

## Economic Stress: Hard Times for Water Planning and Management

*N.M. Water Dialogue's 17<sup>th</sup> Annual Statewide Meeting*

*Summary by Lisa Robert*

Water planning requires at least a little knowledge about some pretty intimidating subjects, including earth sciences, resource law, regulatory policy, and of course, economics. That last category is in many ways the most impenetrable, and yet it remains the yardstick by which most of our water “options” are weighed.

Given her considerable ability to make a tough topic accessible to non-experts, University of New Mexico economics professor Dr. Janie Chermak proved an ideal keynote speaker for the Dialogue's 2011 statewide meeting in January. A familiar voice in resource management circles since her arrival at UNM in 1995, Chermak gets straight to the point: “I'm not sure if our current economic downturn is really the problem, or if, when it comes to water, we're *always* in hard times.”

Even before the recent recession, the nation's annual economic growth was only about 2%, a statistic Chermak labels “not particularly robust.” Between 2007 and 2008, there was a 3.4% drop in individual taxes paid, and by 2009, federal tax revenues had declined by 21%. On the expenditure side, nearly half of the \$356 billion that federal, state and local governments put toward public infrastructure in 2007 went to highways, while other transportation needs accounted for 23%, and 28% went for water and wastewater projects. Half of that money went to keeping existing infrastructure running, and since 1980, in-



*Keynote speaker Janie Chermak speaks of hard times as the norm in the Southwest.*

frastructure expenditures at the federal level have flattened, shifting the burden to state and local governments. Federal dollars now go almost exclusively to highway and transportation, squeezing out water and wastewater needs, both in terms of capital expenditure for new infrastructure, and for ongoing O&M. At the state and local level, a similar trend is apparent, with a disproportionate amount of the money allocated to water resource needs being spent on maintaining what we have, not replacing what we need; i.e., replacing or updating aging infrastructure.

“In the time I've worked on water issues,” Chermak summarizes frankly, “I don't know when we've had *good* economic times. I see flat-to-declining bud-

gets. I see increased dollars going to O&M. I see aging infrastructure. And I don't know how to look at this without saying we're always going to be playing catch-up.”

The collective response to being in hard times favors expediency over long-term solutions. Chermak references the Deep Water Horizon disaster, and economist-voiced fears that a moratorium on drilling would cost billions in lost wages, lost jobs, lost tax revenues, and lost economic activity at the federal level. She says that was a “penny-wise and pound-foolish” reaction focused only on the financial portion of the problem, and not on future consequences. “If we had been in robust economic times,” she wonders, “would the moratorium have been for more than six months?” Without so much emphasis on economic outcomes, might we have used the opportunity to make decisions that forestall future accidents?

The shale gas debate offers another example of immediate benefits versus more durable solutions. New technology for accessing natural gas in shale deposits has the potential to significantly extend the nation's fuel reserves; on the downside, a “tremendous amount of water” is used to complete and operate those wells. So far, Pennsylvania is the only state to establish regulations for treating and releasing such “produced” water into its river systems. Overall, there has been no environmental impact



### Spring 2011

The *Dialogue* is a publication of the New Mexico Water Dialogue.

#### Board of Directors:

**Aron Balok**, Roswell  
**Michael Benson**, Ft. Defiance  
**Consuelo Bokum**, Santa Fe  
**John Brown**, Corrales  
**Carlos Bustos**, Albuquerque  
**Aaron Chavez**, Farmington  
**Eileen Dodds**, Datil  
**Gary Esslinger**, Las Cruces  
**Alan Hamilton**, Lamy  
**Simeon Herskovits**, Taos  
**Jason John**, Navajo Nation  
**John Jones**, Estancia Basin  
**Charlie Lujan**, Ohkay Owingeh Pueblo  
**Maceo Martinet**, Albuquerque  
**Mariano Martinez**, Doña Ana  
**Kendyl Monroe**, Seneca  
**Mary Murnane**, Albuquerque  
**Alex Puglisi**, Santa Fe  
**Lisa Robert**, Los Lunas  
**M.H. (Dutch) Salmon**, Silver City  
**Frank Titus**, Albuquerque  
**Bob Wessely**, Las Vegas

#### Layout, production, photos:

Kathleen Grassel

#### Printing:

Downtown Printing

**Website:** [www.nmwaterdialogue.org](http://www.nmwaterdialogue.org)

Major funding for the *Dialogue* is provided by New Mexico Water Initiative, Rio Grande Return, and anonymous.

Copyright ©2011. All rights reserved.

Send comments and letters to:

Consuelo Bokum, Editor  
 New Mexico Water Dialogue  
 1300 Canyon Rd.

Santa Fe, New Mexico 87501

Email: [bokatz@cybermesa.com](mailto:bokatz@cybermesa.com)



## Update from the President



*by Mary Murnane, President, Board of Directors*

This is always my favorite issue of the New Mexico Water Dialogue Newsletter. It's the one that summarizes the Dialogue's annual statewide meeting, and every year I come from the annual meeting encouraged by the participation of all the attendees, and hopeful that dialogue will enable us to manage our water resources as a community. This year was no different. The combination of a dry winter in much of the state, a new administration in the Governor's office, statewide budget woes, and uncertainty over the impacts of increasing temperatures and population all seemed to make this year's annual meeting especially compelling.

At the March Water Dialogue Board meeting, the Board offered strategies for moving the discussions begun at the annual meeting forward. As a completely volunteer organization, it is a struggle for us at times to maintain continuity in our activities in support of public participation. Suggestions made by board members at the meeting were to take a brief poll of attendees to determine priorities, to develop guidance documents and information for policy consideration, and to continue discussions initiated at the meeting. The mission of the Water Dialogue is "to promote the wise stewardship of water resources in New Mexico through creation and support of open, inclusive and democratic public processes that work toward the development of common ground."

Since the annual meeting, there has been no precipitation to speak of in the state. Snowpack has evaporated, and reservoirs and rivers are very low. The legislative session revolved around budget negotiations and spending cuts. Other than newspaper articles about projected water shortages, there have not been considerable statewide discussions about water policy. Despite the recent court case rulings and the physical constraints on our water supply, public thought and action about water seem largely absent. Hopefully, a more considered review of the purpose and intent of the Water Dialogue annual meeting can help to propel an on-going discussion with communities and water users about our water future. As John Leeper extolled us at the annual meeting we have to "take the discussion out of this room and into the public." Every member of the Dialogue can help in this effort.

