2009 State Water Plan Update Public Meeting

Region: San Juan Basin
Navajo Chapter House
Shiprock, NM
April 28, 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 65 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:

Robert Genualdi, District V (Aztec) Supervisor
Tanya Trujillo, ISC General Counsel
Karin Stangl, Planning and Communication Division Director
Julie Maas, Communication Specialist
Myron Armijo, Native American Water Liaison
John Leeper, Navajo Nation Water Resources Department
Michael Benson, Navajo Nation Water Resources Department

[Note: The meeting was conducted in English and Diné (Navajo). Michael Benson provided translation when appropriate.]

Presentation
Bordegaray presented an overview of the state water planning process to date, including data on population, water supplies and demands, and highlights from 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 is the San Juan River. The major aquifer in the San Juan Basin is the Nacimiento-San Jose aquifer as the major water-bearing unit. The region is bounded on the north by Colorado, on the west by Arizona, on the south and east by the continental divide in McKinley County, Rio Arriba, and Sandoval Counties. The Interstate Stream Commission accepted the San Juan Basin Regional Water Plan in 2003. The plan is available on the Office of the State Engineer/Interstate Stream Commission website at:
http://www.ose.state.nm.us/isc_regional_plans2.html

Questions and Comments on Presentation

Seth Cohen, contracted facilitator, took questions and comments from the audience on the presentation and other related water issues.

Navajo-Gallup Water Supply Project (a federal water project)
Question: A participant asked how much water would be diverted from the river to the pipeline.
Answer: John Leeper, from the Navajo Nation Water Resources Department, responded that 4,000 acre-feet is the total amount with 2,800 acre-feet for Navajo communities and 1,200 acre-feet for the Jicarilla Apaches. All water is for domestic and *not* agricultural water use.

Question: Another resident asked how the Navajo Nation Water Rights Settlement/Navajo-Gallup Water Supply Project water is divided for agricultural and drinking water uses.
Answer: Leeper responded that the settlement has two components: 12,000 acre-feet from the San Juan River is provided for drinking water uses via the Cutter Lateral and a Farmington-to-Shiprock pipeline. 110,000 acre-feet are for irrigation.

Future water supply/demand predictions
Question: A participant wondered if droughts were factored into the 2040 projections and how the predictions are analyzed.
Answer: Leeper stated that part of the analysis is based on Navajo water demand projections using a standard amount of 160 gallons of water per-person-per-day at an annual 2.4 percent growth rate. He stated that there is enough water in the San Juan River to meet demand during severe droughts. If the river is very low, there is back-up storage for drinking water in the Navajo reservoir (system).

Another resident was assured that business growth (municipal demand) was factored into future predictions (and was included in the 160 gallons per-capita-per-day calculation). It was also noted that there has been ongoing coordination between the Navajo Nation and the San Juan Regional Water Planning process.

Question: Another participant asked how global climate change might affect the supply/shortage in the region.
Answer: Leeper stated that modeling was done based on historical trends, including the critical drought years of the 1950s. Projections are relatively accurate, although he noted that nobody knows exactly what might occur with regard to climate change. The models factor in evaporation and other water loss and demonstrate the region can handle droughts in the next 30-40 years.

Question: One resident asked how demand is determined.
Answer: Leeper said they look at the whole state and assume full 100 percent demand during critical periods. [Note: the full report on population in New Mexico, "2008 University of New Mexico-Bureau of Business and Economic Research Population Dynamics," is available on the agency's website: http://www.ose.state.nm.us/PDV/Publications/TechnicalReports/BBER-WPR-Estimates-Projections-Aug2008.pdf.]

Winters Doctrine (1948)

Question: A participant asked about the relevancy of the Winters Doctrine to the recent Navajo Nation Water Rights Settlement. [Note: the "Winters Doctrine" refers to a 1908 U.S. Supreme Court decision ruling regarding reserved water rights for Indians.]
Answer: Leeper and Bensen explained that the Winters Doctrine is relevant to the Navajo Settlement because it determined the way to measure the amount of water due to the Navajos is by the amount of reservation acreage potentially productive with irrigation, or "by practically irrigable acreage."
For more information about the Winters Doctrine see:
http://law.jrank.org/pages/13674/Winters-v-United-States.html#ixzz0LSjIe2Vb
For more information about the Navajo Settlement see:
http://www.ose.state.nm.us/legal_ose_proposed_settlements_sj.html

Repairs to distribution systems

Question: A participant asked if the state has funding for repairs for distribution systems (canals, etc.) where water is being wasted.
Answer: Bensen and Leeper stated that the Natural Resource Conservation Service has funding for irrigation ditch improvements. [Note: The Natural Resources Conservation Service (NRCS), formerly known as the Soil Conservation Service (SCS), is an agency of the United States Department of Agriculture (USDA) that provides technical assistance to farmers and other private landowners and managers.] Leeper added that the Navajo Nation Water Rights Settlement Agreement also has provisions for Fruitland, Hogback, and non-Navajo ditches. These provisions are not yet available but will be in the near future. Several residents expressed the need for rehabilitation of irrigation systems. Leeper advised the public to address concerns to Martin Duncan or Marvin Sagboy who work with NRCS and the Bureau of Indian Affairs.

