

## 2005 Statewide Meeting focuses on negotiated settlements

By John R. Brown, Executive Director

**T**his issue of Dialogue features a lengthy article by Beth Richards on the subject of negotiated settlements of major basin-wide water allocation conflicts in New Mexico; not coincidentally this topic was the focus of the Dialogue's annual statewide meeting in January. In fact, Beth, a Stanford graduate student who is on leave from Sandia National Laboratories where she is an engineer, heard about the meeting the day before it happened, jumped on a "red-eye" plane flight, and arrived at the Indian Pueblo Cultural Center in time to take in most of the meeting.

But why? Besides being intrinsically interesting, the topic happens to be the subject of Beth's dissertation research. This may not be the first article in Dialogue to make use of footnotes, but the notes, boxes and table are important parts of the article and are well worth reading. At the same time, there's nothing scarily academic about this piece. It deals with real issues, and it pulls together common threads among the four settlements in ways that highlight the factors that may have made them – and may make others – possible. But it also suggests some of the pitfalls that may at

times doom a settlement negotiation to failure.

Beth concludes her article with a series of questions, which her dissertation research hopes to answer. She recognizes that her tentative conclusions presented here are only hypotheses, which she plans to test empirically, and she wonders whether the questions posed at the end are the right ones. She welcomes feedback on this article, and she is bravely willing for that feedback to be aired publicly. We hope to receive commentaries on the article in the form of short essays and will print them in the next issue.

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Elsewhere in this issue, we present short reports on the Dialogue's work program – our two major projects. Both of these have suffered delays because we were unexpectedly faced with an immediate cash flow crisis – one of our

funders had changed its funding strategy, and we would not receive a grant we had counted on. We knew that the McCune Charitable Foundation intended to award us \$10,000 this year (and another \$10,000 next year), but those funds were not yet available. Another funder, Messengers of Healing Winds Foundation, had asked us to consider their grant as a "challenge" to attract new and increased gifts this year. As we had already planned – but further impelled by our crisis – we reached out to our mailing list – participants, regional water planners and *Dialogue* readers – in an unprecedented (for us) fundraising campaign. Kick-started by a gift from an anonymous family foundation, we managed by the end of June to raise \$7,900 from 109 individuals and organizations in 40 different cities, towns and villages throughout New Mexico. Then in July we received an unexpected donation of \$5,000 from the

Phelps Dodge Mining Company – a tribute to the diversity of our Board! (A list of all our contributors and subscribers is found on the back page.) To top this off, in July the Healy Foundation awarded us a general support grant for \$5,000.



*The audience listens to five panels throughout the day discuss the challenges of settlement agreement solutions versus litigation.*

# Water Rights Settlement Agreements in New Mexico: What are they, why have they emerged, how have they been achieved, and what do they imply for the future?

By Elizabeth Richards

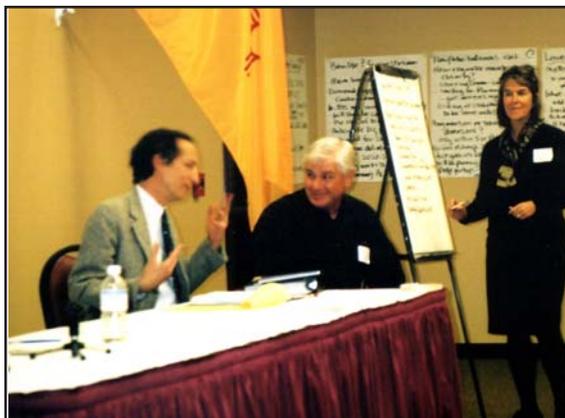
The New Mexico Water Dialogue held its annual statewide meeting on January 13, 2005 at the Indian Pueblo Cultural Center in Albuquerque. This year's meeting, entitled *Water Conflicts: Regional Solutions?*, featured panel discussions on each of four major water rights settlement agreement negotiations recently concluded or ongoing in particular basins in the state. Individuals representing a variety of different perspectives from the Gila, San Juan, Lower Pecos, and Pojoaque basins addressed various aspects of the litigation preceding the negotiations, the settlement agreements themselves (proposed or signed), the negotiation processes, and the reasons for and implications of the agreements. This article looks at some of the similarities and differences among the four settlements and considers why these settlement negotiations have emerged, how completed agreements have been achieved (or not), and what the settlements and negotiations might imply for the future. Although this article may actually raise more questions than it answers, it offers a framework for thinking about the wide variety of issues involved.

## The Settlement Agreements

The four settlement agreements<sup>1</sup> all relate to the allocation (or reallocation) of scarce water at a number of different levels — interstate apportion-

ment, allocation within the state and/or a given basin, and individual rights — with the particular level emphasized varying from agreement to agreement. One of the settlement agreements actually is an interstate allocation, one is a direct outcome of an interstate allocation, and

in New Mexico (see box), and the fourth has set the stage for in-basin negotiations to determine future allocation. All of the settlements are connected in one way or another to the regional water planning processes now ongoing around the state.



*L. to R.: Stanley Pollack and Randy Kirkpatrick discuss the San Juan/Navajo settlement. Lucy Moore is at the chart.*

the other two relate indirectly to interstate allocations. Three of the settlement agreements are closely connected to the water rights adjudication process<sup>2</sup>

The significance and similar timing of these four settlement agreements may signal a new trend in the allocation of increasingly scarce water in New Mexico, and possibly other areas of the western U.S. where traditional or existing approaches have not brought the water allocation process to successful conclusion. There have been other water rights settlement agreements in western states over the last twenty-five years, particularly to resolve Indian claims, but they have generally occurred with a much lower frequency. However, in the last five years in New Mexico, these four major agreements have been/are being negotiated, plus there are other smaller water settlements and/or shortage

(Footnotes)

<sup>1</sup> For simplicity, the terms *agreement* or *settlement* are being used here to mean both the settlement agreements that have been finalized and proposed settlement agreements.

