2009 State Water Plan Update Public Outreach

Region: San Juan Basin
Farmington Public Library
Farmington, NM
April 29, 2009

Summary of Discussion
Facilitator/Recorder: Seth Cohen

Welcome and Introductions
Angela Bordegaray, State Water Planner with the Interstate Stream Commission, welcomed the group of about 55 to this public forum sponsored jointly by the Office of the State Engineer and the Interstate Stream Commission (OSE/ISC). She introduced agency staff and contractors:

Karin Stangl, Planning and Communication Director
Julie Maas, Communications Specialist
Tanya Trujillo, ISC Legal General Counsel
Robert Genualdi, OSE District V (Aztec) Supervisor
Shawn Williams, OSE District V Water Master
Guests included ISC Chairman Jim Dunlap and numerous local, state, and federal-elected or appointed representatives.

Presentation
Bordegaray presented an overview of the New Mexico's state and regional water planning process including data on population, water supply and demands, and an overview of the San Juan Basin Regional Water Plan. The water planning region encompasses San Juan County and portions of Rio Arriba County, McKinley County, and Sandoval County. The principal river basin is the San Juan River. The region is bounded on the north by Colorado, on the west by Arizona, on the east by the continental divide in McKinley County, Rio Arriba and Sandoval Counties, and on the south by the Little Colorado River Basin. The Interstate Stream Commission accepted the plan in 2003. The San Juan Basin Regional Water Plan is available on the Office of the State Engineer's website at: http://www.ose.state.nm.us/isc_regional_plans2.html

Questions and Comments on Presentation

Following the presentation, the public had the opportunity to comment and ask questions about the presentation. Seth Cohen, facilitator, explained that he was contracted by the OSE/ISC to help facilitate the regional State Water Plan Update meetings.

Comment: An audience member requested that the pace of the presentation be a little slower with adequate time to study the maps and graphs.
Answer: The ISC team offered to return to any slides at the request of the audience at any time.

Drought Scenario Projections

Question: In reference to a slide showing "Projected Drought Scenario Supply Gap," a participant asked about the 174,000 acre-feet figure for the supply-demand gap in 2040.
[Note: the graphs showing the water supply-demand gap for the San Juan region were derived from the San Juan Basin Regional Water Plan and the Office of the State Engineer report data, "New Mexico Water Use by Categories 2005." The report also is available on the OSE website: www.ose.state.nm.us/publications_technical_reports_wateruse.html. To estimate and compare future water supply with demand, OSE and ISC staff along with a hydrology consultant developed a method using data from the San Juan Basin Regional Water Plan, the OSE's "New Mexico Water Use by Categories" 2000 Diversions ("water use") report, and recent population data projecting population into 2040. In the case of the San Juan Basin Region, the graph indicated a supply-demand gap of 39,500 acre-feet in 2040 between projected water demand and water supply. Staff and the contractor also projected a drought scenario based on less available surface water. The gap between water supply and demand for 2040 is 174,400 acre-feet in that scenario.]

Evaporation

Question: A participant asked about the different figures for evaporative loss in the presentation.
Answer: Staff clarified that the presentation included the statewide loss of water due to (reservoir) evaporation at 6 percent and the regional figure at 12 percent.

Regional Plan's Impact on Conservation

Question: A participant asked how the regional plan has effected conservation.
Answer: Several residents felt that conservation had improved over the past few years, although they could not attribute it directly to the regional water plan.

A man representing Kirtland Lower Valley Water said that conservation has increased since 2002-2003. The 2002 drought was one of the driest on record, and that seems to have had a pronounced and lasting impact on all users.

The City of Bloomfield attributes conservation success to the San Juan Basin Regional Water Plan. Bloomfield is continually aware of conservation and has a "drought mentality" with regard to landscaping, vegetation, and overall water usage.

A representative of the City of Aztec noted significant conservation since the drought and cited education during the drought as having a noticeable impact.

San Juan Water Commission has provided education on water awareness to students.

A man from the Northstar Mutual Domestic Water Association (headquartered in Aztec) said water use dropped by 15 percent during drought and has stayed at about that level. It may increase this year, as many new gardens appear, and people quickly change their watering patterns during wet years.

According to the Upper La Plata Water Users Association, water use is down despite increased population there. Increased rate structures often affect consumption.

Water Fair
Comment: San Juan Water Commission is sponsoring a water fair May 16-18, 2009, and participation is encouraged. The San Juan Water Commission can provide more information.

Responses to the Four Focus Questions:

The group considered four focus questions for public input on the State Water Plan Update.

1. ***What should your region and the state as a whole do to assure water for a growing population?***

    - Water rights transfers**:** A participant cited Bloomfield as an example where "bookkeeping" is a challenge during the application period for water rights, "purchases fall through and transfers take too long." District V Supervisor Robert Genualdi (Aztec) explained that resurgence of the adjudication in 2002-2003 led to a rush of applications. Further complicating the situation, the Santa Fe office used to assist with the District V workload. This is no longer the case. He also mentioned that budget cuts have prevented the filling of vacant positions. The local water master explained that his time is largely occupied with fieldwork on irrigation, and he is unable to process permits like before.

    - Adjudication: Genualdi also explained that the "Echo Ditch Decree" (1948) defined rights along the river. There was a 1975 "re-adjudication" to clarify rights. During the 1980s, there was less OSE action regarding adjudication but there was adjudication of Jicarilla-Apache water rights. A new judge was assigned in 2001. District office visits by the public and water permit applications increased 10-fold

after that point. Then the 2002 drought occurred. Since then, the Santa Fe Office of the State Engineer has been handling the region's adjudication cases (water rights in La Plata, then San Juan, then Animas).

