

**JOINT MEETING**  
**CHEROKEE METROPOLITAN DISTRICT**  
**AND**  
**UPPER BLACK SQUIRREL CREEK**  
**GROUNDWATER MANAGEMENT DISTRICT**

July 18, 2011

MINUTES

The Joint Meeting between Cherokee Metropolitan District (CMD) and Upper Black Squirrel Creek Groundwater Management District (UBSCGMD) was held on Monday, July 18, 2011 at 5:00 p.m. at 6250 Palmer Park Blvd., Colorado Springs, Colorado.

CMD BOARD OF DIRECTORS PRESENT

Dave Hammers  
Jan Cederberg  
William Beahan  
Larry Keleher

UBSCGMD BOARD OF DIRECTORS PRESENT

Dave Doran  
Donald Booker  
Rick Jenkins  
Larry Rodgers  
Mitchell Baldwin

OTHER GUESTS SIGNING ATTENDANCE LOG

Sean Chambers	Mary Hernandez
Art Sintas	Chloe Olson
Dian Hardekopf	Tim Hunker
Sara Howard	Gene Cozzolino
Tracy Doran	David Hacker
Wayne Booker	Andy Anderson

ITEM 1:

The meeting was called to order by CMD President Dave Hammers at 5 p.m. All were present except Steve Hasbrouck who was absent because of illness. UBSCGMD President Dave Doran also called the meeting to order. All Board Members were present.

ITEMS 2 AND 3:

Mr. Hammers asked if there were any changes or amendments that needed to be made to the July 18<sup>th</sup> Joint Meeting Agenda. Mr. Doran requested permission to insert and read a written statement, on behalf of the UBSCGMD Board, at the conclusion of Item 3.

**\*\*\*MOTION\*\*\***

**MR. BEAHAN MADE A MOTION TO AMEND AND APPROVE THE AGENDA OF THE JOINT MEETING OF JULY 18, 2011 AFTER ADDING ITEM 3a READING OF WRITTEN STATEMENT FROM MR. DORAN. SECONDED BY MS. CEDERBERG. ALL BOARD MEMBERS PRESENT FOR CMD IN FAVOR. MOTION CARRIED (4-0); ALL BOARD MEMBERS PRESENT FOR UBSCGMD IN FAVOR. MOTION CARRIED (5-0).**

ITEMS 3a - 6:

Mr. Doran stated the UBS had a special meeting on July 14, 2011 to discuss the objectives for this evening's meeting. He thanked the Board of Directors for providing this meeting to discuss mutual concerns. Mr. Doran stated that he was chosen to be the spokesperson for the UBS Board to read the position of the UBS Board (written statement on file in office)-attached.

Included in his written statement, he provided a general background of the UBS by explaining its objectives and purpose. He stated 30 to 40 years of water usage and continual growth east of Colorado Springs had seriously depleted the Alluvial Basin. He wanted to reiterate that UBS's mission was not to buy or sell water but to legally protect the basin's resources; and by doing so, it has brought other agencies into conflict with the Basin. Recharging the Basin was a necessity, and avenues of doing so needed to be introduced to achieve the most maximum amount of water recovery return to the Basin.

In Mr. Doran's written statement, the UBS requested Cherokee to provide a proposal which would include a recharge facility in the northern part of the Basin. This would ensure more water for everyone, with conditions for use. Mr. Doran also stated that a proposal from Cherokee must include the cost of a usable northern recharge, project design work, and timeline for completion of project.

The written statement resulted in a mutual discussion for the remainder of the evening's meeting.

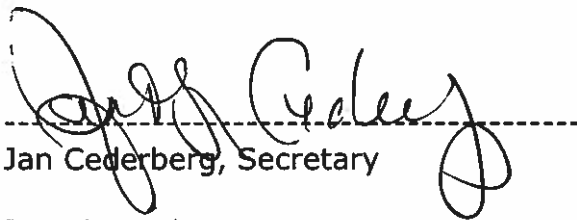
Mr. Doran advised the District on hearing in Division 2 Water Court would take place to determine how much water was taken from Wells 14-17 while there was a stay of execution on the order. CMD could ultimately face an enormous pay back of water to the basin should the order be retroactively enforced back to the year 2000.