<sup>2</sup> Adjudication is the legal process for determining officially who owns the rights to use what water, for what use, at what point of diversion, and with what priority date. According to New Mexico law, an adjudication process begins when the state, federal government or an interested party initiates a lawsuit to ascertain the water rights of a particular stream system. Recently, after decades of litigation, intense conflict, and little progress in some basins, a potentially new trend in water adjudication in New Mexico has emerged: the negotiation of large and complex water rights settlement agreements. More information on the adjudication process in New Mexico can be obtained from the website of the Office of the State Engineer, <http://www.ose.state.nm.us/water-info/legal/adjud-process.html>.

sharing agreements recently completed or in progress. The state water plan and regional planning processes are also unfolding at roughly the same time in New Mexico, offering additional, and perhaps complementary, opportunities to consider carefully how water is to be allocated and used in the future.

### Pecos

The Lower Pecos settlement, termed a “landmark compromise of disputed water rights” by the New Mexico Office of the State Engineer (NM OSE), was signed in March 2003. It settled a nearly 50-year-old adjudication involving the Carlsbad Irrigation District, the Pecos Valley Artesian Conservancy District, the Fort Sumner Irrigation District, the federal government, and the State of New Mexico. It was driven by a Supreme Court decision requiring New Mexico to deliver water to Texas under the terms of the Pecos River Compact, resulting in critical water shortages (as defined by demand exceeding supply) on the New Mexico side. The settlement includes a land and water-rights acquisition program, short-term leasing of water, water-salvage projects, and a well field to pump groundwater from the Roswell Aquifer into the Pecos River funded by approximately \$100M from the state of New Mexico. These features are meant to bring the Pecos River into short-term and long-term hydrologic balance, meet the terms of the Pecos River Compact with Texas, and avoid federal takeover of water management in the basin. A key difference between this settlement and the other three is that this settlement does not address Indian claims. The Pecos settlement was preceded by the development of the Lower Pecos Valley Regional Water Plan, published in 2001, which provided a foundation for negotiating the settlement.

### Gila

The Gila Settlement is part of the Arizona Water Settlements Act of 2004, which relates to the Central Arizona

Project (CAP). It ensures that New Mexico will be able to make use of water allocated to the state under the 1968 Colorado River Basin Project Act. The settlement was approved by Congress and signed by the President in December 2004. The settlement allocates to New Mexico 140,000 acre feet of water from the Gila Basin in any ten years. This amount is a concession from the 180,000 acre-feet originally prescribed in 1968. In return, the settlement provides for New Mexico’s diversion of the water without complaint from downstream pre-1968 water rights holders in Arizona. New Mexico is also to receive \$66M to \$128M in federal



*Panelist John Utton, attorney for Santa Fe County in the Aamodt settlement*

funding for water projects to be determined.

This settlement agreement involved negotiations among the state of New Mexico, the state of Arizona, the Gila River Indian Community in Arizona, and water users in the Gila and San Francisco River basins in New Mexico. It

involves a complex exchange of Gila basin water and main-stem Colorado River water. This settlement is different from the others in that it involves “new” water; adjudication of the Gila basin was completed previously. Now that the overarching settlement is concluded, negotiations have begun to determine how the water and the funding are to be allocated and used. Use of this CAP water is identified in the Southwest New Mexico Regional Water Plan as a key issue to be addressed in the regional planning process.

[*Ed. note:* Allyson Siwik notes that the \$66 million is a “local subsidy” to four counties in southwest New Mexico for any water-related project. If the region chooses to develop the 14,000 af/y, an additional \$34- to \$62 million is made available for the project. ISC and the SWNM Water Planning Group are charged to determine how the funds and water are allocated independent of the regional water planning process.]

### San Juan – Navajo

Another settlement agreement nearing conclusion is intended to resolve the claims of the Navajo Nation to water in the San Juan River Basin in northwestern New Mexico. The San Juan stream system has been only partially adjudicated, leaving rights of the Navajo Nation, the United States, and thousands of private claims in that basin unresolved. The Navajo Nation is the senior rights holder and has claims that could appropriate most or all of the water in the basin. Although only Navajo claims will be resolved with this agreement, the agreement is very significant because it will resolve large uncertainties about the other water rights in the basin. Accordingly, many other stakeholders are involved in the negotiations and successful conclusion of the agreement is likely to require their support.

The settlement includes federal and state funding totaling approximately \$633M for a Navajo-Gallup pipeline project and other water supply projects

to supply water for the Navajo Nation and non-Indians in the Gallup area. The agreement was signed by the Navajo Nation and the State of New Mexico in April 2005 and is now working its way through the federal appropriation and approval process. In a related development, the Navajo Nation and other water users in the San Juan basin have signed voluntary short-term shortage-sharing agreements for the last several irrigation seasons, agreeing to a plan to reduce their withdrawals together in response to drought-related shortages rather than cutting off junior rights holders.