HARD TIMES—*Cont. from page 1*

study to determine the soundness of the process or its long-range effect on water quality, even as increased levels of bromide and chlorine disinfectants are showing up in streams—a combo that results in trihalomethane, a substance associated with cancer. “So we have a decision with short-run economic benefits, but potential long-term impacts. Have we really analyzed this from a dynamic perspective? Is this truly a good economic decision?”

Local governments are also facing major economic problems, and Chermak notes a developing trend: forty communities across the country are considering privatization of their urban water systems, a change that could affect 11 million people. Budget shortfalls are the key driver in every instance, she says, and privatization offers “some insight into things that need to be considered.” In 1999, overwhelmed by an 80% increase in population and the accompanying stress to its infrastructure, the City of Atlanta entered into a 20-year contract with the second largest private water provider in the world. The hope was that a “profit-motivated” company would improve existing infrastructure and service while saving the city money. Atlanta terminated the partnership after only four years, however, because costs, service and system upkeep had all sharply deteriorated. “Markets can be good,” Chermak says, “and privatization can work, but it’s not a silver bullet...” Public and private objectives need to be aligned, and both present and future impacts have to be taken into account.

New Mexico faces its own share of hard times. The American Society of Civil Engineers reports that 19% of the state’s bridges are structurally insufficient; there are 181 high-hazard dams; 167 dams are in need of rehabilitation; drinking water infrastructure is going to require nearly a billion dollars in improvements over the next 20 years; and there are \$160 million in wastewater needs. “That’s not because of the economic downturn,” Chermak says; it stems from the last 50 years worth of planning and management, from the fed-

eral to the local level. State revenues are down, just as they are across the rest of the country, and in the future, New Mexico’s oil and gas industry may not be able to generate the same level of income as in the past.

*What is the probability of a resource infrastructure failure? How many times have I heard a quote like, “Who would have EVER thought that would happen!”—Janie Chermak, UNM economics professor*

Coping with this perfect storm means acknowledging some inherent economic truths. “Water management is not a static problem. You can’t just say, “If I make this decision today, I’ll make \$600 million.” What happens over the horizon? What’s the probability of infrastructure resource failure? What are our needs, what is our supply, and what are the limits to the system? What is the objective of planning in the first place? We have tended to look at water as a legal issue, or a social issue, or an economic issue, or an environmental issue, or an engineering issue, but it’s not any one of those things singly. It’s all of those things *combined*.” If in terms of water we’re always in “hard times,” then good management demands that we think in an integrated way.

#### **Panel 1: Recent Impacts of Economic Stress**

That need for integrated thinking was clearly underscored by a panel discussion on what moderator John Fleck of the *Albuquerque Journal* called “an important set of questions about economic stress, its impact on growth, and the relationship between growth, water and land use in communities.” Architect **Dale Dekker**, of Dekker, Perich and Sabatini, says the four-county area served by the Rail Runner currently has a little over a million people, but between now and 2035, that number is projected to grow by over 624,000. “We’re going to build a new city in the next 25 years, and we’re going to have to change.”

Water and energy-efficient construction tops the list of adjustments we’ll need to make, and Dekker offers as an example his firm’s Gold certified building, which saves some 600,000 gallons of water a year. Transportation must also be figured into the growth equation. A “Business As Usual” scenario developed by the Mid Region Council of Governments predicts that with most jobs located on Albuquerque’s east side, and growth projected to occur on the west side, there will be a million more river crossings per day by the year 2035, requiring 28 additional traffic lanes across the Rio Grande. The solution, Dekker thinks, is “a live/work/play smart-growth community.” Westerners need to get used to the idea of density, he says, because it reduces traffic, consumes less water and less land, produces less greenhouse gasses, and uses energy more efficiently. “It’s about providing a balance between man’s footprint and nature.”



**Dr. Lee Reynis**, Director of the Bureau of Business and Economic Research at UNM, described New Mexico’s economy as the context for talking further about policy. The state’s population is now over two million, according to the latest census, and recession can be measured in a small population state by looking at employment decline. Reynis considers the current downturn “the deepest and the darkest that we have

HARD TIMES—*Cont. on page 4*

HARD TIMES—*Cont. from page 3*

seen,” and although New Mexico is somewhat insulated due to a high percentage of payroll employment in government, the recession has been felt in exports, investments, the denial of access to credit, and in the sharp fall of commodity prices. Slow to enter the recession, but also “slow on the uptick,” New Mexico ranked 49<sup>th</sup> last year in terms of job growth. Sectors suffering the greatest job loss were construction, professional business services, manufacturing, retail trade, and mining. 2009 was also particularly “devastating” for the dairy industry. In addition, “all three levels of government showed year-to-year declines reflective of this fiscal crisis. Growth is expected to stay at around 1%, and we’re not likely to achieve that same level of payroll employment until the end of 2014.” In addition, with the American Recovery and Reinvestment Act about to expire, the state will lose the federal funds it has been using to prop up the budget, and “that’s the context for political pressure to dismantle regulations and shift resources.”

**Denise Fort**, a professor at the UNM School of Law and a member of New Mexico’s Water Trust Board, wonders if the state’s money is being spent in the “best places.” The Trust Board doesn’t pay for projects from the General Fund,

she points out. By constitutional amendment, 10% of the state’s Severance Tax Bond Fund has been set aside for water projects; a second revenue stream derives from a \$40 million Water Trust Fund; and a third, smaller fund established by a private donor exists specifi-

the Trust Board, she’s concerned that conveyance projects may not represent the “greatest value for the citizens of New Mexico.” There’s really been no shortage of funding for large water projects, she argues. Thanks to its U.S. senators, New Mexico has received “a



*Law professor Denise Fort, with architect Dale Dekker and policy analyst Lee Reynis, favors a more practical allocation of existing monies.*

cally for acequia projects. In 2010, a full 62% in Water Trust funds was recommended to go to “big water conveyance projects” with just 8% to be expended on watershed management to encompass salt cedar removal programs and a variety of restoration projects; 29% was provided to conservation projects that allow saved water to be applied to other purposes; the remainder supports flood prevention. “It’s the first category that gives me the most question,” Fort says. As the environmental representative on

healthy ratio of federal money for state money.” What is lacking, in Fort’s estimation, are the “institutional tools to ask whether the benefit from these projects is worth the cost. NEPA analysis happens way down the line, after the state has already made a commitment, after the projects have been drawn up, after the communities have become invested, and after the consultants are working hard on lobbying for these projects.”

