

MINUTES OF THE
SANTA FE COUNTY
WATER POLICY ADVISORY COMMITTEE

January 8, 2015

Santa Fe, New Mexico

This meeting of the Santa Fe County Water Policy Advisory Committee (WPAC) was convened at approximately 5:00 p.m. by Chair Charles Nylander on the above-cited date at the Santa Fe County Public Works Building Conference Room, 424, NM 599, Santa Fe, New Mexico.

A quorum was established as follows:

Members Present:

Charles Nylander, District 2
Bill King, Soil & Water Conservation
Anna Hamilton, District 4
Steve Rudnick, District 5
Sigmund Silber, Central Water Planning Area
Gil Tercero, Mutual Domestic Water Consumers Assoc.
Rik Thompson, Estancia Valley Water Planning Committee
Martha Trujillo, Acequia Association

Member(s) Excused:

Mukhtiar S. Khalsa, District 1
Consuelo Bokum, BDD Board
Rita Loy Simmons, District 3
[One vacancy]

Staff Present:

Claudia Borchert, Public Utilities Division Director

III. Approval of Agenda

Mr. Thompson moved approval of the agenda as published. Ms. Hamilton seconded and the motion passed without opposition.

IV. Approval of Minutes: October 9, 2014

Chair Nylander offered corrections to the draft minutes that were incorporated into the final minutes.

Ms. Hamilton moved to approve the minutes as amended. Her motion was seconded by Mr. Thompson and passed by unanimous voice vote.

V. **Matters from the Public**

None were presented

VI. **Action Items**

A. **Review and Approval of Draft White Paper and Recommendation(s)
Regarding Aquifer Storage and Recovery (ASR) in Santa Fe County**

Chair Nylander said he and staff developed the white paper to basically frame the concept of ASR and provide recommendations. The recommendations that he referred to as “fairly broad and general” all require further study and cost evaluation prior to any financial commitment. It is clearly inferred that ASR is not a panacea and should be done in combination with the use of other groundwater supplies. The recommendations highlight the importance of partnerships for funding and analysis of alternatives, and exploration of other water supply options. ASR is considered in the water and wastewater master planning process along with optimizing treatment of effluent. The recommendations clearly say ASR should be evaluated with other ideas.

Executive Summary Recommendations:

- All ASR alternatives identified herein need to be further investigated particularly their feasibility and cost effectiveness. Alternatives should be ranked using approved criteria.
- Consider any ASR alternative in combination with the use of other groundwater supplies to meet Santa Fe County Utilities backup water supply.
- Use the County’s partnership with the City of Santa Fe and the Bureau of Reclamation in the Santa Fe Basin Climate Change Study work to seek funding for more detailed investigation into both ASR and other future supply options.
- Use the County’s partnerships with the City of Santa Fe and the Bureau of Reclamation in the Santa Fe Basin Climate Change Study work to seek funding for more detailed investigation of ASR options, possibly including small-scale pilot projects.
- Incorporate ASR alternatives in the County’s Water and Wastewater Master Plan process.
- Support the County’s and City’s efforts to optimize the use of treated effluent in the joint City/County Regional Reclaimed Wastewater Feasibility study.
- Work with other local and regional water resource management groups and agencies in analyzing ASR alternatives.

Mr. Silber lauded the white paper as an excellent document but felt studying ASR was out of sequence. The paper places ASR in “too positive” a position and may be doing a disservice to the BCC by encouraging them to invest money in evaluating it at this time. He preferred promoting passive means of recharging the aquifers. He was in support of the last recommendation.

Ms. Trujillo said she found the resolution too positive and was not ready to support ASR. She mentioned adjudication issues, the Aamodt Settlement and regulations that require evaluation before promoting ASR.

Ms. Hamilton said the resolution states it is appropriate to conduct a feasibility study in order to plan for the long term and she could support that.

Mr. Rudnick agreed and asked whether there was a prime storage candidate in the county.

Ms. Borchert characterized ASR as a fairly broad term that can encompass a variety of things. The City has already enacted ASR. For the County, at this point the most promising site is the wastewater treatment plant on SR14 where there is land to irrigate and although nothing is being grown there, the water is infiltrating one of the most porous aquifers in the county and that water will help sustain the streams in La Cienega. That form of aquifer storage and recharge is occurring in a manner that benefits the downstream acequias and ecosystem. In the broadest sense it benefits the water supply.