- Colorado River Compact: A participant questioned whether the San Juan region is over-delivering water to Arizona that could be stored locally for drought periods. Tanya Trujillo stated that 11.25 percent of the upper basin consumptive use apportionment goes to New Mexico. There is not a specific water delivery required to Arizona. The amount of consumptive use that can be used in New Mexico on average is about 642,000 acre-feet per year, based on the United States Bureau of Reclamation 2007 Hydrologic Determination. The participant suggested, "We make the most of that allocation."

- Population statistics: A man from the City of Farmington said that the Bureau of Business and Economic Research's calculations are not useful at city level or for smaller towns. Currently, the county does calculations, but city level data is needed.

2. ***What water conservation strategies would help meet increased constraints (population growth, climate variability) on water in your region and the state as a whole?***

    - Low-flow toilets: Participants raised the importance of more efficient toilets like those used in Australia and Europe and explained that we are "behind the times." Members of the audience believe that there should be incentives for low-flow toilet installation. Santa Fe was cited as an example where this has been encouraged.

    - Conservation dilemma: Many participants expressed the concern "if we don't use it we lose it," which is a disincentive for conservation. If the region conserves too much then, it goes on downstream. There is a cost to users through conservation because decreased usage means less revenue. Water utilities then need to increase rates. The City of Albuquerque was cited as an example where conservation was enforced 18 years ago, and then rates increased. This created some negative reaction from consumers.

    - Irrigation efficiencies: A resident asked the state and others to help with ideas for irrigation efficiencies. Lining ditches with plastic was

suggested. According to the San Juan Water Commission Executive Director, ditch-lining can have a negative effect on groundwater supplies and on vegetation growth along ditches and surrounding areas. He said that most seepage water returns to the river. There may be some ways to provide incentives, but it can lead to conflicts with others because they claim the return flows.

- Salinity systems: One man from La Plata cited Mancos, Colorado as a model for conservation. He said Mancos uses "salinity dollars" to put irrigation water in pressurized pipes (to replace open ditches), so they have excess water for other uses. He said New Mexico needs to get funding for such salinity systems in areas like La Plata where more water is needed.

- Water quality and contaminants: It was noted that better management is needed to clean up pollutants, minerals, and salts that are in the river due to return flows. In Farmington, there is a difference between what comes in from the river and from other sources – such as water softeners. Septic/sewage systems are also causing contamination. Outdated systems are leaking and effecting groundwater. They need to be replaced.

- Domestic wells: Genualdi said the Office of the State Engineer saw an increase in domestic well permits in 2002-2003, perhaps for protection against water system shortages. This indicates that individual consumption of water may not have decreased much.

3. ***Have you observed climate variability (e.g. drought, flooding, severe storms) in your region? What should be done to prepare for these extreme circumstances in your region and the state as a whole?***

- Increase water storage: Several people felt storage should be increased to capture run-off from early snowpack melting.

- Ponds/dams: A participant said more small dams, ponds, and ponds for livestock are needed to capture run-off. OSE explained that permits are needed for such ponds.

- Brackish water: Someone said a pilot-project for cleaning brackish water has been developed in the region and wondered about

developing this further. Trujillo noted that this may need legislative approval and change may be required on the project.

- Produced water: A participant asked if there are proposals to use produced water. Most produced water is "bad" water and is not a reliable source for re-use. Currently, about half of produced water is injected deep into the ground and half evaporates. There is a produced water project by Merrion (an oil and gas company). A participant asked if there is a bill to bring produced water under Office of the State Engineer jurisdiction – oil and gas operations. Trujillo said the Oil Conservation Division of the New Mexico Department of Energy, Minerals and Natural Resources regulates produced water.

4. What water projects are needed in your region? How should these projects be prioritized for funding?

- Septic-recharge: Genualdi said it is difficult to measure septic-recharge in rural areas. So a central wastewater collection and treatment system would help quantify returns to the river and streamline the regulatory process to obtain return flow credits.

- Stimulus money: A member asked if stimulus money might be used for updating infrastructure in the region. Richard Rose of the New Mexico Environment Department's (NMED) Water and Wastewater Infrastructure Division (WWID) announced that there is money available through a Drinking Water Revolving Loan Fund at the Drinking Water Bureau of NMED. He added that NMED also is looking to do wastewater projects. There are more needs than money available.

- Increased regional cooperation: NMED is looking for increased cooperation in San Juan Basin because multiple systems are involved. They can cooperate regarding salinity and multiple source uses. Contact the Constructions Bureau of NMED for more information.

- Surface water re-use/groundwater re-charge: Groundwater is like an underground reservoir where water rights are needed. Re-charge is an option but may not be suitable in this area/region.

- Maintain ditches: Cities and ditches are interconnected and there needs to be cooperation in maintaining ditches.

- State water plan update: A participant asked what can be updated in the new plan. Bordegaray responded that portions of the plan are being updated now. Last year's review of the State Water Plan, "Review and Proposed Update of the New Mexico State Water Plan" (June 2008) [www.ose.state.nm.us/PDF/Publications/StateWaterPlans/SWP-Review&Update_6-26-08.pdf] identified priority areas for update. The four focus areas discussed at this meeting are among those priority areas. Data that is more technical is needed, and the regional plans need to be incorporated into the State Water Plan.

- San Juan Regional Plan: According to a member of the San Juan Basin Water Commission an update to the San Juan Basin Regional Water Plan will begin "sometime after July." The planning committee is looking for new connections and cooperation opportunities for the ongoing update. They still plan to look at conservation and documenting existing water rights.

- Legislature: Participants suggested everyone express support from their legislators for increased funding for New Mexico water planning efforts.