**Peter Russell**, Community Development Director for the Town of Silver City, says his community’s economy has four principal pillars: mining, public service, retail sales, and a growing retirement community. The recession has been particularly felt in regard to unemployment, which reached 13% in 2009, with the greatest impact being to the mining sector. Copper prices are slowly recovering, and unemployment is now around 10%. “What’s interesting to me,” Russell says, “is that we’re this little isolated community in the southern part of the state, and yet our economy depends on decisions made in China about purchasing copper, or the decisions made by the mine owners about



*Peter Russell of Silver City talks about regional economy followed by Utton Center’s Susan Kelly and Santa Fe County’s Duncan Sill.*

## Protests Drown Out Attempted Water Grab

by Eileen Dodds

The San Agustin Plains and its environs provide habitat for large herds of elk, pronghorn antelope, and numerous small game. Bear and cougar also call it home, and the southern Plains is part of the territory of the reintroduced Mexican grey wolf. Approximately 800 people live here as well.

Ghosts of ancient archaeological sites share space on this giant Pleistocene lakebed with the Very Large Array (VLA) radio telescope, where scientists listen to the cosmos.

Ranching took root in the 1870s, and descendants of those early families are still here, carrying on the traditions of their forefathers in this unforgiving land. Communities, too, have grown up on the edges of the Plains. People came here to be left alone, governing their lives according to their own individual ideas. Self-sufficiency was and is a way of life, but neighbors can be counted on to help each other in times of trouble. Politics are not always important, but water is.

This way of life is now under siege. A speculator has come into our midst who is not planning to use the water on his land for his own use. He plans to sell it to third parties for profit, and pump it far away from the San Agustin basin. If he is successful in his efforts to pump huge amounts of water out of the San Agustin basin, lack of groundwater will destroy a way of life that has been carefully nurtured over the last century and a half.

The Augustine Plains Ranch, LLC (hereinafter APR) filed an application (RG-89943) with the Office of the State Engineer (OSE) in October of 2007 to

permit the appropriation of groundwater in the Rio Grande Underground Water Basin by drilling 37 wells to depths of 2,000 feet “with the intent of diverting and consumptively using 54,000 acre-feet of groundwater per annum for domestic, livestock, irrigation, municipal, industrial, and commercial purposes, to include providing water to the State of New Mexico to augment its capacity to meet the Rio Grande Compact deliveries to the State of Texas...at Elephant Butte dam...to offset effects of groundwater pumping on the Rio Grande in lieu of retirement of agriculture via pipeline to the Rio Grande.”

In an effort to put this water mining proposal into perspective, 54,000 acre-feet is about 17.6 billion gallons of water to be removed from the ground and sent out of Catron County every year until it is gone. Albuquerque Public Works data showed 2008 usage for all of Albuquerque and greater Bernalillo County to be 32.3 billion gallons for its population of about 550,000. Therefore, the APR expects to mine, sell, and transport away from the Plains enough water to supply half of Albuquerque. Every year. Until it's gone.

This initial application drew over 500 protestors, including the Middle Rio Grande Conservancy District, the Interstate Streams Commission, the VLA, State and Federal agencies, the Pueblos of Acoma, Santa Ana, Isleta, Sandia, and San Felipe, the Navajo Nation, the U.S. Department of Justice, and many citizens of Catron and Socorro Counties, to name but a few.

APR filed an amended application in May 2008, repeating the initial parameters, and adding possible use of the

water for “environmental, recreational, subdivisions, and other related areas.” They also increased well depth to 3,000 feet in an attempt to circumvent the then-existing State Engineer’s lack of jurisdiction of water below 2,500 feet. This drew an additional 450+ protestants from all over the state, making this the largest number ever to object to any application.

This water would be sent down the Rio Grande to Texas, or sold to developers or others, with little regard for the rural communities and wildlife habitat it will impact. Several attorneys representing the interests of the protestants have deemed this application vague and speculative, and have called for it to be denied. According to Bruce Frederick, staff attorney for the New Mexico Environmental Law Center, “By law, no corporation or any other person can monopolize or hoard an entire supply of free public water for the purpose of speculative future sales.” (*El Defensor Chieftain*, 2/23/11)

Mr. Frederick, who represents about 80 of the protestants, filed a motion to dismiss this application, as has Steven L. Hernandez and Samantha R. Barncastle, who represent the MRGCD. The APR has until April 15, 2011, to file written arguments with the OSE refuting the motion to dismiss, and replies to those arguments are due by May 15, 2011. Oral arguments before an OSE hearing officer are tentatively scheduled for the week of May 20, 2011 at a place not yet determined. Given the speculative nature of the application, there is a good chance the motion to dismiss will be granted as it was in the Berrendo application (see report on page 6).

## Berrendo Application Dismissed by State Engineer

by *Consuelo Bokum*

In 2009, Berrendo LLC filed an application with the Office of the State Engineer to pipe groundwater from De Baca County near Fort Sumner to the Rio Grande. The application stated that the water may be applied to beneficial use by the city of Santa Fe, will be used by the city of Rio Rancho, and to other users to be specified at a future time.

Numerous parties protested the application including the Pecos Valley Artesian Conservancy District, the Carlsbad Irrigation District, US Bureau of Reclamation, NM Interstate Stream Commission, Chaves and Eddy counties, Roswell, Artesia, Dexter, Hagerman, and the Village of Fort Sumner, and the

NM Farm and Livestock Bureau among others.

An Order issued by the Office of the State Engineer on February 8, 2011 denied the application. The Order found that the co-applicants were not ready and able to put the water to beneficial use and that the application lacked “specificity” as to the actual location or use of the water and to be “so vague and overbroad” that making an evaluation of the impacts of the transfer is unreasonable. The Order was in response to a motion to dismiss filed by the PVACD which was joined by numerous other protestants. The Office of the State Engineer’s Order has been appealed by the applicant.