**Pojoaque/Aamodt**

The fourth major water rights settlement negotiation is on the Rio Pojoaque in north-central New Mexico and is



*Gilbert Sandoval, Jemez River Basin Chairman, and Elaine Hebard, Rio Jemez y Rio Puerco sub-regional water plan facilitator, were lunchtime speakers on Jemez shortage-sharing agreements.*

commonly referred to as the Aamodt case. The Aamodt adjudication began in 1966, has 2,500 defendants, and will determine the quantity and priority date

of all water rights in the Nambe-Tesuque-Pojoaque basin. It is commonly reported to be the longest-running lawsuit in the federal court system. It is one of several adjudications started between 1966 and 1983 involving tributaries to the Upper Rio Grande and the water rights of many of New Mexico's Indian Pueblos and Tribes, the federal government, municipalities, acequias and community ditches, and thousands of individual defendants.

The proposed settlement agreement is intended to

resolve the claims of four pueblos: Nambe, Pojoaque, Tesuque, and San Ildefonso. Their claims have been extensively litigated over the course of nearly 40 years. A court-appointed

mediator has supervised settlement talks since August 2001. The settlement negotiations involve the four pueblos, the United States, the State of New Mexico, and non-Indian water users, including the City of Santa Fe, Santa Fe County, and some acequia communities, among others. The proposed agreement originally would have required capping non-Indian domestic wells that are interfering with senior rights, and provided for the development of a controversial regional water system to replace the wells. The agreement appeared to be nearing completion until it was stalled in January 2005 because the amount of funding to be provided by the federal government was dramatically reduced. A modified settlement is

**Table 1. Comparison of Selected Features of the Four Settlement Agreements.<sup>1</sup>**

	Lower Pecos	Gila - San Francisco <sup>2</sup>	San Juan - Navajo	Pojoaque/Aamodt
Year Litigation Began (or other relevant date)	1956	1968	1975	1966
Approx. Amount of Water Involved (acre-ft/yr)	125,000	14,000	600,000	4,000
Federal Funding involved	0	\$66M - \$128M	\$633M	\$11M - \$211M
State Funding involved	~\$100M	\$70M	\$35M	TBD
Finalized <sup>3</sup>	✓	✓	✓	
Settles Indian Water Rights		✓	✓	✓
Interstate Agreement <sup>4</sup>		✓		
Settles a NM adjudication (or portion thereof)	✓		✓	✓

Notes:

1. The intent of this table is to provide a quick comparison among the four settlements. These numbers are based on the best available information from a variety of sources, but their accuracy is not guaranteed as some are estimates, some have not been finalized, and funding amounts are subject to appropriations. The author would welcome updated and/or corrected information.
2. These numbers apply only to the New Mexico portion of the Gila agreement.
3. The Pecos and Gila agreements have been finalized. The San Juan agreement has been signed by the parties involved, but it is still making its way through the federal system. The proposed Aamodt agreement has not been signed.
4. The Gila settlement is an agreement with Arizona. The San Juan/Navajo settlement may affect other Colorado basin states, but New Mexico is the only state that is a party to the actual agreement. The Lower Pecos agreement was prompted by shortages due to interstate compact with Texas, but the settlement agreement itself regards how water will be handled within New Mexico.

now being pursued. Changes include a lower price tag and terms more acceptable to non-Indian water users. Capping of wells will not be required and connection to the regional water system will be voluntary.

### Other Water Settlement Agreements

The four settlements addressed by panels at the conference are not the only water rights settlement agreements, although they are most prominent cases in New Mexico. The Jicarilla Apache Water Rights Settlement Act was finalized in 1992, and water rights settlement negotiations are currently ongoing with the Pueblo of Taos. Shortage-sharing agreements on the Jemez River (described during the lunch time session at the Dialogue meeting) and in the San Juan basin have also been signed within the last few years. A number of water rights settlement agreements have also been negotiated in other western states, some with a similar degree of complexity to the recent agreements in New Mexico.

The Jemez shortage-sharing agreement provides for the rotation of water withdrawals between an upstream acequia community and a downstream Pueblo with more senior rights. During the drought, the Pueblo was not able to withdraw water due to the low water levels and filed suit for priority administration. Rather than pursuing the matter to conclusion through the courts though, the parties reached agreement on their own whereby all share the hardship of the drought, rather than having the more junior rights holders cut off entirely.

As mentioned above, short-term shortage-sharing agreements have been signed in the San Juan basin. These agreements are one-year voluntary arrangements among ten entities, including the Navajo Nation, power plant operators, non-Indian irrigators, and municipalities. The agreements set criteria for defining when a shortage is

occurring based on stream flows, reservoir levels, and projected inflows. They determine in advance how a shortage will be handled and specify who will be cut off, when, for how long, and how much.

### Similarities and Differences

Table 1 provides a comparison among the Pecos, Gila, San Juan-Navajo, and Aamodt settlements. There are some notable similarities and differences. Although no one agreement stands out as being fundamentally different from the others, no two are alike.

All of the agreements stem from litigation that is decades old, addresses highly contentious and complex disputes, and involves large numbers of



*ISC Director Estevan Lopez spoke about progress and implementation strategies of the State Water Plan.*

parties and stakeholders. All of the agreements involve the provision of funding (federal and/or state) from outside the basin in question. All four settlements have some form of federal involvement, even if federal funding is not included.

As described above, water rights settlement agreements are not new; a

variety of settlements, mainly involving Indian claims, have been reached in other states. Three of the settlement negotiations in New Mexico are linked to efforts to resolve Indian claims, although they also involve many other rights holders and stakeholders. However, Indian claims are not an issue in the Lower Pecos agreement.

