



# Water Wise Community Brief

Volume I, Issue 2

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## Could New Mexicans Be Facing a Prolonged Drought?

New Mexicans could be facing a "megadrought," a crowd of about 200 were told by keynote speaker Dr. Julio Betancourt at the 2003 New Mexico Drought Summit on September 16.

Betancourt said the state has experienced drought conditions for the past four years. He warned there is a good chance conditions will get worse in years to come before they get better.

Betancourt, a drought researcher at the U.S. Geological Survey's Desert Laboratory in Tucson, said the current climate indicators are very similar to the drought of the 1950s and other devastating multidecade dry periods. If that is the case, he warned that New Mexicans need to become very conservative about using precious



photo by Yvette Chavez

Drought summit participants hear about climate factors that could contribute to an extended period of drought.



Dry soil reminds us that we live in a desert here in New Mexico.

water resources. He also said scientists have been watching the drought coming since the late 1990s, but they do not know enough about the dynamics of drought to predict exactly what action to take.

Betancourt was just one of numerous speakers brought together for the 2003 Drought Summit in

Albuquerque, an event co-sponsored by the New Mexico Office of the State Engineer, the New Mexico Energy, Minerals, and Natural Resources Department, Southwest Strategy, the U.S. Bureau of Reclamation, and the U.S. Forest Service.

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## New Mexico First Town Hall Forum Provides Input for a Comprehensive State Water Plan

More than 140 people with an interest in water issues affecting New Mexico participated in the Interstate Stream Commission/New Mexico First Town Hall meeting on "Developing a Comprehensive State Water Plan," held in Albuquerque, on September 23-25.

The focus of the Town Hall meeting was to gather input for the state's first comprehensive state water plan.

"The Town Hall forum is a true democratic process, which



Town Hall participants discuss water issues in small groups.

allows citizens to be heard and to affect public policies," said New Mexico First President Judy Zanotti.

Groups represented in the Town Hall meeting included: Interstate Stream Commissioners, the Water Trust Board, members of the Governor's Blue Ribbon Task Force on

Water, Pueblo and Tribal officials from around the state, representatives of state agencies that deal with water issues, as well as members of the general public and members of action groups that have a special interest in water issues.

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# Hydrographic Survey Bureau Employees Win GIS Award

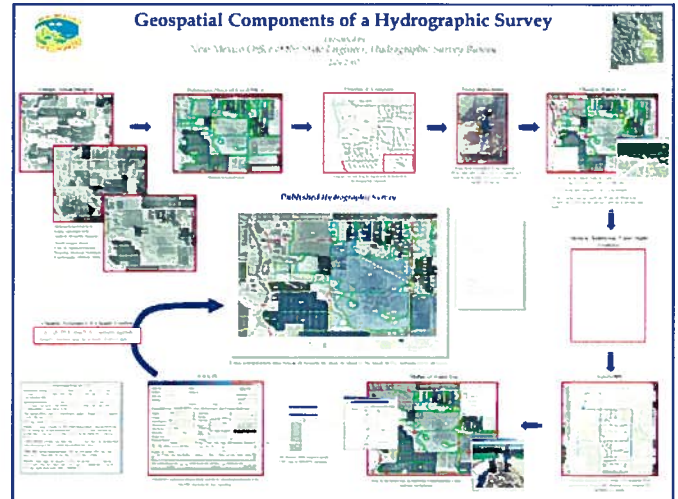


ESRI Conference winners Jaime Bustos, Christina Noftsker, Liz Ayarbe, and Mike Recker (left-right) with New Mexico State Engineer John D'Antonio (center).

Employees from the Lower Pecos Team within the Hydrographic Survey Bureau recently won an award for the "Best Instructional Presentation" at the Environmental Systems Research Institute International (ESRI) Conference in San Diego, California. Christina Noftsker and Elizabeth Ayarbe partnered with

Mike Recker and Jaime Bustos to produce the first-place winning map, which illustrated the procedures required for planning and completing a hydrographic survey. Employees within the Hydrographic Survey Bureau

are responsible for supporting the adjudication or legal identification of a water right by assessing and mapping areas of water use and sources. 💧



Winning map: *The Geospatial Components of a Hydrographic Survey*

## New Mexico Interstate Stream Commission Approves Plan to Move Forward with Land Purchases in the Pecos River Basin

The New Mexico Interstate Stream Commissioners gave the nod to move forward with plans to secure land in the Pecos River Basin.