An application filed by the Agustin Plains Ranch similarly fails to identify specific uses for the water to be transferred. Hundreds of protests were filed and a motion to dismiss similar to that filed in the Berrendo case was filed by the Middle Rio Grande Conservancy District in February 2011.

It is unlikely that the applicants will prevail based on the existing applications. However, the applications can be amended in ways that will allow them to be considered rather than dismissed. At that point, protestants can challenge the applications on other grounds including impairment, conservation and public welfare.

---

## 2011 Legislative Session: Water Bills Pass and Fail

by *M.H. Salmon*

Opinion concerning natural resource legislation is seldom unanimous, but I think it safe to say that the conservation lobby was generally pleased with the outcome of the State 2011 legislative session. Despite a host of anti-environmental bills introduced during the session, not a single “bad bill” made it to Gov. Susana Martinez’s desk while some “good bills” did pass.

Two water bills in particular are indicative of the good sense that pervaded the session, at least as regards conservation policy.

House Bill 225, titled Water Quality Control Act Revisions and sponsored by Rep. Andy Nunez, purported to “streamline” water quality protections. The bill’s Fiscal Impact Report reveals a more aggressive intent to eviscerate the Water Quality Control Commission (WQCC). In sum, the bill would have

transferred rule-making authority, and veto power over new rules, from the WQCC to the Secretary of the Environment or one of several “constituent agencies.” For example, rule-making authority for water quality as relates to the oil and gas industry would have evolved to the Oil Conservation Commission; for agriculture, to the state Department of Agriculture; for mining/water issues, to the Energy, Minerals and Natural Resources Department. Thus, as relates to water quality, power would shift from a mixed board representing various interests, to members of a governor’s cabinet often representing a particular interest or economic agenda. Despite the support of industry and the Governor’s Office, the bill died in the House Energy and Natural Resources committee.

House Bill 301, sponsored by Rep. Rudy Martinez, established the New Mexico Unit Fund to accept Federal dol-

lars totaling \$6.6 million per year over the next 10 years for water development or water utilization projects in Grant, Luna, Hidalgo and Catron Counties. The Unit Fund was necessary to establish that the funds and the interest accrued would remain as directed at local water projects that meet a water supply demand and not be diverted into the state general fund. The bill also made it clear the funds need not be spent on Gila River diversion projects, but rather also allows for spending on a variety of water utilization plans such as municipal or agricultural conservation, groundwater development and infrastructure projects, watershed restoration, etc. Of course, the bill does not preclude a contentious big water development on the Gila either. Each approach has its supporters and this is no doubt one reason that HB 301 got unanimous support in the House and Senate.

## Not Funded: New Mexico's Cost Share of the Aamodt, Taos and Navajo Nation Water Rights Settlements

*by Jason John*

The New Mexico Interstate Stream Commission and the Office of the State Engineer supported efforts to implement a funding mechanism to fund the State's cost share of the Aamodt, Taos and Navajo Nation Water Rights Settlements during this year's state legislative session. Sen. Carlos Cisneros (District 6 - Los Alamos, Rio Arriba, Santa Fe, and Taos) submitted Senate Bill 376 that would have funded the State's share of the settlements through the issuance of severance tax bonds. The bill would have amended the Severance Tax Bonding Act by temporarily allocating six percent of the estimated bonding capacity for fiscal years 2012 through 2021 to go toward the three water rights settlements.

The United States approved the water rights settlements within the Omnibus Public Land Management Act of 2009 and Claims Resolution Act of 2010. These bills were signed into law as Public Law 111-11 and 111-291, respectively.

The State's cost share of the Navajo Nation's water rights settlement is \$50 million. The State had already allocated approximately \$31 million in previous fiscal years for projects in the eastern portion of the Navajo Nation and the Gallup region that may get credited toward the State's share of the \$50 million. The funds would be used to support the construction of the Navajo-Gallup Water Supply Project which is estimated to cost \$870 million and have the capacity divert up to 37,760 acre-feet per year.

The details of State's cost share of the Aamodt water rights settlement is subject to the Cost-Sharing and System Integration Agreement. The Regional Water System project would deliver 4,000 acre-feet of water per year and consists of the Pueblo Water Facilities and the County Distribution System. The County Distribution System would convey 1,500 acre-feet. The cost of constructing the County Distribution System would be a non-Federal contribution. Public Law 111-291 authorized

\$106,400,000 to construct the Pueblo Water Facilities.

The State's cost share of the Taos water rights settlement is 25 percent of the Mutual Benefit Projects. The Mutual Benefit Projects are designed to provide grants to certain non-Pueblo entities for projects that would move future non-tribal groundwater pumping away from Buffalo Pasture and resolve disputes over surface water flows in the Arroyo Seco Arriba community. Public Law 111-291 authorized \$36 million for the Mutual Benefit Projects and \$88 million for the Taos Pueblo Water Development Fund. The Taos Pueblo Water Development Fund can be used to acquire water rights, develop water and waste water infrastructure, enhance Buffalo Pasture, administer water resources, and fund watershed activities.

The legislation was not approved during the 2011 legislative session. It will most likely be taken up again by the state legislature this summer or fall.

HARD TIMES—*Cont. from page 4*

whether to invest in Chile or the Congo.” Other manifestations of the recession were that the collapse of the housing bubble made it difficult to finance new home construction or to sell homes, which had a direct impact on retirees looking to relocate to Silver City, and the fact that the city’s gross receipts revenue declined by 10%. In regard to water resources, the town has only 4,500 acre-feet of water rights and pumps about 3,000 acre-feet a year, providing water to 10,000 people within the city, and an additional 10,000 in the surrounding county. To address future growth and the issue of insufficient water rights, the town is looking at several options, including tapping into an existing mining company water line to recharge the municipal well fields; developing a new well field using return flow from the wastewater treatment plant; and developing a regional water system to “tie everything together.” These projects are all beyond the local funding capacity, says Russell, “so when we look to the state and see declines in revenues and capital outlay, when we look to the federal government and see the decline in earmarks and federal programs that we qualify for but that are underfunded, we are quite concerned. Not only do we see economic stress making resources less available for our

large-scale, visionary projects, but even our day-to-day operations are likely to be affected as the state struggles to address its own revenue shortfall.”