Mr. Doran explained that they would be happy to meet with Cherokee again once they receive a more detailed proposal with the requested items from the UBS. In conclusion, Mr. Chambers assured UBS that they would look at the old and new proposals and present more of an outline proposal.

ITEM 7:

⇒ Adjournment

There being no further business to come before the Boards, the meeting adjourned at 7:04 p.m.

  
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Jan Cederberg, Secretary

Board Members

Term Expires

Dave Hammers, President	May, 2014
Larry Keleher, Vice President	May, 2012
Jan Cederberg, Secretary-Treasurer	May, 2014
Steve Hasbrouck, Director	May, 2012
William Beahan, Director	May, 2014

## UBS Statement – UBS/Cherokee Combined Board Meeting 7/18/11

As the chosen spokesperson the UBS offers the following statement, which was determined at our Special Meeting, July 14, 2011

First, let me on behalf of the UBS Board thank the Cherokee Metropolitan District Board and their manager for arranging this opportunity to meet. This prepared statement will be the only comments made by the UBS Board at this meeting and represents the concerns of the UBS in its relationship with Cherokee. It's our expectation and hope that the information we provide today will be helpful to the Cherokee Board and will serve as the starting point of possible future discussion of critical issues between our boards.

First, some general information and background about the UBS. The UBS is a groundwater management district, created by the Colorado legislature and charged with the legal responsibility of protecting both the quantity and quality of the groundwater in the UBS Basin. Groundwater is, of course, a limited natural resource and, unfortunately, over the past 30 or 40 years the groundwater in the Basin has been seriously depleted as the population east of Colorado Springs has grown. In fact, the Basin has been deemed over-appropriated which simply stated means that there are more users than there is water, which puts this aquifer in a non-renewable status and that is what the management district would like to try and change. For a groundwater management district such as UBS, the quantity of groundwater available is only part of the equation. As the quantity of groundwater has decreased, the quality of the remaining groundwater is being threatened by, among other things, increasing numbers of individual domestic septic systems and improper (illegal) disposal of industrial waste. So increased development and population growth on the eastern plains has presented a serious challenge to the UBS and similar groundwater management districts to protect the groundwater as we're legally required and empowered to do on behalf of all users whether they be private domestic wells or large capacity or Denver Basin wells. Again, I want to be very clear on this point – The UBS does not buy water and the UBS does not sell water. The UBS and the other groundwater management districts exist only to protect the groundwater for all who have the legal right under Colorado law to use that water, now and into the future. Further, the UBS is governed by an elected 5 member board who serve in an unpaid, volunteer capacity. And I can assure you that the current UBS board takes its legal responsibility to protect the groundwater very seriously and understands that their decisions directly impact the lives and property of tens of thousands of people.

This legally imposed responsibility to protect the groundwater in the UBS Basin has brought the UBS into conflict with a number of entities over the years, including Cherokee. Sadly this ongoing conflict has been an enormous drain on the resources of both Cherokee and the UBS. Time, money, and technical expertise in great amounts has been spent in seemingly endless (and some might say needless) litigation instead of these resources being used more productively to address the many other critical things our

districts need to deal with. And, of course in the end, the only parties really getting any benefit from these endless courtroom dramas are the attorneys on both sides.

It is with that information in mind that the UBS Board makes the following comments:

1. Recharge of the Basin is a critical and absolute necessity if any users are to have any water in the future.

Because of the natural terrain, geology, and hydrology of the Basin, the best way to accomplish the most beneficial recharge is to introduce the maximum amount of recharge water possible into the northern part of the Basin.

2. Water introduced in the northern part of the Basin would eventually recharge the entire Basin ultimately benefiting all users in the Basin, both large capacity and small capacity domestic. Water introduced into the southern end of the Basin would benefit only those whose wells are in the southern end.

