# 2009 State Water Plan Update Public Outreach

## Region: Northeast New Mexico

**Memorial Building**
**Portales, NM**
**May 5, 2009**

## Summary of Discussion

Facilitator/Recorder: Janet Wolfe

## Welcome and Introductions

Estevan López, Director of the Interstate Stream Commission, welcomed the group of about 35 to this public forum sponsored jointly by the Office of the State Engineer and the Interstate Stream Commission (OSE/ISC). He introduced agency staff and contractors:

Gretel Follingstad, ISC State Water Planner
Kevin Myers, OSE Hydrologist
Mark Murphy, ISC Canadian River Basin Manager
Christopher Shaw, ISC Attorney
Maureen Haney, Communications Specialist

## Presentation

Follingstad 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 Northeast New Mexico Regional Water Plan.

## Questions and comments on presentation

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

Comment: A participant questioned whether the irrigated acreage data presented on the slide (481,100) was accurate.
Response: Follingstad and other state representatives indicated that this was the most accurate data available to them at the time the Regional Water Plan was prepared in 2007. They clarified that this represented the amount of water being diverted and that irrigated acreage has been declining, and may have reduced since the plan was originally developed.

Comment: The Mayor of Portales Orlando Ortega read a statement prepared by the Mayor and Portales City Council (statement attached).

Comment: The Mayor of Clovis Gayla Brumfield expressed support and appreciation to the OSE/ISC for their efforts in helping to obtain congressional authorization of the Ute water projects and other efforts. She also expressed support, on behalf of Clovis, for exploration and development of deep brackish water, effluent reuse, and other means to conserve our fresh water supplies.

Comment: A participant expressed concern about the high cost of the New Mexico Rural Water System (Ute Pipeline) and the resulting potential tax burden on the local citizens. Specifically, he expressed that the Ute Pipeline would not help agriculture.

Comment: A participant representing the New Mexico Rural Water Association (NMRWA) expressed that the Ute Pipeline project would have a very direct benefit on the local agricultural community. Using the pipeline water as a municipal and industrial supply would ease the strain on the aquifer extending the life of agriculture in the area.

Comment: A participant expressed concern about the state's well metering efforts, stating there are very few meters and the state needs to be more proactive in mandating metering and monitoring.
Question: Why doesn't the OSE do hydrologic surveys, meter, and manage the Northeast Region the same way the Lower Pecos Valley is managed?
Response: The Texas/New Mexico Pecos River Settlement in the Lower Pecos Valley was the driver for fully metering and monitoring the Pecos River Basin to meet the compact agreement.

Comment: A participant also inquired about how the meters work and whether water usage was looked at on an annual usage basis.
Response: OSE/ISC staff explained how the Pecos Basin metering program works and that water usage is monitored based on basin averages, to calculate levels and rates of recharge based on how much water is being pumped and that it is generally looked at on a five-year average.

Question: How do water rights work? Who determines who owns the water?
Response: López responded by explaining that the State of New Mexico actually owns all of the state's water. Individual water rights give people the right to put that water to beneficial use. Beneficial use is the basis, unit and measure of water for that property.

## 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?***

    - Meter wells: The state should meter wells and restrict water usage to ensure no one is using more than what they have the right to, better enforcement of our water law. A participant suggested this would manage the draw down rate and allow for recharge.

    - One participant noted that the City of Portales is a metered water right holder.

- Aquifer depletion is a major concern: Local groundwater supply is not a renewable source due to low natural recharge rates. Therefore, one participant noted, water stewardship is critical in the region.

- Provide incentives: Incentives for drip irrigation or other conservation programs were suggested. It was explained that the state currently has a low interest loan program that enables farmers to implement water conservations measures.

- Pray for rain.

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

    - Drip irrigation: This was suggested as a means of conserving water for agricultural irrigation.

    - Metering programs: One participant suggested implementing metering programs to ensure that water users do not exceed their allocations.

    - Effluent reuse: Portales has an aggressive effluent reuse program in place. It was suggested that other communities around the state should implement such programs.

    - Xeriscaping programs: These were suggested to provide incentive to convert landscaping to low-water use plants.

    - Salt cedar eradication: Removal of invasive species as a conservation strategy was also suggested.

    - Water rate structuring encourages municipal conservation: It was pointed out that the City of Portales uses only minimal increases currently, but that graduated water rate increases can be very effective.