**Susan Kelly**, Director of the Utton Center at UNM’s School of Law, talked about an ad hoc group that is examining the connections between land use and water supply. Regulatory problems identified by the group include subdivisions in the ‘family’ exemption category that escape review at the state level; thousands of antiquated subdivisions that were platted prior to present infrastructure requirements for water and roads; a lack of standardized building codes to promote water conservation and provide a level playing field for building contractors statewide; the persistence of standard urban lot sizes that support excessive water use; no standard calculation for determining a subdivision’s water supply, and no requirement for re-submission of the plan if the OSE finds the proposed supply inadequate; and a “gap” in the Subdivision

Act relative to extra-territorial areas outside municipal limits. In this period of tight budgets, the state might also revise the regional water planning statute to “mandate” local government review of water plans when considering new development or resource-related actions; require regions to report back to the Interstate Stream Commission on plan implementation; and encourage the consideration of regional public welfare statements when water transfers are proposed. “There are things we could do to massage our policies

that wouldn’t involve money,” Kelly says. “It’s a good time to think about developing some fair, evenly-applied prospective policy that might benefit us in the long run.”



*Duncan Sill presents ideas about use of green infrastructure.*

**Duncan Sill**, an Economic Development Specialist with Santa Fe County agrees with the notion that money is always available, but how it’s applied makes all the difference. “Green infrastructure is meant to be a multi-functional network of processes in space,” he explains. People tend to look at the components of green infrastructure ‘in silos,’ he says, but those components have to be *integrated* in order to yield public benefits—environmental, social and economic. Employing the principles of green infrastructure

doesn’t mean simply leveraging and harnessing ecological processes; it’s also about using what has already been constructed or what’s already in place. It can include waterways, wetlands, wildlife habitat, farms and ranches, acequia and irrigation systems, open space, green roofs and street side improvements. ‘Ecological economics’ is the attempt to integrate these different components to create a baseline against which to measure outcomes and approaches. “Conventionally,” Sill says, “when we look at return investment, we’re looking at the fact of *gain*. Everybody understands how you get a 5% return on something,” but expediency is not necessarily the most beneficial thing, especially at the community level, where “we’re seeing a lot of economic stress because we’ve relied on these types of formulas when making decisions.” To get beyond numbers, a decision framework needs to consider three things: the risk involved in investing or not investing; the actual cost of the infrastructure



*Q & A is a big part of every Dialogue meeting.*



HARD TIMES—*Cont. from page 9*

improvements; and how you measure value. The “triple E return” (environment, economics and social equity) is sometimes called the equation for sustainability, and yet, Sill says, “we continue to build *negative equity*” because beyond mere cost, there may be risks and values we haven’t considered. “You’re always going to have an impact, whether you like it or not, on the environment and on your community.”

### Keynote: Integrated Planning and Diminishing Resources

The Dialogue’s second keynote speaker of the day, **Dr. David Feldman**, Chair of the Department of Planning, Policy and Design at the University of California at Irvine, believes we face “three major challenges throughout the West, and increasingly throughout the world, in terms of water policy.” Those challenges are population growth and urbanization, infrastructure O&M, and climate variability—each of which requires a move toward integrated resource management, the process of “adopting the best options for providing water by augmenting supply and managing demand. You have to do *both*,” Feldman says. Two examples of “best options” may be wastewater reuse and water conservation.

Now that we are beyond the “era of big dams,” conservation is the most effective means of augmenting water supply. One way of ensuring that it works is “ratcheted phasing,” which begins with educating the public through the media and schools. “If you can get people to understand the reasons for conservation, then you can employ economic incentives in a workable manner, and you can even impose regulatory sanctions, fines, and other punishments.” The ‘low-hanging fruit’ model of voluntary conservation is prevalent in California, while the ‘mandatory/incentives’ model has served Tucson for many years. But unanticipated consequences always accompany water conservation, Feldman warns. “You can look at it one way and say, ‘Good

news! You grew, but you really didn’t use that much more water,’ or you can flip it around and say, ‘You saved a lot of water, so you’re taking advantage of it by continuing to grow.’” Other drawbacks that may accompany conserva-



*U of California's David Feldman broadens water policy challenges to the West and to the world.*

tion include “equity burdens,” wherein tiered pricing penalizes low-income residents, apartment owners, or those on a fixed income; meter installation costs may outweigh actual water savings; conservation can affect property values, and some communities may resist conservation for aesthetic reasons; and finally, cheap home prices, large lot sizes, and uniform water pricing often occur in concert on the suburban fringe. Fairness and environmental justice issues also dog conservation efforts, but Feldman notes there are programs that are attempting to “wed equity and public acceptability with a good public policy solution in water conservation.”

Recycled wastewater is already a familiar option across the West, whether as a non-potable source for irrigating municipal landscape, or as a highly treated component of public water systems. A “stigma” is still attached to the idea of drinking treated sewage, however, damaging a community’s self-image, arousing mistrust in government, and engendering concern over health risks and aquifer contamination. Like water conservation, reuse can also en-

courage additional growth. Perhaps the only surefire way to overcome the stigma, suggests Feldman, is to convince the public that there is no choice. Regional collaboration and consolidated water/wastewater systems are also options, but they too, carry “challenges.”

Finally, Feldman believes climate variability is indeed a threat to the southwest. The ever-expanding City of Las Vegas may have reduced per capita use, but its plan for coping with a deteriorating climate is to “import water from other places that are also suffering from the same climate change.” The notion that population and economic growth are the drivers of insatiable water demand should probably be flipped around, Feldman says. “Perhaps the reality is that inexpensive, subsidized water encourages population growth and profligate use in all the wrong places.”