Responses to the Four Focus Questions:

The group considered the 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?***

- Eradicate invasive vegetation/restore the watershed: Salt-cedars, Russian olives, Siberian elms, and other non-native invasive trees and plants should be removed from riparian systems because of the water they use.
- Rehabilitate Irrigation systems/better water distribution: A participant stated that irrigation systems need to be rehabilitated. He said "Area 3" does not get water and that there are other outlying areas that need water delivered. Another man expressed concern that many communities were not represented at the meeting tonight and that these areas need head gates to ensure water is delivered to all fields in remote areas ("A" and "B" canal/lateral distribution). Many of the pipes underground need to be repaired or replaced. Leeper and Benson explained how the Navajo Nation Water Rights Settlement would provide resources to rehabilitate irrigation systems. Leeper said the

2003 plan included this. Leeper also invited farmers to ask for what they need, stating it is essential that local input be given from area farmers.

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?***

- Restrict water consumption statewide: A participant said the state should take a greater role in restricting outdoor water use, particularly in metropolitan areas where usage for lawns and evaporation is an issue.
- Desalination: A resident noted the poor access to groundwater in the San Juan region compared to the surrounding states of Colorado and Utah where there is more freshwater from mountains. He suggested desalination be used as needed. Leeper said desalination is expensive but is coming to the region.
- Groundwater access: A participant inquired about current access to groundwater. Leeper said that Navajo use of groundwater will increase and be delivered by the pipeline, as part of the Navajo-Gallup Water Supply Project. Current use is about 2,000 acre-feet. The pipeline will deliver about 4,000 acre-feet. Developing a conjunctive water use plan is key to assuring a future water supply.
- Increased consumption by Navajos: Leeper emphasized that one cannot look at conservation the same way in areas of the Navajo Reservation as they do in New Mexico as a whole. Presently, many Navajos do not have adequate access to, or supply of, water. Conservation on the Navajo nation means water use will go up as technology and infrastructure improve, so that families have better access to safe water for health and daily life.

3) ***Have you observed climate variability in your region? What should be done to prepare for these extreme circumstances in your region and the state as a whole?***

- Overgrazing/range-management: A participant emphasized livestock overgrazing as a local problem, resulting in sandy soil that converts to sand dunes and dust storms as the wind picks up. Range management and reducing livestock numbers was suggested as a path to watershed restoration.
- Flooding: The disastrous effect of flooding on farms is related to the sand dunes, resulting in sandy soil being washed onto irrigated fields. Modern techniques of spreading seeds on the surface are often ineffective due to seeds being lost from flooding and wind. Restoration is needed to allow seeds to take root.

- Watershed restoration funding: The need is there, but currently there is limited funding allocated to restoration. Leeper said that funding is coming, but pressure is needed from individual farmers and other users.
- Catchments: Participants discussed the need to capture run-off with small dams, ponds and other methods that can benefit livestock and personal use. Capturing floodwater would prevent severe water loss. It was noted that water is being lost in the San Juan to Lake Powell.
- Evaporation/loss to groundwater: A participant suggested converting irrigation ditches to underground pipes.

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

- Rehabilitation projects (lateral canal repair): A participant asked what the state could provide for repair or updating of underground piping on lateral canals and areas where water travels underground for irrigation projects. Benson and Leeper explained that the Navajo Settlement would fund such projects.
- Greater collaboration between the State of New Mexico and the Navajo Nation was encouraged for restoration projects. ISC General Counsel Tanya Trujillo explained that under the settlement the state would provide some funding for non-Navajo rehabilitation projects. The state will also work closely with the Navajo Nation to assure that the settlement's provisions are realized. An OSE employee noted that the state has spent 30 million on drinking water distribution in the region.
- Redistricting: Some participants explained the need for redistricting conservation districts.
- Soil and Water Conservation Districts (SWCDs): A resident stated that the SWCDs should be reformed to allow for attention to local concerns.