    - Public education on conservation: A participant suggested more public education on water conservation is needed to inform people about the scarcity of water and simple strategies to reduce water use at home.

    - Soil moisture monitoring: Soil moisture level monitoring to help optimize irrigation was suggested as a conservation measure.

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?***

- Increased winds: One participant noted that there has been increased wind in the region, which causes increased evaporation. In addition, people are planting more trees to block wind, which then uses more water.

- Decreased rainfall: Participants mentioned the decrease in rainfall in recent years, which has resulted in higher fire danger.

- Understanding trends: Participants emphasized the importance of understanding and working with climate data, that it is best to understand climate trends and make more accurate predictions. Tree ring data was mentioned as a useful source of climate data.

- Crop rotation: The Conservation Reserve Program facilitates keeping water rights but not using them through crop rotation during drought years; however, it was also suggested that regulated grazing was needed in conjunction with crop rotation to control fire hazard. There are new United States Department of Agriculture (USDA) contracts in place for this program.

- Cloud seeding: A participant inquired about the effectiveness of cloud seeding. Representatives from the OSE/ISC indicated that cloud seeding has been used by cities and by ski areas to enhance precipitation, but it was very difficult to evaluate its effectiveness.

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

- Ute pipeline: Several participants noted that the Ute Pipeline is the highest priority for the local area.

- Water reuse: It was suggested as a high priority program for the state to implement a water reuse program.

- Desalination: Participants suggested determining the feasibility of developing deep-water use/desalination. However high-energy costs and brine waste issues need further investigation.

- Wind energy resources: These were suggested as a way to move water at a reduced cost and improve our water transmission capacity.

- Water rights acquisition: Participants suggested that the region continue to acquire water rights.

- Reducing pumping: Programs to reduce pumping locally were also suggested, like aquifer recharge projects to reserve water rights.

- Incentives for farmers: Incentives for drip irrigation for farmers was suggested as well as more local options for local farmers.

- Pumping subsidy: One participant suggested an irrigation pumping subsidy program to give farmers incentives to control pumping. This could be an alternative to the Ute pipeline project. However, it may be cost prohibitive.

- Regional projects commitment: It was suggested that the state create an "authorization" process for regional rural water projects, which would make a long term funding commitment, similar to the federal authorization process for the Ute Pipeline. This would save time and money for projects viewed as high priority by the state by circumventing the annual competition for funding.

***Additional comments:***

López thanked the participants for attending and contributing to the State Water Plan Update. Follingstad reminded the group that there are a variety of ways to comment on the state water planning process, including visiting the OSE/ISC website, the comment form or by email. She then thanked everyone for their comments and their commitment to helping make the State Water Plan as comprehensive and useful as possible.

# STATE OF NEW MEXICO WATER PLAN

PUBLIC MEETING – MAY 5, 2009

P RTALES

Gateway to a good life

The City of Portales is a community with a diverse and strong economic base. As with many growing rural communities in the southwest, the City is challenged with ensuring a viable water supply while demand increases and ground water resources diminish. As a result, the Portals City Council has made it a priority to plan for the future of our community through methods that create a sustainable water supply. The City of Portales has enhanced its water supply in many ways including water conservation, the purchase of additional of water rights and land in 2001 (adding 18-30 year supply to the current level), converting agricultural wells to municipal use and most currently, conducting a water appraisal for the re-use of the City's wastewater supply. The use of reclaimed wastewater is a common and effective means to extend the use of our groundwater supply. Water Re-Use is an essential component of the City's water supply portfolio. We will need support and financial assistance from the State of New Mexico, including the Water Trust Board, Interstate Streams Commission and Federal Government to further the goals of creating a sustainable water supply in our community.

The City's existing water supply system consists of two well fields the Blackwater well field located southwest of the city and the Sandhill well field located northeast of the city. The groundwater obtained by these well fields is from the Ogallala Aquifer. This Aquifer is being depleted more rapidly than the rate of recharge. The capacity of the existing water distribution system is estimated at 12 million gallons per day. The maximum pumping capacity of the City's wells is estimated to equal 8.4 MGD, with an average capacity of approximately 2.39 billion gallons per year.