### Panel 2: Updating the State Water Plan

State Engineer **John D’Antonio** summarized his office’s effort to review the 2003 Water Plan. An assessment was done several years ago on the 98 implementation strategies contained in the document, and statewide public meetings were held in 2009 to gather input about possible changes, but the agency has held off on completing the update given the likelihood of administrative change in 2011. Also, with 67 vacant staff positions in the State Engineer and Interstate Stream Commission offices, D’Antonio admits “budget does play a role in moving forward.” Currently he anticipates a June timeframe for completing the update, which would allow the next administration to have some input to the revised plan. The update will address population growth; increasing water demand; the integration of regional water plan data; conservation; rainwater harvesting and water capture; reuse and water wise construction; climate variability; the OSE’s Active Water Resource Management program’s role in determining diversion rights and ownership; and infrastructure needs.

About \$200 million in Water Trust

HARD TIMES—*Cont. on page 10*

**HARD TIMES—Cont. from page 9**

Fund loans and grants have been given out over the last eight years, D’Antonio says, and the “loan component has been made bigger” to allow more projects to be funded. Taking exception to the idea that plenty of money is available, he notes that although the Trust Board has between \$30 and \$40 million to work with on a year-to-year basis, it receives at least \$120 million worth of applications. “If that’s not a shortage, I don’t know what is.” Many of the proposals do undergo a cost/benefit analysis, especially those that are federally leveraged, such as infrastructure projects to serve Native American communities. With 22 tribes and pueblos in the state, certainty about water rights is important,” D’Antonio emphasizes, “and in exchange for tribes giving up claims to a lot of water, we build infrastructure.” Some \$320 million in direct funding, plus perhaps an additional \$160 million,

based on long-term application processes, protest periods, and hearing processes. It makes it very difficult to manage water in the short term.” In 2007, the OSE adopted an “alternative administration” policy called Active Water Re-

lieve part of the reason we have an implemented settlement on the Pecos; and have made significant progress on adjudications in the Pecos; and have an historic high compact credit on the Pecos; and have a high compact credit



*State Rep. Mimi Stewart expects a rough few years re funding of state water planning. State Engineer John D’Antonio and ISC Director Estevan Lopez described ways to get the most bang for the meager buck.*



*Navajo Nation’s John Leeper says the State Water Plan needs to be presented as a “story.”*

will be coming into the state as a result of several recent Indian water rights settlements.

The backlog of water right applications D’Antonio inherited with the State Engineer job eight years ago has been reduced from 900 to 450, he says. “You can’t actively manage water in the West

source Management, designed to protect senior water right holders while allowing for short-term water transfers. However, a lower court ruled (Tri-State, November 2010) that the state engineer does not have the authority to do priority administration in the absence of either an adjudicated decree or a state-issued license. The decision is currently under appeal. Meanwhile, D’Antonio says, determinations have been made in 49% of the 12 adjudications that are “in progress” around the state.

**Estevan Lopez**, Director of the Interstate Stream Commission, says the state is approaching the water plan update in the “integrated” way advocated by keynote speakers Chermak and Feldman. The work has essentially been done “on a shoestring,” with input from the public and relevant state agencies, and the document is being drafted internally with “minimal contract help.” The plan covers all aspects of water management, Lopez says. “Obviously, I’m focused on things like compact management. The 2003 plan staked out a number of strategies, and looking back, I be-

lieve part of the reason we have an implemented settlement on the Pecos; and have made significant progress on adjudications in the Pecos; and have an historic high compact credit on the Pecos; and have a high compact credit

on the Rio Grande is that we followed through on the strategies in the 2003 plan. Our objective in *this* plan is to recognize how circumstances have changed. Now we have to figure out how to make those settlements and strategies work over the long haul, how to coordinate with farmers and irrigation districts to make sure we don’t inadvertently create other problems, all the while managing for things like ESA needs.” Lopez acknowledges that not everyone thinks “big infrastructure” is a good thing, but points out that one long-awaited project (the Navajo-Gallup pipeline) “is hugely important to people on the Navajo Nation who have had to truck in water,” and likewise, the Ute Pipeline is “a really big deal” to the City of Clovis, which faces imminent water shortages if it continues to rely solely on the Ogallala aquifer. Lopez says a lot of attention is being paid to the environmental aspects of water management, particularly Endangered Species Act issues, but the state is trying to meet such requirements without taking water from

HARD TIMES—*Cont. from page 11*

other uses, and “without taking it from somebody who has a right to it.”

**John Leeper**, Department of Water Resources for the Navajo Nation, thinks that people who are involved in water issues are “overwhelmed” because “there is less resources to do what needs to be done, and potentially, the resource we have to work with is shrinking.” Phoenix, he says, is an example of a community “where the wheels have fallen off the wagon” in terms of population vs. resources. Ten years ago, Phoenix had three million people; now it has over four million. “What does it look like with five million?” Leeper asks, “Or seven million? The heat island expands, the irrigation disappears, the whole valley changes. How Phoenix deals with that challenge is going to impact everybody in the Colorado River Basin.” Another question Leeper poses is, “What does Albuquerque look like when it’s 100° Fahrenheit? What if, due to climate variability, Albuquerque is 102°? What does it look like at 106°? Some analysis suggests that Albuquerque in the summer will look like Phoenix summers today. We may not see it, but there’s a likelihood that our kids will. The point I’m trying to make is that the State Water Plan is a story, and you guys are the storytellers.” Referencing last year’s Interstate Stream Commission “scheme to deal with Intel’s water issues,” Leeper says, “The failure wasn’t in their plan. The failure—and I’m looking at you folks—was in telling the story. You’re the ones who understand these issues and you have to take your understanding outside that door.”

**Rep. Mimi Stewart**, co-sponsor of the legislation that created the State Water Plan, says, “This is going to be a rough few years. The budget crisis—well, at least we’re not in California, with \$27 billion, or Texas with about \$20 billion. We’re just little old New Mexico with a \$4 billion deficit. The legislature has cut about a billion from our budget, and

we’re looking at more this year.” Part of the problem is that the state has had Recovery Act money, and now it will have to “plug those holes.” Stewart says, “We’re facing draconian measures when what we ought to be doing is planning.”