The Pecos, San Juan-Navajo, and Aamodt agreements settle (or would settle, in the Aamodt case) longstanding water rights adjudications within the state. The Pecos agreement has been signed by the parties involved; since no federal funding is involved it does not need congressional and presidential approval. The Gila agreement has been signed into law by the President. (A “Consumptive Use and Forbearance Agreement,” incorporated by reference into the AWSA Gila Settlement, which outlines conditions under which NM can divert water without harming senior water rights holders, is being reopened to clarify several issues. Even though the overall settlement has been signed, unless all parties sign the CUFA the settlement is moot.) The San Juan agreement has been signed by the parties involved and is now ready for Congress to consider it. The Aamodt settlement is still being negotiated.

Only the Gila agreement directly involves another state, although meeting the requirements for water delivery to Texas under the Pecos River Compact was clearly a driving force behind the Lower Pecos agreement. Colorado, at least, is watching the San Juan-Navajo proceedings to ensure that its own interests under the Colorado River Compacts are not compromised. The outcome of Aamodt may affect how New Mexico meets its obligations to Texas under the Rio Grande Compact.

### Key Questions

While there are some notable and important differences among these settlement negotiations and agreements, it is striking that after three or four

decades of litigation (actively or not so actively pursued) in some basins, water rights settlement negotiations have emerged recently in at least four major basins in New Mexico. Why are settlement agreements “suddenly” appearing on the scene? Furthermore, the conflicts involved are longstanding and complex, involving many parties and stakeholders – how are they being brought to settlement after so long? What is different now that has allowed and/or compelled the settlement of sometimes intense and complex conflicts over water? The panelists, other speakers, and members of the audience provided a wide variety of insights regarding answers to these questions. What is especially interesting is the variation in the answers provided, and the interconnections among them. Most likely, there is no single answer as the wide variety of interests are likely motivated by different aspects of the settlements.

## What Prompted Negotiations?

A large number of explanations were offered as to what prompted the settlement negotiations. When these explanations are considered together, it appears that three factors that served to bring people to the table were present in all four basins. First, there were one or more initiating, or triggering, events. Second, there were enabling conditions that facilitated or provided incentives for people’s participation. And third, it seemed there was either new information presented or a change in people’s perceptions about their water rights.

### Initiating Events

The initiating events served to bring focused attention and urgency to the problem of water allocation and management. They included water shortages, outside threats, and government intervention. Water shortages, as defined by water demand exceeding the available supply, were becoming



*Larry White, attorney for the Community Ditches in the Aamodt case*

apparent in at least three of the basins, brought about by drought, population increases, and, in the case of the lower Pecos, enforcement of the Pecos River Compact. Regardless of their cause, water shortages made acute the need to quantify and prioritize water rights so that priority administration could be implemented.

Outside threats were present in at least two of the basins. In the Gila, unless the New Mexico interests organized themselves and collaborated, there was a risk of losing water to Arizona. In the Pecos, there was a threat of federal takeover of water management in the basin if sufficient water was not delivered to Texas.

State and/or federal government intervention also seemed to play a role in initiating settlement negotiations. In the Gila, San Juan, and Pojoaque basins, the federal government’s interest in settling Indian claims appears to have been a

factor. In addition, the state government had reason to intervene in some basins because of the need to meet the requirements of interstate compacts, the urgency of dealing with water shortages, to control costs in adjudicating water rights, and as part of the NM OSE’s new Active Water Resource Management program. Political pressure at either the federal or state level may also have contributed to government initiatives to promote settlement of the disputes.

## Enabling Conditions

In addition to one or more initiating events, it appears that there were some enabling conditions present that facilitated or provided incentives for people’s participation in settlement negotiations in each of the four basins. These enabling conditions included the introduction of new dispute resolution mechanisms, the opportunity to pursue alternatives through settlement that were not available through the litigation process, opportunities for state or federal funding, and lower transaction costs of negotiated settlements relative to litigation.

In the Pecos, the state provided for a facilitated negotiation process. One panelist from the Pecos remarked that, contrary to popular belief, he felt the facilitated process was more important than the threat of federal takeover in bringing people to the table. In other basins, the federal government provided facilitation assistance in resolving Indian claims. In the Aamodt case, the presiding federal judges paved the way for mediated settlement negotiations. In some cases, the negotiation process allowed stakeholder (as well as rights holders) interests to be incorporated in the agreement, thereby facilitating the political process in getting funding or other support.

The settlement agreements also appear to offer alternatives not available to claimants within a litigation framework.

They offer an opportunity to bring in outside funding for water projects or buyouts of land and water rights, effectively increasing the size of the pie that is being divided. In all four basins the opportunity to obtain state and/or federal funding for water projects or buyouts of land and water rights provided incentives to rights holders and other stakeholders to pursue settlement negotiations instead of proceeding with litigation. The settlements also offer the opportunity to negotiate special provisions, such as transparency in water rights transactions that protect acequia communities.

There seems to be general agreement that, for complicated basins with many rights holders and interests, settlement agreements may have considerably lower transaction costs than litigation. That is, the costs – in time as well as money – of negotiating and concluding a settlement agreement may be significantly less than the costs associated with pursuing water rights adjudication through litigation in such basins.

### New Information/Change in People's Perceptions

In addition to having one or more initiating events along with appropriate enabling conditions, it appears that new information bringing about a change in people's perceptions and calculations of their interest may be an important ingredient in bringing parties to the negotiating table. For example, in the Pecos, the Supreme Court ruling requiring compact compliance (the 1988 Pecos River Decree) forced the realization that water shortages were real and had to be dealt with, but it wasn't until it seemed likely that the New Mexico Legislature would appropriate money to buy out senior rights holders that negotiations began in earnest.