Ms. Borchert identified reclaimed wastewater as a viable option. Mr. Silber said he considered reclaimed wastewater a passive project which he supports. He repeated that at this point he could not support advising the County to conduct studies on ASR.

The Central Arizona ASR project was mentioned and Chair Nylander said Santa Fe lacks the volume of water that Arizona has to put underground.

Chair Nylander said the white paper clearly asserts ASR requires further study and should be looked at in combination with other groundwater supplies. There is no urgency to choose one option right now.

The resolution promotes deferring ASR for the long term and in the short- and mid-term consider locating backup water supply wells. The resolution directs the County to invest in groundwater wells now and perhaps ASR has a role in the future. He concurred with Mr. Silber's observation that it was premature to implement ASR.

Ms. Hamilton offered it was a waste of time not to suggest the County do something. A study will allow the County to plan for the long term by investigating what they should be doing. The process for setting criteria and who establishes criteria should be spelled out.

While the white paper will be reviewed, Chair Nylander said it is the resolution that will direct the Commission's decision which clearly states they should develop groundwater backup wells and put ASR off to the future.

Ms. Hamilton said feasibility work is required by the County for the long term and framework guidance on that work should be included in Committee's recommendations.

Mr. Thompson said the resolution plainly advises the Commission to get more groundwater for backup. The County certainly needs to be looking at ASR and preparing for a water shortage is not premature.

Ms. Trujillo said she has deep concern regarding farmland sustainability in the more rural areas of the County.

Chair Nylander said injecting water into the aquifer is complicated and a wealth of knowledge is required to implement such projects. The Committee is instead recommending that

the County needs their own wells rather than relying on the City's wells to meet their needed backup water supply. He said the County has 153 acre-feet of groundwater rights that they are unable to access without their own wells.

Providing background history, Ms. Borchert said in 2009 a conjunctive use plan was developed that identified the need for available surface water and when not available backup water supplies were needed. In 2010/2011, the BCC asked whether ASR could be implemented rather than backup wells, thus placing ASR high on this Committee's task list. The question is could ASR provide the backup needed by the utility? If not, what and where is the backup supply?

Chair Nylander said it was determined that ASR was not fundamentally ripe as an economical concept to provide the backup water. In the short term backup wells are being recommended while ASR is researched as a possible future augmentation source.

Chair Nylander said in 2009 a committee reviewed siting wells with a focus on avoiding protests from other water right holders, acequias and private well owners. Rather than focus on geology the committee looked for a location that would be free of protest.

Ms. Borchert identified the County's 153 acre-feet as Santa Fe Basin rights and pointed out that the County's Rio Grande water is being diverted through Buckman. A backup supply would service the County when Buckman is down.

Referring to the 4th recommendation in the resolution, Ms. Hamilton recommended expanding the language to include careful consideration in respect to protests and excessive costs, and craft language to sufficiently articulate the conjunctive use study to site wells: 4) "...new wells, taking into consideration siting criteria to avoid protests and excessive costs."

Ms. Silber said the resolution reads as a recommendation for groundwater wells and he questioned whether that was within the Committee's assignment. He acknowledged that his difficulty with the executive summary and resolution recommendations is wording. There is value in the ASR concept, conceded Mr. Silber, but the Committee is not recommending where it should be applied.

"All" was removed from the first bullet in the white paper.

Mr. Silber said he supports a recommendation that communicates there is merit in an ASR approach but the Committee is not ready to say how it should be applied. However, over the next few years it will become clearer. His concern is the County will commission studies and that is premature.

Mr. Rudnick said he wanted to advise the Commission to begin/continue to study ASR and referred to the list of aquifer storage and recovery alternatives (1-20) in Santa Fe County chart that accompanies the white paper.

Mr. Silber said there are ASR projects occurring within the state and country that are appropriate for staff to monitor. Chair Nylander said the concept to monitor ASR could be a component of the Utility's master plan.

A preliminary bullet to establish that the ASR concept has merit but is premature and needs further investigation that may come out of current operations rather than requiring a commissioned study was recommended.