The Commission received bids from landowners offering to sell more than 27,000 acres of land and associated water rights in the lower Pecos River Basin under the state's water and farmland acquisition program.

The acquisition program was authorized by House Bill 417, approved during the 2002 State Legislative Session. The legislation authorizes the Interstate Stream Commission to purchase up to 6,000 acres of land and water rights in Carlsbad Irrigation District (CID) and up to 12,000 acres of land and water rights above Brantley Dam, which includes the Pecos Valley Artesian Conservancy District (PVACD) and the Ft. Sumner Irrigation District (FSID).

Landowners interested in selling their land and water rights were

required to submit bids to the Interstate Stream Commission.

The Interstate Stream Commission request-for-bids was issued on December 18, 2002. The deadline for submitting bids was July 31, 2003.

The total amount of acreage submitted for sale to the Interstate Stream Commission as of the deadline is as follows: about 7,300 acres within the Carlsbad Irrigation District; about 18,900 acres within the Pecos Valley Artesian Conservancy District; and about 800 acres from within the Ft. Sumner Irrigation District.

"We're pleased that there appears to be a sufficient number of offers to permit the purchase of the minimum amounts of land needed to implement the settlement, even after eliminating offers that may not meet our needs," said Interstate Stream Commission Director Estevan López.

"Now, our staff will begin evaluating the offers received to make

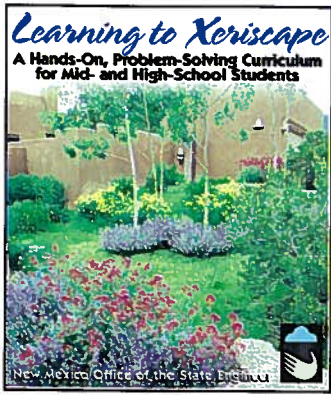
sure they are viable," he said.

"I commend landowners who took the initiative and stepped forward to offer up their lands and water rights in the Pecos River Valley. They have made it possible to complete the terms of the settlement," said State Engineer John D'Antonio. "This settlement was critical to averting the negative impact that a priority call would have had on the state's economy and to ensuring future compact deliveries to the State of Texas."

The acquisition program was first proposed in 2002 by the Lower Pecos River Basin Committee, an organization comprised of local stakeholders along the lower Pecos River, including irrigation districts, county and municipal governments, and business representatives. The acquisition program is one component of a long-term Consensus Plan devised by the Lower Pecos River Basin Committee as a means of ensuring that New Mexico meets its interstate delivery obligation to the State of Texas under the Pecos River Compact. 💧



## New Xeriscaping Curriculum



With water supplies in the state expected to get even more scarce in the

future than they are now, homeowners and business managers will need to be more water-efficient than ever.

Helping today's students become tomorrow's water-conscious adults is the reason the New Mexico Office of the State Engineer has published a xeriscape curriculum for middle- and high-school students aimed at teaching them how to plan, design and install water-wise landscapes.

Recognizing that large amounts of water are used for residential

and commercial landscapes, *Learning to Xeriscape: A Hands-on, Problem-Solving Curriculum for Mid- and High-School Students* uses xeriscaping as a way to introduce water issues in the classroom. The curriculum teaches students the seven principles of water-wise landscaping: proper planning and design, adequate soil preparation, appropriate turf areas, wise plant selection, efficient irrigation, adequate mulching, and proper maintenance. It also includes background discussions on broader state water issues.

The 361-page curriculum employs a problem-solving approach that puts students in the position to participate in critical thinking and decision making. It uses xeriscaping as an integrating concept, tying science, social studies, math, and language arts into real-life situations. Students are asked to address typical

questions and problems that might occur when planning a residential or commercial landscape through numerous hands-on activities.

The curriculum, which was funded through grants from the U.S. Bureau of Reclamation and the Xeriscape Council of New Mexico, is being offered to teachers and other educators throughout the state. The Office of the State Engineer is providing a two-hour mini-workshop for educators who would like an introduction to *Learning to Xeriscape*. The workshops will highlight teaching techniques and help locate local resources. 💧

Free copies are available by calling the New Mexico Office of the State Engineer at 1-800-928-3766, or from our web site at: [www.seo.state.nm.us/water-info/conservation](http://www.seo.state.nm.us/water-info/conservation).