More generally, increasingly active water markets may change claimants' perception of the value of having their water rights formalized and documented, making them more interested in reaching an accord. It also appears that the perceived value of water rights

themselves may change in response to new information about particular situations. Interestingly, for some the value may increase, while for others the perceived value may decline. This premise prompts the following speculations about how uncertainty and informational asymmetries may have influenced parties' willingness to negotiate a settlement:

1. According to the law of supply and

demand, water shortages would generally be expected to increase the value of water rights. However, lack of priority enforcement due to incomplete adjudica-

tion may have caused a reduction in the perceived value of some senior water rights. In a prior appropriation system, senior rights would be expected to be the most valuable. But for this to be true, priority must be enforced. Without adjudication completed, this is difficult or impossible, and some senior rights holders may be left without the water they would otherwise have been entitled to. This situation may have made senior rights holders more willing to negotiate.

2. Meanwhile, incomplete adjudication and accompanying lack of priority enforcement may have increased the perceived value of junior rights. Junior rights are generally less valuable than senior rights because they are subject to being cut off in the event of a shortage. However, if priority is not enforced, then the risk of being cut off is diminished and the perceived value of a junior right might increase accordingly. In such a situation junior rights holders might prefer that traditional adjudication not be completed. They might prefer instead to negotiate a settlement with shortage sharing or other provisions that would preclude them from being cut off, or that would provide funds to buy and retire rights to alleviate the over-allocation problem.

Changes in perceptions of transaction costs may have also been a factor in people being willing to negotiate instead of litigate. The length of time adjudication had been underway in these four basins made it clear that litigation can be very expensive. The length of time these basins have taken to adjudicate may also change perception about costs of litigation in future adjudications in other basins. Similarly, new appreciation for the complexity of water rights based on the experience in these basins may change expectations about relative transaction costs in other basins.

### What Enabled Settlement?

Successfully engaging parties in negotiation is not enough to ensure that



*Peter Chestnut, attorney for the Pueblos in the Aamodt case*

Settlement agreements can often be concluded more quickly than the litigation process, as evidenced by the many decades of litigation.

a settlement can be reached, especially considering how complex, entrenched, and longstanding some of the disputes have been. The panelists and other conference participants discussed a variety of factors important in bringing the negotiations to successful conclusion with a signed settlement. Three factors stand out. First, the benefits must outweigh the costs, both at the “micro” level and at the “macro” level. Second, appropriate negotiation processes must be employed. And third, there must be a deadline.

### **Benefits Exceed Costs**

It is doubtful that settlement negotiations could be brought to successful conclusion unless the benefits generally exceed the costs for each of the parties to the agreement. This condition must hold at the level of individuals, or “micro” level, and at the policy, or “macro” level for the organizations involved in the settlements. For example, for a water rights claimant, the benefit of having a documented water right (including size, priority, and point of diversion) obtained through a settlement must compare favorably relative to the right the claimant might have expected through a normal adjudication litigation process, after accounting for the costs involved in each of the processes. If this condition does not hold, then other compensating factors, such as government funding for water projects or buyouts, must be present to create an incentive to settle. Similarly, the benefits must exceed the costs for each of the government agencies, Indian tribes, acequias, irrigation districts, and other organizations involved in the settlement, or they will have no incentive to sign on to the agreement. In the Aamodt case in January 2005 the federal government evidently felt that its costs, in terms of federal funding, would be too high, sending the negotiators back to the table.

Risk and time preferences may also be a factor. Water rights holders might be willing to reduce their claims because

they prefer smaller certain rights now over potentially larger but uncertain rights in the future. They may also be willing to reduce their claims because they prefer smaller rights that they can use or sell now instead of larger rights later. Another explanation offered at the Dialogue meeting is that water rights holders may simply have grown weary of the seemingly endless litigation process.

The emergence of water markets has likely increased the value of having water rights that are documented. Water markets may also provide incentives to settle by enabling junior rights holders with higher economic values for water to purchase water from senior rights holders with lower economic values for water, providing an outlet for concerns by juniors (such as municipalities) that they will not have a way to access water in the event priority administration is needed to deal with a shortage.

### **Appropriate Negotiation Processes**

Appropriate negotiation processes appear to be a critical factor. There is a lot of literature on alternative dispute resolution, and the topic is too large to be fully addressed here. A few key items particularly relevant to these settlements include cultural considerations, managing the complexity of the dispute, and balancing transparency and fairness against the need to have a manageable number of people involved in the actual negotiation.

Effective negotiation processes offer some cultural advantages over litigation. First, the process of negotiating a settlement rather than trying to resolve issues through the courts may be more sensitive to cultural issues; for example, settlement negotiations offer sovereign Indian tribes the opportunity to negotiate directly with state and federal government. Second, face-to-face negotiations can better enable the parties to express the subtleties and nuances of different cultural values than can the more

adversarial and dualistic (“either-or”) language of litigation. Third, negotiations can permit the incorporation of cultural values into the settlement, such as the acequia tradition of shortage sharing rather than cutting off juniors, or the deeply-held value that land and water should not be separated.

Properly designed and managed negotiations provide a way to deal with the complexity of Indian and other undocumented water rights, and they can offer an expedited approach to adjudicating basins with large numbers of rights holders. Transparency and fairness are key though; secret negotiations and a perceived lack of transparency reportedly contributed to delays in bringing at least two of the settlement agreements to successful conclusion.

