

Appendix 7-1

***Meeting Minutes
El Paso County Water Authority
Northern El Paso County Group
Workshop Held on October 5, 2000***

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MEETING MINUTES EL PASO COUNTY WATER AUTHORITY NORTHERN EL PASO COUNTY GROUP WORKSHOP HELD ON OCTOBER 5, 2000

On October 5, 2000 a workshop was held in the offices of the Donala Water and Sanitation District on Holbein Road. Members of the El Paso County Water Authority (EPCWA) represented at the meeting are shown on the attached Table 1. The purpose of the workshop was for the northern EPCWA members to present their ideas related to coordinated and looped infrastructure projects in support of Subtasks 4C through 4G (Water Reuse, Synergistic Projects with Colorado Springs Utilities (CSU), Optimum County Water Distribution Infrastructure, Water Plan for Private Well Owners, and Potential Water Import Projects, respectively) of the EPCWA County Water Master Plan currently underway by Halepaska & Associates/Knight Piésold.

The issue of a coordinated, looped, emergency or non-emergency interconnected water supply system is generally technically and philosophically accepted by the northern El Paso County water entities. Issues are strictly political, which may be difficult to overcome in some cases. Each entity present was asked if they wanted the regional infrastructure concept and if they had technical concepts of this regionalization, which they could share with Halepaska & Associates/Knight Piésold and the rest of the group. Each entity responded as summarized below.

Triview Metropolitan District. Triview shares its wastewater treatment. Currently there are two wastewater treatment plants (WWTPs), each with three entities, for a total of six entities. These entities were not specifically identified, but are assumed to include Triview, Donala, Academy, Woodmoor, Monument, and Palmer Lake. Thus, WWTP as well as lawn watering return flows from non-tributary Denver Basin water could be stored, by exchange, for reuse. They also could be reused directly for irrigation use. Because no existing infrastructure exists to completely store these return flows, capital investment would be required such as storage reservoirs and perhaps pumping facilities.

Within Triview, the issue of interconnecting with other entities is not a philosophical one, but rather a political one. Some in the district do not favor connecting to any other system. In the future; however, there will probably be a need to interconnect because of reduced ground-water resources from the Denver Basin aquifer.

Woodmoor Water and Sanitation District. Woodmoor favors regionalization of the water supply infrastructure. The district does not need regionalization now, but recognizes that in the future it may need help in protecting its customers during drought. Emergency water supplies are an issue and interconnected infrastructure could resolve that issue.

Woodmoor pointed out that, currently, water supply systems that were poorly planned or are poorly operated are constantly being “bailed out” by those entities that planned well. Bailing out poorly planned or poorly operated entities does not sit well with Woodmoor or other northern group members.

Donala Water and Sanitation District. Regionalization is a good idea for the future. Within Donala it is not needed now, but it is understood that some kind of integrated infrastructure will be needed in the future. Donala is currently requesting annexation by the City of Colorado Springs for the sole purpose of obtaining new water from CSU. Donala currently has Leonard Rice Consulting Water Engineers doing a study to assess additional wells for the District.

Donala feels that the northern El Paso County area needs a plan similar to Douglas County for interconnections between entities. Donala also sees a need for a replenishable water source, and a need to connect private well users. If private well users were connected to an existing water supply entity, that entity could obtain the Denver Basin water rights of the private well users. This is politically feasible, but the technical feasibility must be part of the EPCWA study currently underway.

Donala proposed two possible infrastructure alternatives. The first alternative would seek water from the CSU, whose system is approximately ½ mile south of Donala, or from a water import project, such as Stockmans. The regional interconnection would involve Academy and Sun Hills to the east, Triview, Woodmoor, Monument and Palmer Lake to the north, and Forest Lakes to the west.

The second Donala alternative involves water from Forest Lakes Metropolitan District via the existing Bristlecone Reservoir, an expanded Bristlecone Reservoir, or a new reservoir downstream on Beaver Creek or on upper Monument Creek. The source of the reservoir water, under the Donala alternative, would be from the CSU or imported water. A regional water treatment facility would be located at the reservoir with distribution to the northern group entities of Palmer Lake, Monument, Woodmoor, Forest Lakes, Triview, Academy, and Donala. Most likely any alternatives for a regional infrastructure project in northern El Paso County also could include other public and private entities such as Pioneer Lookout Water District, Forest View Acres Water District, Walden Community System, and private well users.

Forest Lakes Metropolitan District. The ideas presented by Gary Barber at the workshop are not endorsed by Forest Lakes as a whole and are solely his ideas. Gary made it clear that Forest Lakes is not politically supportive of his plan for a regional infrastructure system, which he outlined at the workshop. His ideas involve a conjunctive use system

of water procurement, water storage, water treatment, direct use and reinjection of treated water for use during high demand periods.

The regional water infrastructure system is based on obtaining water from the CSU or from a water import project with storage in Bristlecone Reservoir, in an expanded Bristlecone Reservoir on Beaver Creek, or in a new 20,000 af reservoir further downstream on Beaver Creek or on upper Monument Creek. Because the live storage in Bristlecone Reservoir is estimated to be 400 af, it is felt that additional water storage must be available for a viable regional infrastructure system, either with or without conjunctive use. A 10 MGD regional water treatment plant would provide water for both direct distribution to northern El Paso County water entities or for injection into Denver Basin non-tributary aquifers. The injected water would be withdrawn during peak demand times. A regional augmentation plan using the Triview WWTPs would be used for non-tributary return flows.

An additional potential source of water for a new reservoir on upper Monument Creek would involve issues of exchange on Monument Creek related to existing intervening water rights. It may be possible to lease water to satisfy these intervening Monument Creek water rights from the Fountain Mutual Ditch. This ditch water also could be used to aggregate storage in a new 20,000 af reservoir on Monument Creek. In 1997, GEI did a feasibility study for a new 20,000 af reservoir on Beaver Creek. That study report is currently proprietary and would not be available from Forest Lakes for the EPCWA infrastructure tasks.

