

**UPPER ARKANSAS WATER  
CONSERVANCY DISTRICT**

**Regular Meeting of the Board of Directors**

**April 11, 2019  
1:30 PM**

A regular meeting of the Board of Directors of the Upper Arkansas Water Conservancy District was held Thursday, April 11, 2019, at the District offices, 339 East Hwy 50, Salida, Colorado, following the Water Activity Enterprise committee meeting, notice having been given by posting of Notice and Agenda on April 10, 2019, at the offices of the Upper Arkansas Water Conservancy District, 339 East Hwy 50, Salida, Colorado.

**DIRECTORS PRESENT**

Robert M. Senderhauf	Tim Payne (phone)	Brett A. McMurry
Franklin J. (Jay) Moore	Robert B. (Bill) Donley	Thomas Goodwin
Gregory W. Felt	Timothy C. Canterbury	John H. Sandefur
Richard Hilderbrand	Mannie Colon	

**DIRECTORS ABSENT**

Jeff Ollinger Tom E. French

**DISTRICT OFFICIALS/STAFF MEMBERS PRESENT**

Ralph L. (Terry) Scanga, General Manager	Ken Baker, Consultant
Jord Gertson, Hydrologist	Kendall K. Burgemeister, Attorney
Wendy Ryan, Colorado River Engineering	Kimberly Kerschke, Secretary

**DISTRICT OFFICIALS ABSENT**

Chris Manera, Engineer

**STATE OFFICIALS PRESENT**

Brian Sutton, Water Commissioner District 11  
Jerry Livengood, Water Commissioner District 13

**EX-OFFICIO REPRESENTATIVES PRESENT**

Tom Flower, Custer County Commissioner

**EX-OFFICIO REPRESENTATIVES ABSENT**

Brian Berger, Poncha Springs Administrator  
Michael Patterson, Florence City Manager  
John Roorda, Chaffee County Planning Manager  
Shawn Williams, Buena Vista Public Works Director  
George Medaris, District Manager, Round Mountain WSD  
Philip Puckett, Buena Vista Town Administrator  
Bob Hartzman, Canon City Water Superintendent  
Council Representative, Salida City Council

**GUESTS PRESENT**

Bill Canda, Custer County Commissioner  
Dick Shea, Penrose  
Valda Terauds, San Isabel Land Protection Trust  
Linda Poole, San Isabel Land Protection Trust  
Tony Telck, Fremont County  
Mike Halmberg, USGS  
Zachary Kisfalusi, USGS  
Randy Rusk, Custer County  
Jay Printz, Custer County Commissioner  
Suzanne Paschke, USGS  
Connor Newman, USGS

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David Lady, City of Salida Public Works Director  
Drew Nelson, City of Salida City Administrator

### **PLEDGE OF ALLEGIANCE**

Chairman Senderhauf led attendees in the Pledge of Allegiance.

### **INTRODUCTION OF GUESTS**

Guests were asked to introduce themselves.

### **MINUTES OF THE MEETING OF March 14, 2019**

The minutes of the meeting of March 14, 2019, were unanimously approved upon motion by Director Felt with second by Director Sandefur.

### **FINANCIAL REPORTS**

Upon motion by Director Goodwin with second by Director Payne, the Board unanimously approved the monthly financial report dated March 31, 2019.

### **PROGRAM PRESENTATIONS**

Manager Scanga provided background on studies conducted in partnership with the United States Geological Survey. Studies began in the 1980's with the collection of groundwater and well data throughout the Upper Basin. In the year 2000 a more in depth study was conducted dealing with the sustainability of groundwater resources between Granite and Wellsville. Manager Scanga highlighted the results of this study and the estimated 472,000-acre feet of recoverable groundwater found in the top 300 feet of the aquifer. The study found that, based on the demographic projections for 2030, less than 1% of the recoverable groundwater in the top 300 feet of the aquifer would be used. A desire for further exploration led to the initiation of a Water Balance Study, which was broken into three different phases. A report on Phase 1 of the Water Balance Study came out in 2011, which covered the area between Granite and Wellsville. Manager Scanga said that this report could be found on our website, along with information on other studies and projects. Phase 2 of the Water Balance Study was started a few years ago and involves cost share partners throughout the Basin, including the District, several counties, and municipalities. Grants from the Water Supply Reserve Fund were also allocated towards the study with the District as the project manager. Manager Scanga said that this month's presentation focuses on Phase 2 and is concentrated in the Wet Mountain Valley, an area of Custer and Fremont counties within our District. The study is looking at alluvial storage and the potential for storing water underground.