The exact locations of the recharge sites would be determined after study by impartial experts who would choose the sites based on maximum benefit for the Basin as a whole.

3. With the above information in mind, the UBS requests the Cherokee develop and submit to the UBS a specific proposal that would accomplish a workable northern recharge of the Basin. This proposal should ideally include specific infrastructure requirements (both existing and to be built), cost estimates, ideas for funding the project (including possible fees and the acquisition of grants), and a timetable. Such a proposal and a serious and sincere commitment to accomplish it would benefit the entire Basin and all its users including Cherokee by insuring that there will be water for all for many years into the future and would go a long way in restoring the health of what is now a very depleted Basin. We feel a serious commitment on the part of Cherokee would signal good faith and could begin the process of developing a more positive relationship between Cherokee and the UBS.

Much has been lost in the conflict we have had over the past 30 plus years, not only in money and water but in the poisoned relationship that has been harmful to all involved. This concludes our part of this meeting. We will leave now so that the Cherokee Board has the opportunity to discuss the information I've just presented among themselves and hopefully prepare a response so that further questions and discussion between our boards can continue. We look forward to your response at a future date.

Pipeline Evaluation For Potential North Black Squirrel Basin Recharge  
Pipeline Alignment  
August 2, 2011  
GMS, Inc. Consulting Engineers

As requested by the Cherokee Metropolitan District, this pipeline evaluation has been prepared to present conceptual costs for transferring treated wastewater from the District's Wastewater Reclamation Facility (WWRF) to potential recharge points in the northern Black Squirrel Creek Basin. This evaluation looks at the pumping and piping facility related costs. The specific recharge locations are general. The actual recharge facilities have not been determined and could consist of recharge basins, injection wells, or surface water discharges.

Upper Black Squirrel Recharge Pipeline Route

The route selection has been based on a starting point at the existing WWRF site. Electric power needed for pumping would be available at this site, whereas, costly power line extensions would be needed to service a pump station at the wastewater recharge basin site. Multiple recharge points in the Upper Black have been identified by District staff. The concept is to pump treated wastewater effluent to these multiple sites using a single pipeline and dropping off an equal percentage of the flow at each site.

The evaluated Recharge Pipeline alignment begins at a new pump station located at the existing WWRF site and traverses east 0.5 miles to Peyton Hwy, then continues north 7.0 miles to McDaniels Road. From McDaniels Road and Peyton Hwy., the alignment turns east for 5 miles to the North Wellfield pipeline. From this point the alignment parallels the North Wellfield pipeline cross country and along Ellicott Hwy. for 8 miles to the northernmost recharge point. The total length is 20.5 miles.

Potential Recharge Points

The seven potential discharge sites are located as follows:

- 1.0 mile east of Ellicott Hwy and 0.5 mile south of Big Springs Rd., near Well No. 1.
- East side of Ellicott Hwy. and 0.5 mile south of Jones Rd. near Well No. 5.
- East side of Ellicott Hwy. and 0.5 mile north of Falcon Hwy. near Well No. 6.
- West side of Ellicott Hwy. and North side of County Hwy. 110
- West side of Ellicott Hwy. and 0.25 mile south of Judge Orr Rd.
- North side of Judge Orr Rd. and 0.25 mile west of Ellicott Hwy.
- East side of Ellicott Hwy. and 0.75 mile north of Judge Orr Rd.

Pipe size, material and class have been selected based on the flow having a velocity in the 2-3 feet per second range to control water hammer and minimize pipeline friction losses. Cost estimates are for the pipeline and appurtenances. The estimates do not include legal costs, land acquisition, injection wells or new recharge facilities at each site. Discharge piping laterals from the main to the new recharge sites are also not included in the estimate.