Another possibility of storing water in a large upstream reservoir to serve northern El Paso County would be to contribute to the CSU pipeline from Pueblo Reservoir. Another potential water source is the City of Aurora, who may be interested in piping water from the Arkansas River basin by utilizing their lower Arkansas water rights from the Rocky Ford Ditch, through El Paso County, to the South Platte River basin.

Gary encouraged those present to think about a pilot project for injecting treated water into non-tributary Denver Basin formations using wells. One objection to the recharge of treated water is that high dissolved oxygen concentrations of the treated water may cause precipitation of iron, effectively plugging the aquifer. This technical problem must be resolved before the conjunctive use portion of the plan could be viable. However, the plan without conjunctive use could be viable and is a more detailed version of Donala's second alternative.

Gary estimates that the cost of the infrastructure water system, not including the non-tributary injection wells, might be \$10 to \$15 million (M), broken down as \$10M for a 10 MGD water treatment plant, \$2M for a large storage/distribution tank, and \$3M for distribution pipelines to the various entities. This cost estimate was deemed to be too low by Triview's engineer (Nolte Associates). Nolte estimated that the above costs would be in the range of \$30M to \$45M for the same treatment, storage and distribution system. The estimated cost of a 20,000 af reservoir on Beaver Creek is between \$50M and \$60M based on the 1997 GEI report (not generally available to the public).

Gary's plan has been preliminarily engineered by Kiowa Engineering. The preliminary feasibility study has taken into account the demands of neighboring entities. The work by Kiowa Engineering was promised to Halepaska & Associates/Knight Piésold to use in the EPCWA planning study.

Academy Water and Sanitation District. Currently, Academy is not interested in regionalization. Academy has two Denver Basin wells, which are providing adequate water for the District. The Academy District board of directors is not in favor of a regional infrastructure system for northern El Paso County and has decided not to remain a member of the EPCWA.

Town of Monument. The Town of Monument indicated that a regional water infrastructure system for northern El Paso County would be prudent and proactive, but the politics of such a system must be addressed. No further comments were made by the Town of Monument. *[The Town is hoping that restoration of Monument Lake dam will provide sufficient storage to supply water to the Town in the near term. Actually, the Town has no water storage rights in Monument Lake. The estimated capacity of the Lake is about 200 af, all of which is currently allocated to natural wetlands and maintaining the Lake. Estimated demands for the Town in the year 2020 are approximately 770 af/yr. Therefore, without storage or additional Denver Basin wells, the Town will require help from a regional water supply entity.]*

Town of Palmer Lake. The Town of Palmer Lake will vote on a bond issue this November to drill an alluvial well and a Denver aquifer well. Currently, the Town cannot agree how to connect to a regional infrastructure system. It is currently possible to transfer water into the existing Forest View Acres Water District distribution system south of the Town. The town agrees that regionalization makes sense, but politics must be overcome in order to commit to regionalization.

Summary of Potential Regional Infrastructure Alternatives. The following potential regional infrastructure alternatives are proposed for northern El Paso County:

- Inter-entity emergency connections using existing water supply wells or a satellite wellfield, which would include private well owners.
- Integrate individual augmentation plans in order to maximize the effectiveness of non-tributary return flows or lease of return flows to other entities for exchange of raw water.
- Full integration of the northern El Paso County entities using water from CSU, imported water, or exchange water from non-tributary return flows. Additional water storage and water treatment would be required.
- Full integration of the northern El Paso County entities using water from the CSU, or imported water from Stockmans or the Arkansas River basin through the City of Aurora. Additional water storage and water treatment would be required.

- Full integration of the northern El Paso County entities using either of the above two alternatives, but with conjunctive surface-water/ground-water reuse. Additional water storage, water treatment, and injection wells would be required.
- Integration of northern El Paso County entities with southern El Paso County entities using Frying Pan/Arkansas River water as a source. This water could be leased and used as emergency supply or stored in existing reservoirs for peak demand use.
- Other combinations of the above infrastructure alternatives.

TABLE 1

**EL PASO COUNTY WATER AUTHORITY
NORTHERN EL PASO COUNTY GROUP ATTENDERS
WORKSHOP HELD ON OCTOBER 5, 2000**

Name	Representing	Telephone	Facsimile
Dana Duthie	Donala Water and San. Dist.	(719) 488-3603	(719) 488-3110
John McGinn	Forest Lakes Metro. Dist (Kiowa Engineering)	(719) 630-7342	(719) 630-0406
Jim Kunkel	Knight Piésold and Co.	(303) 629-8788	(303) 629-8789
Bruce Lytle	John C. Halepaska & Assoc.	(303) 794-1335	(303) 794-3245
Paul Gilbert	Town of Palmer Lake	(719) 520-5999	(719) 520-5909
Ron Simpson	Triview Metro. Dist.	(719) 488-6868	(719) 488-6565
Jerry Jacobson	Academy Water & San. Dist.	(719) 481-0711	
Phil Steininger	Woodmoor Water and San. Dist.	(719) 488-2525	(719) 480-2530
Roger Sams	GMS, Inc.	(719) 475-2935	(719) 475-2938
Chuck Ritter	Triview Metro. Dist. (Nolte Associates, Inc.)	(719) 268-8521	(719) 268-9200
Tom Wall	Town of Monument	(719) 481-2634	(719) 481-0219
Rick Sonnenburg	Town of Monument	(719) 481-2954	(719) 481-0219
Gary Barber	Forest Lakes Metro. Dist.	(719) 598-0230	(719) 598-0260