The City has promoted water conservation as a high priority in an effort to assist in water supply planning. This effort has proven to be very successful. The City's water use in 2006 was about 62 million gallons less than in 2005. In 2007 the City's water use showed an additional 11.05% decrease, totaling 127 million gallons. From 2007 to 2008 consumptive use continued to reduce by 1% or another 11 million gallons. To supplement our efforts toward water conservation, the City is investing $1.5 million in automated meter reading system. This automated system will yield water savings of approximately 4% which will be reflected in loss water reported. Automated Meter Reading will provide the City with a better management tool in working with customers on their consumption water use as it has it has the ability to

provide hourly water consumption with an accuracy of 1/10 of a gallon. It is the goal of the Portales City Council to decrease the City's average annual water use and it is apparent that Portales is making much progress as demonstrated by the reductions in their consumptive use. These efforts alone will not sustain our community in the future; therefore we must work diligently in partnership with the State and Federal governments to find solutions that will support the growing needs of our community.

Lastly, another water supply source potentially available to the City in the future is surface water from the Ute reservoir via the Eastern New Mexico Rural Water System pipeline project. This project has the support of the Portales City Council and is seen as the most viable option for a supplemental, renewable water supply in Roosevelt and Curry County. The City has 3,433 acre-ft per year allocation of Ute Reservoir water reserved representing approximately 60 percent of the community's needs. The City of Portales supports the building of the pipeline project as has just been authorized by Congress. In order to ensure that this project is affordable and is available, the Ute Water Authority and rural communities will solicit strong support from the State of New Mexico to secure the funding needed to construct this project. Everyone working together for the same common purpose is critical for this project to see fruition.

The City of Portales wishes to thank the State of New Mexico for its progressive thinking and for the planning of water needs crucial for of all residents. We especially appreciate your support and effort in assisting us in eastern New Mexico so that as a community and a State we can continue to thrive and grow.

Thank You

Mayor Orlando Ortega, Jr.

## WATER CONSERVATION MEASURES

- A 5-year program of 4% annual rate increases was adopted in 1995 to encourage water conservation and fund system improvements.
- A schedule of increasing block rates with increasing consumption to increase water costs and discourage excessive use. The water utility is financially self-supporting for present and future needs.
- The minimum monthly base rate including the first 2,000 gallons of water use was set at less than the expected minimum usage to encourage water use awareness.
- Water meter readings are monitored for excessively high and low values and checked for accuracy. High readings trigger onsite leak checks and informal water use surveys.
- Sewer rate schedules are tied to water use and are therefore also structured to encourage water conservation.
- Treated effluent is used to irrigate up to 300 acres of farmland thereby reducing agricultural groundwater demand.
- Low water pressures (40 to 60 psi) are maintained in the distribution system to reduce waste.
- Water metering is universal except for some parks. All new facilities are being metered and unmetered uses are being progressively eliminated.
- A water meter testing, repair and replacement program was implemented.
- A program for conducting internal, system-wide audits of the City's water utility was implemented to document water supply and use on an annual basis.
- Leak detection and pipe repair/replacement programs were implemented.
- The City is working with *Pride in Portales* and *New Mexico Clean and Beautiful* organizations to promote water-conserving landscaping on road medians and adjacent areas.
- Automatic, timed sprinkler systems were installed in City parks allowing for controlled use of water and nighttime watering.
- Sprinkler systems in City parks are designed with controlled nozzle sizes and equal overlap to minimize overwatering.
- The City Council has authorized emergency water management authority including drought management.
- An expanded program offering free water conservation surveys for all water utility customers. The surveys identify areas of excessive water use and promote water conservation.
- A water conservation education and outreach program for water utility customers and the general public. The program provides presentations and water conservation information for public schools, community service groups, and major water users.
- A continuation of annual water block rate increases.
- Cooperate in conversion to drought-resistant landscaping at ENMU.

**Potential Water Savings from Additional Conservation Measures**

| Additional Conservation Measure | Potential Overall System Savings | Notes |
|---|---|---|
| Conservation Water Audits | 2% | Assume 20% of customers get 10% savings |
| Education and Outreach Program | 3% | Program will also support other conservation measures |
| Conservation Water Rates | 7% | Savings expected to range from 5% to 10% |
| Cooperate in Conversion to Drought-Resistant Landscaping at ENMU | 1% | Assume 15% savings for 9% of system use |

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|---|---|---|
| **Total Potential System Savings** | **13%** | |