Mr. Tercero recalled the uproar following the 2009 study regarding well locations. As a member of the Agua Fria Water Association he was part of the uproar and he recalled the County's withdrawal of their application in direct response to the protests. He could not summon up any well locations agreed to by the Santa Fe Basin well users as not having an impact on anyone.

Considering the legal expenses to address the protests and legalities of transferring water rights, Mr. Tercero said drilling wells could be as difficult to do as an ASR project.

Mr. King asked whether the State Engineer recognizes a license to pump water back out once San Juan-Chama water has been pumped into the Santa Fe Basin. Ms. Borchert said the State Engineer did recognize Albuquerque's reclaimed water but it was a long, detailed process. There are specific rules that guide an applicant through an ASR application. To date there have been two successful applicants and the process took between seven and ten years.

Ms. Borchert noted that the water the County has to put into the ground is something that will decrease as the demand on the system increases. She questioned whether it makes sense to invest money for ASR because in the time it takes for permitting it may no longer be an appropriate solution.

Mr. King recommended determining whether there is a place the State Engineer will permit ASR and then commission the appropriate study.

Ms. Borchert said wastewater will continually be produced and she pointed out neither the City nor County have applied for return flow credits on the wastewater effluent going down the Santa Fe River. Applying for return flow credit may be a good start, suggested Mr. King.

Ms. Borchert pointed out that return flow credits suggests the water is making it down to where it was diverted and therefore returning an equal amount. That is not the situation with the water that goes down the Santa Fe River because it infiltrates before it makes it to the Rio Grande. A pipeline from the wastewater treatment plant down to the Buckman Direct Diversion on the river has been suggested and that is a viable option, as is injecting and pumping it out or treating it and returning it to the pipeline.

Ms. Borchert mentioned that the well at the state penitentiary could possibly serve as a backup supply well and eventually could provide recharge potential. She suggested it may make sense to periodically pump that well to recover some of water for backup situations.

As a concrete recommendation, Mr. King supported applying to the State Engineer for return flow credits at the penitentiary and pumping out of that well. With approval that could provide a good system for the future. Ms. Borchert said the County does not own the penitentiary

well and has no water rights there. There are too many factors that need to be fleshed out before a recommendation can be proffered.

Mr. Tercero said it surely should be pursued. Chair Nylander agreed adding that the accompanying list of ASR alternatives should be prioritized and studied in order to determine the appropriate project(s) to pursue.

Ms. Borchert said what makes a project feasible is whether it is a long-term reliable water source. Wastewater meets those criteria. A question that needs to be asked and answered is if the community of Santa Fe County is ready to drink purified water. If the answer is yes, then the investment in groundwater models and applications to the State Engineer could be moot.

Mr. Rudnick said the correlation between the amount of water and the cost of an ASR project may make it unfeasible. Technical studies rather than philosophical aspects need to occur before ASR recommendations are tendered.

It was clear to the Committee that there is a need to communicate the necessity of backup.

An additional white paper recommendation would be that staff conduct further ASR research and in the meantime consider drilling new groundwater wells to address the backup water supply.

In response to whether it was feasible to propose that County staff conduct the necessary studies, Ms. Borchert pointed out that the County Utility is supposed to operate as an enterprise fund. At this point, the utility is able to provide in-kind but not financial contributions.

Mr. Silber said the issue is whether the County is ready to develop a scope of work, not who does the work. Ms. Borchert agreed and said having the resolution to reference will be an asset.

Mr. Silber said the resolution needs to be phrased in a manner that the BCC does not interpret it as a call for immediate implementation.

Ms. Borchert mentioned the Santa Fe Basin Climate Change Study, which is basically this basin's long-range water supply plan from a utility's perspective, will be followed by the formulation of ranked alternatives. When completed, she offered to forward the final study and provide a brief presentation. The reclaimed wastewater component as the untapped resource concept is in its infancy and the City and County are reviewing that to fill the gap that is created in the long-range water supply plan. The effluent could be piped into the Rio Grande for flow credit.

Chair Nylander identified the unutilized 12" wastewater pipeline that connects the Airport Road wastewater plant with Las Campanas as valuable infrastructure the City and County should consider in master planning.