Flow Rate

The existing WWRF is rated at 4.8 mgd or 3,300 gpm. The facility is expandable to 9.6 mgd. Currently the WWRF is treating approximately 1.5 mgd. For the purpose of this evaluation, the pipeline design flow rate of the existing facility at 4.8 mgd has been selected. Lower flow rates

would reduce the pipeline diameter. There is approximately 512 feet in elevation rise from the WWRF to the last point of recharge on the pipeline. Thus, the recharge pump station would need to be equipped with six(6) 150-hp pumps. These could be installed as WWRF flows increased over time.

North Black Squirrel Basin Recharge Pipeline  
Preliminary Construction Cost Estimates

The following cost estimate is for the pipeline and appurtenances associated with the alignment considered. The estimate **does not** include legal costs, land acquisition, easements, recharge facilities or injection wells. In addition to the construction cost estimate given below, significantly regulatory proceedings will need to occur. The pipeline and discharge locations will be subject to a formal site application required by the Colorado Department of Public Health and Environment. Given the diameter of the pipeline, a parallel activity consisting of El Paso County's site location approval process will also be required. Before these activities can be initiated, the District will need to have secured the appropriate sites and pipeline alignments in perpetuity, either through dedicated easements or acquisition. The front end easement and site acquisition process followed by the required site application process should be considered to take at least a 9-month period and potentially 12 months or more. The District's discharge permit will need to be modified to address all locations where effluent would be discharged and the manner of the discharges. Thus, a formal amendment to the discharge permit application will also be required. That activity could occur concurrently with design and construction of improvements subsequent to the State's formal site application approval. If injection wells are pursued, their approval is subject to EPA's action. Both rapid infiltration basins as well as surface water discharges are subject to only CDPHE's approval and action. The CDPHE will require plan and specification review and approval prior to entering into a construction contract. That activity will likely require 3 to 4 months. Give design requirements plus the required regulatory processing, actual construction would likely not start for an 18 to 24 month period after deciding to move forward. Added geotechnical work will be required for either RIB or injection wells. The following provides the construction related aspects of the primary pipeline to extend the effluent into the northern reaches of the basin. The laterals and associated mode of actual discharge will vary dependent upon final selected sites and the mode of the actual discharge (i.e., rapid infiltration basins, injection wells or surface water discharge). These additional activities could easily increase the construction budget given below by 50% or more.

Pipeline sizing is based on a maximum flow rate of 3,300 gpm.

**North Black Squirrel Basin Recharge Pipeline – 20.5 miles**

Item	Description	Quantity	Unit Cost	Total Cost
1	24-inch diameter C905 DR 18 PVC	95,040 LF	86.00	\$8,173,440
2	20-inch diameter C905 DR 18 PVC	2,640 LF	76.00	\$200,640
3	18-inch diameter C905 DR 18 PVC	2,640 LF	53.00	\$139,920
4	14-inch diameter C905 DR 18 PVC	2,640 LF	43.00	\$113,520
5	10-inch diameter C905 DR 18 PVC	5,280 LF	29.00	\$153,120
6	24-inch butterfly valve	17 Ea	9000	\$153,000
7	20-inch butterfly valve	1 Ea	7500	\$7,500
8	18-inch butterfly valve	1 Ea	3500	\$3,500
9	14-inch butterfly valve	1 Ea	2500	\$2,500
10	10-inch butterfly valve	7 Ea	1800	\$12,600
11	Connection to existing piping	1 EA	16,500	\$16,500
12	Blowoff assembly	8 EA	2,500	\$20,000
13	Air/Vac relief valve vault	9 EA	4,500	\$40,500
14	Seeding	49.7 AC	1,200	\$59,640
15	Booster Pump Station with building, 6-550 gpm pumps, piping, valves, electrical, generator, SCADA, and all appurtenances	1.0 EA	2,400,000	\$2,400,000
Subtotal preliminary cost				\$11,496,380
Project contingencies @ 15%				\$1,724,457
Engineering and construction observation				\$850,000
Other Engineering (easements, geotechnical, permitting, site application, County location approval, etc. Does not include legal expenses.)				\$200,000
Traffic Control				\$45,000
<b>Total preliminary construction cost estimate</b>				<b>\$14,315,837</b>