*Las Cruces water attorney Steve Hernandez presents the outcomes of some closely followed water rights cases.*

The State Water Plan has “forced us to talk to each other, to look at regional plans, and then to look statewide. There are problems, of course. We’re not really implementing a lot of the things we put in those regional plans; they’re old; they haven’t been integrated; some regions think upstream users are going to bail them out. Luckily, we have a statute that forces us to move forward.” Stewart likes the idea of “a quiet time of little money,” when we could “move forward with planning, or legislation to standardize building codes to conserve water.” The issues of density and green infrastructure also interest her. “We give tax credits for every kind of economic incentive. What about tax credits for having the kind of density that Dale Dekker was talking about? There are things we can do to promote the ideas that *we* want, and I urge you to think about that.” Stewart noted that New Mexico lost six progressive legislators in the last election, meaning many legislative committees will now have an equal number of Republicans

and Democrats. She worries that regulations and plans enacted in the last eight years may be overturned. “We’re going to have to plan for defense.”

### Panel 3: Regional Water Planning Challenges

**Angela Bordegaray**, Senior Water Planner with the Interstate Stream Commission, has been involved with both regional water planning and the update of the State Water Plan and says, “Our greatest challenge is integrating those two programs. It is part of the statute that they be integrated and what we have to do together is figure out how.” In 2009, in a series of forums held throughout the state, the ISC summarized for the individual regions “what we thought your regional plans said.” Now, data from the regions will be considered as the ISC staff updates the state plan, and public input will continue to inform the process. Bordegaray recalls the ad hoc committee that worked to identify and reconcile differences between regional plans and the state plan after 2003. “We’ll continue down that path,” she says. Since the state update has a “basin focus,” one challenge is how to integrate all of the plans that are relative to one stream system, for instance the Rio Grande, which passes through five planning regions. Another challenge is that currently, the ISC has no process for accepting updates to regional water plans, and with revisions already underway in the Estancia Basin, Jemez y Sangre, Pecos, and the Northwest regions, criteria for accepting



*Try to imagine a Dialogue meeting without Lucy Moore.*

HARD TIMES—*Cont. on page 12*

those updates need to be developed. Bordegaray believes the New Mexico Water Dialogue should be involved in determining that criteria, similar to the way the group is collaborating with the ISC on a revision of the Regional Water Planning template.

**Richard Smith**, who serves on the board of the Pecos Valley Artesian Conservancy District, notes that water planning in the Lower Pecos was “highly motivated” by the Supreme Court ruling that New Mexico was under-delivering to Texas by some 10,000 acre-feet a year. The only recourse appeared to be a priority call on agriculture, until an ad hoc group of surface and groundwater users worked with the State Engineer to negotiate a settlement that “has gone a long way toward solving our problems.” Agricultural conservation, control of riparian vegetation (saltcedar), and upland watershed management have all contributed to the settlement’s success. About three years ago, the region hired a consultant to update the 2001 water plan, but as ISC funding began to dry up, the planning committee decided to take on the update themselves. At every meeting, Smith says, “a problem or a resource inventory” was assigned to one of the members, and the group steadily compiled the resulting data. The region has since received a grant from the state, and a contractor is finishing up the work. Smith believes there are things that yet require planners’ attention, including “polishing” the settlement agreement; seeing that adjudications are completed in the basin; and figuring out how to address the difficult issues of out-of-basin water transfers and domestic wells.

**Steve Hernandez**, a Las Cruces attorney with extensive experience in water litigation, offered information about two major cases that relate to the theme of water planning in economic hard times. The first case concerns an application by Berrendo, LLC to “take water from the Pecos and move it somewhere in the Rio Grande, for some use, to be purchased by someone, sometime.” Facetious as Hernandez’ description sounds,

it is disturbingly accurate, and a motion was filed by the Pecos Valley Artesian Conservancy District to dismiss the case on the grounds that the application is “speculative,” since the place of use was not defined beyond certain counties, and “every box for ‘purpose of use’ was marked.” Hernandez, who represents Carlsbad Irrigation District in the case, says due process was violated in regard to public notice. “People didn’t get an opportunity to protest because they don’t know where the water may potentially be going.” Hernandez re-



*Dick Smith tells of getting along with neighbors to agree on the Pecos Regional Water Plan.*

mind his audience that New Mexico’s regional water planning program is a result of the *Reynolds vs. El Paso* case. In their defense against export of the state’s water to Texas, Hernandez and others argued that a 40-year water supply needed to be preserved for the transfer-from area, based on projections for population and demand. “We realized we could not withstand any more out-of-state requests for water if we didn’t know what we were going to use our own water for...The Supreme Court had said in *Sporhase v. Nebraska* that

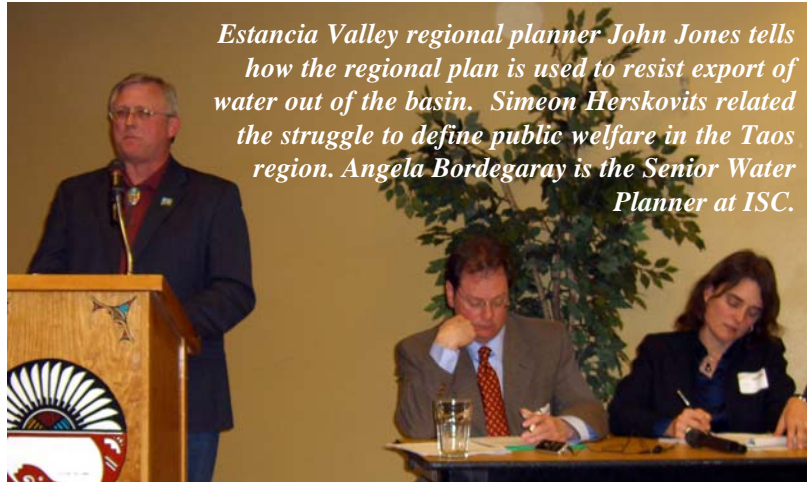
you could not interfere with interstate commerce, but there is an exception in there for public welfare.” Thus New Mexico’s water planning statute was born. Now, with millions spent on planning and on the settlement to put the Pecos back into equilibrium in order to guarantee water deliveries to Texas, Hernandez says the Berrendo case “has the entire basin worried.” A similar situation arose in 2008 in the Lower Rio Grande basin, when an application by the Agustin Plains Ranch for 54,000 acre-feet per year of unappropriated water rights in eastern Catron County elicited more than 800 protests. As in Berrendo, protestants raised the issue of *speculation*, and the examiner in the Agustin case has called for an evidentiary hearing specific to that topic. Hernandez suggests that the State Water Plan will be at the center of this community-versus-community controversy. “What are you going to do when regional plans say that we need to keep our water within our basin? Is the regional plan the indicia of public welfare? Does the State Engineer’s hearing examiner have to defer to what the regional plan says as the direct voice of the community? I think those public welfare questions will be extensively briefed and argued in these two big water transfer cases.”