Chair Nylander suggested that he work with Ms. Borchert to temper the positive tone of the white paper, encourage the continuing investigation of ASR, and add a first bullet that ASR should be considered but it is premature to select a project at this point.

Mr. Tercero requested a bullet regarding appropriate siting of wells. Chair Nylander agreed and said that should fall within both the recommendations and at the conclusion be re-emphasized to state: in the short term groundwater wells should be pursued with consideration of well locations avoiding protests, impacting others, etc. It is important that the BCC recognize that groundwater wells are no more a panacea than ASR.

Ms. Borchert said the white paper is about ASR. Discussion of drilling groundwater wells is incorporated within the resolution.

Ms. Hamilton recommended drafting a contextual paragraph on why ASR is being considered. She pointed out that there is a regular change in commissioners and for continuity, that context is important.

Mr. Thompson introduced a motion to accept the white paper as amended per discussion. Ms. Hamilton seconded and the motion passed by unanimous voice vote.

Ms. Borchert said she would forward the amended white paper to the members for review prior to its inclusion within the BCC packet.

B. Review and Approval of Resolution 2015 – Adopting the Recommendations of the Water Policy Advisory Committee on Aquifer Storage and Recovery and Backup Water Supply

Chair Nylander said not all County committees have resolutions that accompany their products; however, the BCC has approved the resolutions submitted by this Committee and he felt it was important to continue the practice. The resolution has six recommendations:

1. Aquifer storage and recovery (ASR) is a viable backup water supply component for Santa Fe County and has been studied as required by the CMP, Resolution 2011-88 and the WPAC CY14 work plan.
2. ASR has four prerequisites in order to be feasible:
 - a. Source of permitted, often treated, water supply to infiltrate or inject into the aquifer.
 - b. Geohydrologic conditions that allow infiltration of injected water to be received, stored without excessive loss, and reliably recovered.
 - c. Infrastructure to convey water to and from the injection/recovery location.
 - d. Permissive regulatory framework.
3. Given the uncertainty in the interplay of the four prerequisites identified above and the County's need for a reliable backup supply to be available in the short and medium term, the County's resources are best focused on developing existing groundwater rights and supplies. ASR as a long-term strategy does require further exploration, and study in context of other future water supply options.
4. In the short and medium term, as indicated in the CMP and Resolution 2011-88, the County shall pursue the use of groundwater wells to provide backup water supply. This

- undertaking shall involve the acquisition of groundwater rights, the acquisition of existing appropriate wells, and/or the development of new wells.
5. The County shall continue to partner with the Bureau of Reclamation and the City of Santa Fe to investigate alternatives for using ASR to using regional reclaimed wastewater and for meeting future water supply needs under two planning efforts: A Feasibility Study to Optimize the Use of Regional Reclaimed Wastewater and the Santa Fe Basin Climate Change Study.
 6. Staff shall continue to cooperate with the City of Santa Fe, La Cienega, La Cieneguilla, Agua Fria, Santa Fe Basin Water Association, Eldorado Area Water and Sanitation District, and other stakeholders as identified to partner in regional backup strategies to meet the goals articulated in Resolution 2014-103.

Under discussion of recommendation #4, language can be included to say that new well sites will be carefully considered in terms of impacts, costs, and benefits along with a siting criteria to mitigate and avoid impacting other groundwater well users.

Mr. Tercero pointed out that the protest regarding the previous proposed wells is what caused the Commission to move to ASR and now this Committee is recommending wells.

Ms. Borchert said she was employed at the City at the time and the City was a protestant. The County's plan was not well conceived and this time the County can be smarter.

Mr. Tercero asked that #4 recognize the previous problems and that a different direction be explored.

Chair Nylander mentioned that Buckman Well #10 (Santa Fe Basin) which is adjacent to booster station 2A on the Buckman direct line is rarely used by the City because it is high in arsenic. The arsenic could be treated at the treatment plant and a permit is not required. Ms. Borchert hastened to note that it is not the County's infrastructure.

Chair Nylander recommended adding to recommendation #4 "or utilize existing wells," and mention Well #10 as an example rather than a recommendation.

Mr. Tercero asked whether mention of the financial constraints required, or inherent in the enterprise utility was necessary in order to get supplemental funding from the County General Fund. Chair Nylander said that was appropriate for the white paper.