### **Deadline**

Another important factor in reaching agreement appears to be the existence of a deadline, such as a court order or other government-imposed restriction. In the Gila, as the Arizona Water Settlements Act was proceeding through the federal system on its own timetable, those in the New Mexico portion of the basin had to act promptly or risk losing their water to Arizona. In the Pecos, the deadline was set by the Supreme Court order to comply with the Pecos River Compact deliveries or risk losing local control of water management. Real or perceived expiration dates on the availability of funding may also serve as a deadline. Explanations offered as to why settlement agreements involving Indian claims seem to be on the increase included the possibility that future federal funding for water settlement agreements may be threatened by large federal budget deficits and, in the case of New Mexico, the rumored retirement of the state’s senior senator puts a perceived time limit on federal subsidies to the state.

Although the above explanations provide insight into what the important factors might be in initiating negotiations



*State Engineer John D'Antonio talks about lessons learned from regional experiences.*

and bringing them to successful conclusion, none of the explanations alone appears to be complete. There are many more variables present than there are data points, so drawing firm conclusions is risky at this point. It is likely that the complete explanation will involve more than one of the factors described above, and it is possible that some factors will turn out to have little or no effect. It is also possible that other factors not considered here will turn out to be significant.

## Implications for the Future

It appears that negotiated settlements have the potential to be used more frequently to resolve difficult water rights adjudications or other disputes involving the allocation or reallocation of scarce water in New Mexico and the rest of the western U.S. Adjudication has yet to begin in the most populated, most complex, and possibly most over-

allocated basin in New Mexico, the Middle Rio Grande. Even if adjudication could be accomplished in a timely manner through the traditional litigation process in this basin (which is doubtful), it could result in a large number of high-value junior users cut off from water due to the over-allocation. While well-functioning water markets could possibly alleviate this problem by reallocating water from “low-value” to “high-value” uses (assuming the hydrology is compatible and/or means of conveyance exists), it is not clear what the environmental externalities or third-party effects to agricultural communities would be or how those costs might be accounted for in a simple market.

If negotiated settlements are to be used on a more regular basis, there are a variety of questions that may need to be answered first. One group of questions revolves around how the outcomes of a settlement agreement differ from the outcomes of adjudication:

What do the various rights holders give up or gain in the settlement as compared to what they could have expected from the normal litigation process? What wealth transfers are required, both within the basin and from outside the basin?

Another set of questions relates to the process of negotiating settlement agreements: What precipitates settlement negotiations? Under what circumstances is negotiation chosen over litigation, and vice versa? How, after decades of intense conflict, are negotiations conducted successfully? What needs to change to enable ending long-standing conflicts? What sorts of institutional arrangements will be necessary to make them work? What institutional changes will the settlement agreements in turn cause?

A third set of questions regards the attributes of a successful settlement.

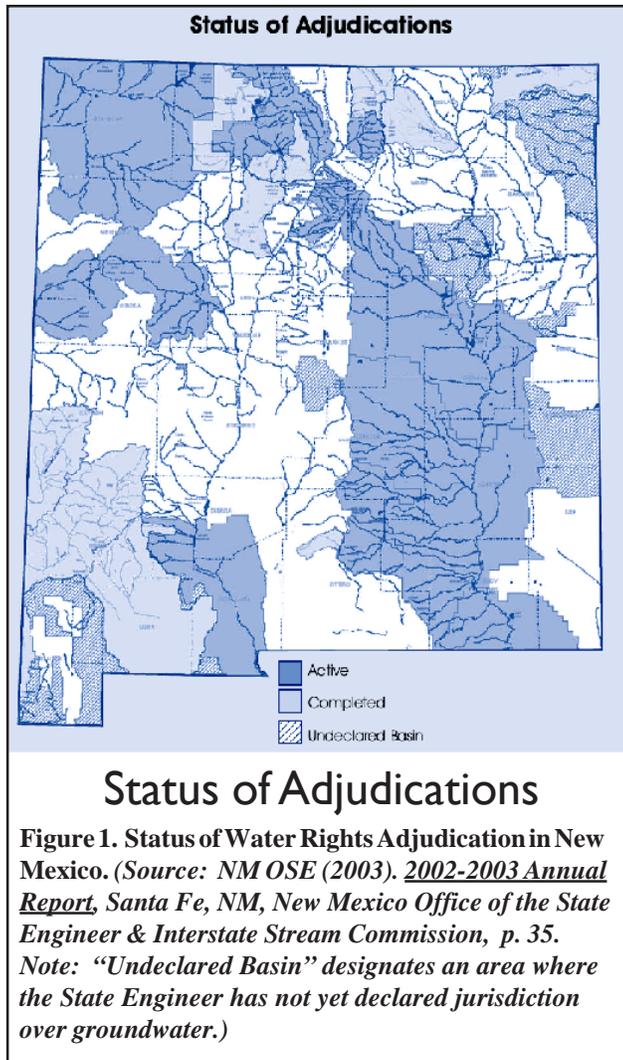
What makes settlements possible; specifically, what are the necessary and sufficient conditions to achieving a successfully negotiated and signed agreement? What makes settlements likely, that is, what factors lead to successful conclusion (signing) of settlement agreements? Similarly, what makes settlements unlikely, that is, what factors are indicative of unsuccessful negotiations (no signed agreement)?

A fourth set of questions regards what makes settlements desirable. That is, under what conditions is negotiating a settlement agreement a better approach than the standard litigated adjudication process? Are there common principles that if followed can produce fair outcomes? These are normative questions, and answering them requires definitions of “better” and “fair” – things that are likely to have quite different meanings depending on the value systems of the different stakeholders in the process.

