of the *Dialogue*, also on the Dialogue's web site.



14th Annual Statewide Meeting

January 11, 2008

Indian Pueblo Cultural Center

2401 Twelfth Street NW, Albuquerque

Prospects for Sustainability in a Century of Uncertainty DRAFT AGENDA

8:00	On-site registration
8:30	Welcome and introductions
8:45	1987 – 2007: Celebrating 20 Years of Water Planning
9:00	Regional Water Plans Completed/SWP Update
10:00	Break
10:15	Visions for New Mexico's Future
11:00	Dialogue: New Mexico's Water Future - Where do we go from Here?
11:45	Award
12:00	Lunch
1:00	Legislative Panel: New Mexico Water Policy and Funding
2:30	Break
2:45	Regional Water Plan Updates: Template for the Future
3:15	Dialogue: Updating Regional Water Plans
3:45	Summation and Nominations for the Dialogue Board of Directors
4:00	Close



New Mexico Water Dialogue 14th Annual Statewide Meeting

"Prospects for Sustainability in a Century of Uncertainty"

Friday, January 11, 2008 Indian Pueblo Cultural Center- Chaco I & II 2401 12th Street NW, Albuquerque

EARLY REGISTRATION FORM

Registration includes lunch catered by the Indian Pueblo Cultural Center and morning and afternoon beverages and snacks. The early registration fee (pre-paid before January 4) is \$25. Registration at the door is \$30. The fee for panel members who prepay is \$20. Payment may be made by check or purchase order. Copy this form your computer, fill it out and send it to NMWD, c/o Bokum, 1300 Canyon Rd., Santa Fe, NM 87501. (Or paste it into an email to bokatz@cybermesa.com. You'll still have to mail in your payment, since we're not equipped to accept plastic.)

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