Ms. Borchert said \$1.2 million has been earmarked to ASR and she would discuss that with the Finance Department.

In discussion of recommendation #1, it was suggested that "potentially" be inserted before "viable," eliminating "backup" and adding "ASR can be a valuable water resource management tool."

It was suggested modifying the sequence of recommendation #1 to first state that the WPAC studied ASR and concluded it was a potentially viable tool.

Based on discussion and with direction to staff to incorporate modifications, Mr. Silber moved to approve the resolution. The motion was seconded by Mr. Rudnick and passed by unanimous voice vote.

C. **Review and Approval of Draft 2015 WPAC Work Plan**

Chair Nylander reminded the members that the Committee was meeting every two months. Per the Committee's direction he emailed the BCC on November 4th asking if they had any suggestions for the work plan. Commissioner Holian was the only responder. She thanked the Committee for its work and expressed concern regarding water supply in the County: providing water to new customers and preserving capacity for emergencies, i.e., communities suffering dry wells and/or contamination problems. Commissioner Holian asked that a policy determining eligibility for purchasing water from the dispensing station be developed: Do we really want to sell expensive BDD water to a business that will use it for dust control? asked the Commissioner.

The tasks for the 2015 work plan were presented as follows:

1. Review water allocation status in Santa Fe County and develop/review draft water development and allocation policies.
2. Review and approve Santa Fe Basin Climate Change Study: A 40-year water supply plan for the Santa Fe Basin.
3. Provide input to and review the County's water policies on the Aamodt Settlement and the County-owned portion of the Pojoaque Basin Regional Water System.
4. Provide input to and review the County's water and wastewater master plans.

Ms. Borchert confirmed that a consultant would assist staff in the development of the water and wastewater master plans. She hoped to use the Committee as an interactive tool for County hot topics.

Mr. Silber suggested exchanging tasks 1 and 2 because the study will inform the thinking on task 1. Ms. Trujillo said the tasks are connected.

Mr. Thompson moved to approve the 2015 work plan. The motion was seconded by Mr. Tercero and passed by unanimous voice vote.

Mr. Silber agreed with Ms. Trujillo about interconnectiveness and said it would be helpful to the Committee if staff considers drafting the 2016 work plan. Ms. Borchert was asked to speak with Adam Leigland in regards to what is foreseen in 2016 and how that might influence the Committee's work this year.

There was consensus that relevant information on any of the tasks was appropriate to forward to staff and the members.

VII. **Discussion Items**

- A. **Presentation by Claudia Borchert, Water Utility Division regarding a) current and proposed water development and allocation policies, and b) master planning and expansion of water utility services within Santa Fe County**

Chair Nylander reminded the Committee of a past discussion on the necessity for water rights, wet water, and the infrastructure to get it where it is needed. The County is deficient in water rights versus its demand, although there is enough wet water for the current demands.

Ms. Borchert said there is a cap to the water supply that can be physically pumped via the Buckman Direct Diversion system without going through an EIS process. The question of what to do once the cap is reached was posed. Another thought is as long as we're okay with our current demand it doesn't matter if there's a cap or not. She said she was not accustomed to planning in that manner but that has precedent with the utility that needs to be formulated, articulated and eventually adopted.

She noted that the County had an active water right acquisition program that had required developers to bring water rights. Those programs are no longer active.

Ms. Borchert identified Resolution 2006-57 as the guiding policy for waterline extension and water service policies. From 1994 to 2006 there was no infrastructure and the County gathered customers, predominately from the south side, and provided water contracts/water allocations with the caveat that the developer help build/pay for the utility. Rancho Viejo is an example of a customer who is obtaining water and participated in the infrastructure via a water contract. Other contracts have not been completed and staff needs to determine which contracts have been fulfilled and which are outstanding. Many of the contracts contain a "standby fee" to reserve water. To preserve the contract an annual charge per acre-foot is required. The County stopped billing that fee in 2011 and she estimated there was \$500,000 that could be due the County for that reservation to continue the effectiveness of the contract.