*(Drought Summit -- continued from page 1)*

Other experts discussed the impacts of drought on surface and groundwater, forest health, land use and development, ecosystem health, wildfires and wildlife, as well as biodiversity.

Steve Hansen, Assistant Area Manager for the U.S. Bureau of Reclamation in Albuquerque, reminded the group that we live in a desert. The state has experienced drought conditions that have strained Elephant Butte Reservoir. It will take a few good years of snowpack and precipitation to refill the reservoir. All New Mexico reservoirs are at just 40 percent of normal levels, Hansen said.

Other speakers at the summit addressed the number of piñons being killed by bark beetles, which prey on trees weakened by drought conditions. Entomologist Dr. Terry Rogers with the U.S. Forest Service said bark beetles do tremendous

damage. "But there is nothing we can do about it," he said.

Drought is threatening 69 rare animals and 42 rare plants in New Mexico said Dr. Esteban Muldavin, Ecology Coordinator for Natural Heritage New Mexico. He said helping these species stay off the endangered list needs to be a priority.

National Weather Service Director of the Albuquerque Office Charlie Liles said drought is the norm for New Mexico, not the exception. He said it is a cycle for which we need to be prepared.

Jess Aber, of the Water Resources Division of Montana's Department of Natural Resources, shared drought-planning efforts in that state, which has had a decade of experience.

New Mexico State Engineer John D'Antonio said his agency is taking the drought very seriously

and is considering innovative measures to solve the problem.

D'Antonio said our state laws need to be more flexible during times of drought. One option is water banking, or simplifying the transfer of water rights through a market-based system while still preserving the seniority of rights. Water banking pilot projects are already underway in the Santa Cruz Irrigation District in northern New Mexico, where water is being transferred from an agriculture-to-agriculture use. If this leasing system proves effective, the concept could be expanded to assist municipalities, to assist with recreational needs, and to fulfill compact obligations during times of drought.

D'Antonio said he wants to aggressively pursue finding new sources of water, which means harnessing new technologies to

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## New Water District in San Miguel County

A new water district was created for the Rio Gallinas in San Miguel County.

The State Engineer declared the special district in response to requests by water right users in the area to actively manage and administer the diversions and use of water from the Rio Gallinas on a day-to-day basis. The declaration also gives the State Engineer authority to create a position and appoint a water master to be based in Las Vegas, New Mexico.

Water masters actively administer water on a stream system. They monitor the diversion and use of the waters on a daily basis, especially during irrigation season.

In coming months, the State Engineer will work with water users to develop a water master manual that will fit the Rio Gallinas. Active management of surface water has proven challenging for the State Engineer in this area, even in the best of water supply years. ♣

(Town Hall -- continued from page 1)

"The Town Hall allowed us to convene people from diverse backgrounds with an interest in water issues to develop workable policy suggestions for the final state water plan document," said State Engineer John D'Antonio.

"This first year, the state water plan will provide a policy framework for the Office of the State Engineer and the Interstate Stream Commission to manage water issues and prioritize funding needs around the state in coming years," said Interstate Stream Commission Director Estevan López. "Additionally, the plan will include a broad-brush assessment of supply and demand. It is a work in progress and will continue to be refined over time."

Governor Richardson mandated that a comprehensive state water plan be in place by the end of December 2003. Information was gathered from public meetings in 29 communities throughout the state, from July through September. ♣

(Drought Summit -- continued from page 1)

make brackish water usable. Desalination techniques could help create usable water from the estimated 15-billion acre-feet of underground brackish supply in our state. New Mexico currently uses between three and four million acre-feet of water each year.

Also, new rules and regulations are being prepared for active water resource management in lieu of priority administration.

Innovative projects such as the Silvery Minnow Refugium, located at the Albuquerque Biopark, will also help manage endangered species during times of drought.

Other options include the dredging of the low flow conveyance channel north of Elephant Butte, to help ensure the maximum amount of water gets to the reservoir next year. ♣

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Make every drop count!

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