*Elizabeth Richards is an engineer with Sandia National Laboratories. She is currently pursuing a Ph.D. through Stanford University's new Interdisciplinary Graduate Program in Environment and Resources (IPER). Her focus is on economics and institutional analysis, and New Mexico's water rights settlement agreements are the subject of her dissertation. She welcomes feedback on this article or other information relevant to the water rights settlements. She may be reached at*

*Sandia (ehricha@sandia.gov,  
505-844-6951)  
or Stanford  
(beth.richards@stanford.edu,  
650-450-0154).*

## Water Rights Adjudication Hindered by New Mexico's Complex History



Water management in New Mexico is complicated by the state's history of Native American communities that go back 1000 years, Spanish colonial land-grant communities that go back 400 years, a period of Mexican rule, then U.S. territorial status, and finally statehood starting in 1912. The water laws and management practices in use today evolved throughout this history. Since 1907, a permit from the State Engineer has been required to divert water and put water to beneficial use, but there are numerous pre-1907 water rights. Many of these rights have been in place for centuries, some before written records or water laws; accordingly, many water rights are undocumented.

New Mexico's complex history has made it extremely difficult to adjudicate water rights in some places. Water rights on Indian lands and reservations in New Mexico are particularly complicated because they may involve one or more of three different water law doctrines: pueblo historic use water rights, federal reserved water rights, and/or water rights established under New Mexico state law. In some basins in New Mexico — including the San Juan, Lower Pecos, and Pojoaque — the water rights adjudication litigation is decades old, is exceedingly complex, and can represent intense conflict among the parties. While some adjudications have proceeded through the litigation process successfully and with little fanfare, others have been stalled due to stalemates and/or a lack of resources to complete them. As shown in Figure 1, the process has been completed in only a few basins. While adjudication is being actively pursued in some basins, it is not being pursued in many others. As long as water supplies are adequate, having unadjudicated water rights is not a large concern except perhaps when documented rights are needed for functioning water markets or other water transfers. But when there are shortages, having known and quantified water rights is critical to administering the prior appropriation system.

**Acknowledgements:** Thanks to Susan Kelly, Utton Transboundary Center, for her talk on local values and the SWP public process, and Amy Goodin, UNM Institute for Public Policy, for the latest water survey data.

Thanks to the Gila River Basin (Arizona Settlements Act) panelists Craig Roepke—ISC, Rodney Lewis—Gila River Indian Community, AZ, Tom Bates—SW Regional Water Plan Steering Committee, and Dutch Salmon—Gila Upper Water Shed Conservation Coalition.

Thanks to panelists speaking on The Lower Pecos: Fred Hennighausen—Legal Consultant, Pecos Valley Artesian Conservancy District, Wesley Menefee—President Pecos Valley Artesian Conservancy District, and Estevan Lopez—Director, NM Interstate Stream Commission

Thanks to discussants Gilbert Sandoval—Jemez River Basin Chairman, and Elaine Hebard—Rio Jemez y Rio Puerco sub-regional water plan facilitator, for their update on the Jemez river valley since the settlement.

Thanks to the San Juan-Navajo Settlement panel: Stanley Pollack—Special Water Rights Counsel, Navajo Nation, Randy Kirkpatrick, San Juan Water Commission, and John Whipple—Engineer, NM Interstate Stream Commission.

Thanks to the Aamodt Settlement panelists John Utton – Attorney for Santa Fe County, Peter Chestnut—Attorney for the Pueblos, DL Sanders—Chief Counsel, Office of the State Engineer, Larry White—Attorney for the Community Ditches, David Ortiz—Chairman, Bd. of Directors, Pojoaque Valley Irrigation District; and board member, Rio Pojoaque Acequia Assn.

And finally, thanks to State Engineer John D'Antonio who spoke about Lessons from Regional Experiences, and ISC director Estevan Lopez speaking on implementation of the State Water Plan. And thanks to our meeting facilitator Lucy Moore, who has been with the Dialogue since its formation.

## Work Plan Progress

By John R. Brown, Executive Director, NM Water Dialogue

The ISC completed a State Water Plan (SWP) by the end of 2003. Though we called it a good start, it was immediately clear that important issues were not adequately addressed. The Dialogue's annual statewide meeting in January 2004 focused on "unfinished business" in the adopted SWP (see *Dialogue*, July 2004). It also became evident that most regional water plans (RWPs) share with the SWP two major failings. First, they do not specify criteria to guide the State Engineer in deciding whether applications for water transfers are consistent with "the public welfare of the state" and should be approved. This failure threatens to undermine the basis for regional and statewide planning efforts: to establish working rules to regulate market-based water transfers decisions on the public's behalf. Second, the SWP and most RWPs are silent on the effects of New Mexico water law's "use it or lose it" rules that shape New Mexicans' incentives, thwarting effective conservation practices. Our work plan outlines projects that address both these issues. The Board has created committees to oversee and monitor work on both projects.

The Water Transfer Policies Project

(WTPP) aims to recommend policy changes to strengthen consideration of public values in water right transfer decisions. In the first phase we have reviewed relevant portions of all the adopted RWPs and plans in progress (thanks to the ISC's RWP Coordinator Mary Helen Follingstad), and are looking at whether the plans relate local public values and priorities to local hydrological realities, so that they can serve as a guide to the State Engineer in making transfer decisions. A UNM student intern, Genevieve Sadler-Trainor, who has since graduated and taken a full-time job, undertook the initial research. In the next phase, beginning this fall, results of this research will be presented in a series of workshops with stakeholder-based regional planning groups, who will examine potential changes in their own plans and in the state water plan that can make operational the public welfare provisions of state water law. Workshop outcomes, finally, will be presented to state agencies and legislative committees for appropriate administrative and legislative actions.