Later it became more important to the County that developers bring water rights or cash equivalent, at the Utility's discretion, plus 20 percent. Developers did bring water rights forward – a mixture of Rio Grande and groundwater rights – which enriched the County's portfolio. As a utility the County is protected from forfeiture and abandonment that individuals are subjected to. An individual hooking up to the water utility is required to pay \$2,750. The scale of the water acquisition fee is not relevant to a water budget but relates instead to the size of the meter.

Ms. Borchert said she was unsure why the County stopped collecting the standby fee and speculated it could be attributed to the downturn in the real estate market.

Ms. Borchert said currently developers are required to bring Rio Grande surface water rights to proceed with development. There may be an option in the future for groundwater rights but they are not equivalent to Rio Grande rights and would require roughly a 2:1 ratio.

Resolution 2006-57 is circular and confusing for the development community, stated Ms. Borchert. With receipt of water rights the County provides a letter of assurance that the County is "ready, willing, able" to provide water. The question is whether there is sufficient water to provide to the developer. Within a year of needing the water, the developer is required to submit a "new water delivery." She mentioned that 10 percent of all new water deliveries, according to the resolution, must be set aside for County uses which may address Commissioner Holian's concern for emergencies, etc. There needs to be buffer for the unforeseen system loss and basic reserve.

Ms. Borchert said what is missing in the current process is an initial step by which the projected water demand is evaluated against the overall County portfolio. Every project should be required to meet an acceptance test similar to the City's requirement of a Home Energy Rating System (HERS). Development should meet certain water conservation criteria and receive points for communal wastewater/utility.

Mr. King pointed out that there are subdivisions that establish their own water systems.

Ms. Borchert said Resolution 2006-57 speaks to developers wanting County water and needs to be updated. The Sustainable Land Development Code (SLDC) is moving forward and water-related policies should be reviewed and criteria identified in addition to bringing water rights, to insure the County's water supply meets community demands.

Ms. Borchert said the County is hiring an Aamodt specialist and with Ms. Torres' resignation a hydrogeologist will be hired.

Chair Nylander recommended reviewing the County's program of taking over mutual domestics and the policy implications as those expand. Those systems are typically on the periphery of favorable areas for development and not accessible to County lines. Ms. Borchert agreed and said that should be considered within the context of the SLDC and the utility planning.

It was noted that Mr. Leigland is preparing a memo outlining the status of the acquisition of the two mutual domestics and one co-op that are in progress: Chupadero, Cañoncito and Hyde Park Estates. There are tremendous access/easement issues. The wells and tanks are not on easements owned by the mutual domestic. In fact, one of the mutual domestics has over-diverted and has a water debt of 124 acre-feet.

A discussion about the County's financial aid for the mutual domestics ensued with the information that when the County did provide funds, it was within the County-owned portion of the facilities, usually the lines.

Ms. Borchert said there are a number of topics that need to be tackled and she offered to develop a list and email it asking the members to identify issues they were available to work on. She suggested that small groups could meet every few weeks. Avoiding a quorum was mentioned. There was consensus to do so.

Ms. Borchert said she would develop the bulk water policy to address a concern raised by Commissioner Holian. She offered to email the proposed policy to the members.

It was mentioned that New Mexico was the only state without a definition of beneficial use.

VIII. Matters from the Committee

There were no matters brought forward.

IX. Matters from County Staff

The next meeting is scheduled for March 12, 2015 at 5 p.m.

Ms. Borchert said there is a Committee vacancy for the northern planning area/District 1. She invited recommendations. Contacting the northern pueblos was suggested.

X. Adjournment

Having completed the agenda and with no further business to come before this Committee, Chair Nylander declared this meeting was adjourned at approximately 8:00 p.m.

Approved by:

Charles Nylander
Charles Nylander, Chair

Respectfully submitted by:

Karen Farrell
Karen Farrell, Wordswork



COUNTY OF SANTA FE) WATER POLICY ADVISORY
STATE OF NEW MEXICO) ss PAGES: 12

Hereby Certify That This Instrument Was Filed for
Record On The 7TH Day Of May, 2015 at 02:23:27 PM
and Was Duly Recorded as Instrument # 1763904
of The Records Of Santa Fe County

Witness My Hand And Seal Of Office
Geraldine Salazar
Deputy Laura Hernandez County Clerk, Santa Fe, NM