**John Jones**, Vice President of the Estancia Basin Water Planning Committee and Legislative Chair for the Rural Water Association, says the Estancia Basin planning committee has been around since the ‘90s, but “it’s never been cursed with very much money.” Santa Fe County came up “almost annually” with administrative, postage and public notice money, and funding from the ISC allowed the group to collect data and publish two water plans. The committee received further support from Tarrant and Bernalillo counties, the latter supplying a hydrologist. Nevertheless, Jones says, “The merit and the strength of the Estancia Basin Regional Water Planning Committee has been the people on it, and the members of that community.” Jones quotes Gen. Dwight D. Eisenhower who often de-

clared that plans are useless, but the planning process is indispensable. “Some of the facts in a plan turn out not to be facts,” Jones observes. “You have to go back, reassess, reaffirm, and reallocate, and it is the *process* that brings you together.” When the money isn’t there, Jones advises, “you employ and enhance the relationships that exist in the community. You benefit from the time and skill of your volunteers and stakeholders. You persevere, you overcome, you adapt. In times of austere funding, you *talk* to people, you Google for information, you attend community meetings, and you find a way to leverage information, to gain what you need to move the plan along.”

**Simeon Herskovitz**, an attorney from Taos and an active participant in that region’s water planning process, says, “Up in Taos, no one ever talks about not planning. No one thinks it’s even an option to not consciously make an effort to plan. There’s willingness to simply carry on and do what needs to be done, on a piecemeal basis if need be.” When the Taos Regional Water Plan was completed in 2008, a steering committee was formed to look at implementation priorities and strategies. The “economic dislocations” that occurred around the same time stalled that endeavor until 2010, but meetings have now resumed, and the committee is focusing on several areas. One effort involves gathering and disseminating more accurate and comprehensive information about surface and groundwater resources. Another focus is on infrastructure, specifically improving and expanding the existing domestic and wastewater systems of various communities within Taos County to increase efficiency, and to lessen the possibility of groundwater contamination. A third priority is to “preserve and support viable, traditional, agricultural land uses.” Additional land

use regulations or modifications to the land use codes are being discussed, but the major vehicle for implementing this priority is the detailed public welfare statement contained in the regional water plan. Herskovitz says that while there has been disagreement on some aspects of the public welfare statement, “there



*Estancia Valley regional planner John Jones tells how the regional plan is used to resist export of water out of the basin. Simeon Herskovitz related the struggle to define public welfare in the Taos region. Angela Bordegaray is the Senior Water Planner at ISC.*

has always been agreement on certain priorities—the dissemination of information, and protecting certain existing water uses and patterns of land and water use in the community.” The water plan includes a mandate to local governmental entities to implement the public welfare statement, and in October of last year, Taos County was the first government to adopt an ordinance to that effect. “There are a number of places in this ordinance where the priorities, the strategies, and the objectives of the regional water plan are made an integral part of determining what is in the best interest of the public welfare.” The county also named a geographically-representative committee that will review public welfare issues using the 10 criteria contained in the public welfare statement; educate and inform the public and elected officials about the state of water resources in the county; and notify residents of any proposed water transfers or new appropriations. The hope is that residents, local governments, and even the State Engineer can make more balanced public policy decisions when all the relevant values, needs, and water uses are meticulously examined in light of one another.

## Commonalities and Cautions

Hindsight is always instructive. Since January, two events have occurred that sadly embody the fistful of themes repeatedly expressed at the Dialogue’s 2011 statewide meeting. Those themes include our general disinclination to plan for the worst-case scenario; to think and manage in an integrative way; to seek long-term solutions rather than short-term fixes; and to base policy choices on anything other than economic gain. One incident that hummed with all of those themes was the random plunge of the thermometer in February that brought down a crucial chunk of the power grid, leaving thousands of New Mexicans with-

out heat, without electricity, without water, and without any reassurance that it won’t happen again. Then, as if to underscore the idea that ‘perfect storms’ may be the rule and not the exception, March delivered a literally earthshaking calamity in Japan. One of the most technologically savvy, fiscally shrewd nations in the world is on its knees, felled, it might be argued, by a catastrophic combination of those same thematic shortcomings: a gross underestimation of the risks, a tendency to go it alone, a slavish devotion to convenience, and a predilection for easy financial yield.

With nearly one voice, the Dialogue speakers had a clear and disturbing message. Then synchronicity and Mother Nature punctuated it with dispatch. As Dwight Eisenhower and John Jones would both affirm, plans may prove useless in the face of the unanticipated, but information shared and relationships formed during the *process* of planning turn out to be indispensable. In the combination of regional and state water planning, New Mexicans have a forum for talking about choices, and a living structure for coping with disaster, *if we’re* willing to take advantage of it.



## Thanks to Our Contributors

The Board of Directors thanks all of you who have contributed to the Water Dialogue and made our work possible. Like most non-profit organizations, our foundation income has been cut drastically. Despite that, the support we have continued to receive from many of you has made a huge difference to our survival.



We have two requests. First, we continue to need your memberships and tax-deductible contributions. Please go to our website <http://nmwaterdialogue.org>, and click on "Join Us." Second, one of our major ongoing expenses is the cost of printing and mailing this newsletter. We are trying to reduce this expense by encouraging our readers to subscribe electronically only. If you are willing to join this effort, please contact John Brown at [john.r.brown2@gmail.com](mailto:john.r.brown2@gmail.com), and in the future we will email you a link to each new issue.



New Mexico Water Dialogue  
c/o John Brown  
P.O. Box 1387  
Corrales, NM 87048

Non-Profit Organization  
U.S. POSTAGE PAID  
Albuquerque, NM  
PERMIT NO. #1893