The Water Conservation Incentives Project (WCIP) has been more difficult to implement than originally thought, in

part because of conflicting understandings of the meaning of conservation and of the public and private purposes it should serve. The Executive Director discussed these issues with the ISC Director in June. The Board's WCIP committee explored them in mid-July with a group of NMSU faculty working on institutional barriers to conservation, and plans to meet with UNM resource economists in August. These meetings are a prelude to a series of workshops focused on the Middle Rio Grande region to involve stakeholders, agency officials, and "experts" whose work and livelihoods will affect and/or be affected by rules that provide incentives. These meetings have forced us to rethink the design and the objectives of the workshops. Although a list of potential invitees had been prepared in the spring, invitations were never issued and the workshops have been rescheduled tentatively for November, January and March.

NOTE: More information about our work plan, upcoming events, and about the New Mexico Water Dialogue itself will soon be available on the Dialogue's new Website, which should be accessible by mid-August. Visit the site at [www.nmwaterdialogue.org](http://www.nmwaterdialogue.org).

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The *Dialogue* is a publication of the New Mexico Water Dialogue. Executive Editor: John R. Brown. **Board of Directors:** Cyndie Abeyta, Albuquerque, Beth Bardwell, Las Cruces, Ty Bays, Silver City, Michael Benson, Ft. Defiance, Consuelo Bokum, Santa Fe, Brent Bullock, Roswell, Oscar Vasquez Butler, Las Cruces, John Carangelo, La Joya, Paula Garcia, Mora, William Gonzales, Las Vegas, Brian Greene, Mountainair, Elaine Hebard, Albuquerque, Janet Jarratt, Los Lunas, Dick Kreiner, Los Lunas, Leanne Leith, Albuquerque, Charlie Lujan, San Juan Pueblo, Mary Murnane, Albuquerque, Ernest Mirabal, Nambé Pueblo, Kendyl Monroe, Seneca, Jack Milarch, Albuquerque, Jacob Pecos, Pueblo de Cochiti, Tom Shelly, Tyrone, Frank Titus, Albuquerque, Mark Werkmeister, Rio Rancho, Jean Witherspoon, Albuquerque. Layout and production: Kathleen Grassel. Funded in part by the General Service Foundation and the McCune Charitable Foundation. Copyright ©2005. All rights reserved. Send comments, letters, and contributions to: John R. Brown, New Mexico Water Dialogue, PO Box 1387, Corrales, New Mexico 87048, email [jrb@osogrande.com](mailto:jrb@osogrande.com)

## Thanks to All Contributors

The Dialogue Board appreciates the individuals and organizations that support the organization and make our work possible. Our current foundation funders are the **McCune Charitable Trust**, the **Messengers of Healing Winds Foundation**, and the **Healy Foundation**. Our organizational and individual donors and subscribers are listed below. The Board extends its gratitude to all.

**Special Recognition (gifts of \$100 or more):** Phelps Dodge Mining Company, Janet Jarratt and Gregory Titus, Beth Bardwell, Lucy Moore, Vickie Gabin, Chris Garcia, Consuelo Bokum, Elaine Hebard, Trudy Healy, New Mexico Acequia Association, John Hawley, Hennighausen & Olsen LLP, Leanne Leith, Kendyl Monroe, Mary Murnane, NM Water Resources Research Institute, Amigos Bravos, William Turner, Robert Wessely.

**Contributors and Institutional Subscribers:** Leslie Kryder, Eddie Roberts, Robert Armstrong, Cyndie Abeyta, Gallup Joint Utility, Cooperative Extension Service Bernalillo County, Russell Baker, Mary Helen Follingstad - NMISC, Louis Jenkins - City of Deming, Susan Kelly -Utton Transboundary Research Center, Estevan Lopez - NMISC, Gene Paulk - City of Las Cruces, Jeff Radford – Corrales Comment, Loren Schoonover – Anthony Water and Sanitation District, John Shomaker & Associates, Lee Tillman – Eastern Plains COG, Frank Titus, Lee Wilson & Associates, Jean Witherspoon, Jicarilla Apache Nation, North Central New Mexico Economic Development District, Office of Senator Jeff Bingaman, Waldo Anton - AARP, John Cordova, Joe Culbertson, Gina Dello Russo, Jay Groseclose, Fred Hashimoto, Tom Ross, Stephen Snyder, Peter White, Stephen Bockemeier, Jessie Fitzgerald, Aileen Gatterman, Mark Jones, Evelyn Losack, Carol Pittman, Lisa Robert, Peggy Schwebach, Paul Bauer, Stephen Benjamin, John Carangelo, Kristan Cockerill, Tom Davis - Carlsbad Irrigation District, Donald Dayton, R. Edmund Gomez – NMSU/ CES, Rebecca Greaves Tydings–Rio Grande Nature Center, Sylvia Hawley-Gutierrez, John Hooker, Alan Marks, Jane Petchesky, Ti Piper, New Mexico Farm Bureau, NM Cattlegrowers Association, Socorro SWCD, Tres Piedras MDWCA, The Navajo Nation

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The New Mexico Water Dialogue  
PO Box 1387  
Corrales, New Mexico 87048

Non-Profit Organization  
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Albuquerque, NM  
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