Connor Newman, hydrologist for the USGS Water Science Center, provided the Board with a project update on the evaluation of groundwater storage potential in the Wet Mountain Valley. Hydrologist Newman said that, with the population at the headwaters expected to grow rapidly by 2030, additional water resources need to be utilized to meet the needs of a growing population in an over-appropriated Basin. Based on the interconnection between groundwater and surface water, this study is looking at the potential for storing additional water in an alluvial aquifer. Hydrologist Newman highlighted that, if you add more water to the groundwater than what is being added naturally, recharged water would eventually reach surface water. Recharged water that is stored and released into the stream over a longer period of time can then be put to beneficial use within the Arkansas Basin.

Hydrologist Newman reported that the 2011 study detected potential recharge areas between Granite and Wellsville and he showed a map of areas identified as having a high potential for alluvial storage. A conceptual model of the Wet Mountain Valley showed sand and gravel basin fill stretching between the Sangre de Cristo and Wet Mountains, as well as bedrock along the flanks of the Sangre de Cristo's. Hydrologist Newman said that the basin fill aquifer deepens on the west side of the valley, towards the Sangre's. The study focuses on the alluvial aquifer area and excludes bedrock areas, as not enough data is available to fully evaluate these areas.

As part of the study a surface water analysis was conducted and discharge was measured at thirty different locations on three separate occasions, the fall of 2017 and 2018, and during 2018's spring runoff. Hydrologist Newman said that data helps define where stream loss and gain occurs. It was found that streams on the western side of the basin show greater low-flow discharge than the eastern side,

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which is likely due to greater precipitation in the Sangre de Cristo Mountains. Hydrologist Newman said this also likely represents long-term drainage into the alluvial aquifer. He added that streamflow is also controlled by irrigation diversions and that natural fluctuations in the water table are about 1-3 feet due to well pumping. Hydrologist Newman stated that groundwater levels recover as soon as the pumps are turned off.

Hydrologist Newman reported that the USGS has built a groundwater model that incorporates domestic and municipal wells, streams, recharge from snowmelt, irrigated fields, and the extent of the alluvial aquifer. The model shows approximately 5000 feet of alluvial material on the southwestern boundary of the study area, which is comparable with a report done in 1971. The next step is to calibrate the model to observed water levels and streamflow. The model will aid in evaluating potential aquifer storage and Hydrologist Newman said that variations in the aquifer will be addressed through aquifer testing. Aquifer testing will take place from early to mid-May and results will be analyzed in the months following. Water level monitoring will continue through 2019 and data will be compared with 2017 and 2018, the variability in stream flows based on run off conditions providing a good opportunity for comparative data. Hydrologist Newman said that a published report can be expected in September 2020.

Questions followed and Director Donley asked why the study area was primarily limited to the area east of Hwy 69, with the exception of Antelope Creek and the gaging station at DeWeese Reservoir. Hydrologist Newman said that, from a hydro perspective, most of the inflow is coming from creeks draining from the Sangre de Cristo Mountains and that the streams from the east side of valley are almost always dry, therefore it does not make up a big portion of the water budget. Hydrologist Newman said that the east side of the valley is comprised mostly of fractured rock and there is hardly any surface water input from that side of the valley.

It was asked which model was being used for the study and Hydrologist Newman responded that MODFLOW is being used.

Director Colon asked Manager Scanga what our financial contribution has been to Phase 2 of the study. Manager Scanga did not have the exact figures, but he estimated the District's investment at \$60,000-\$70,000, plus in-kind contributions. As for total cost of the study, it was estimated at \$300,000-\$400,000, 30% of which came from USGS matching funds. Many other entities have also contributed and Manager Scanga said he could get accurate numbers to the Board.

Director Felt asked if the model would be useful for land use decisions regarding well density and if it would be granular enough to inform these decisions. Hydrologist Newman said that the model will be calibrated where there is a greater density of wells and it will be useful for evaluating the water budget in portions of the model domain. He added that the model cannot predict the precise amount of groundwater at specific points and that the model is based on 250 meter horizontal and 30 meter vertical grid spacing.

Custer County Commissioner Flower asked if well depths come into play in the model and Hydrologist Newman said that the depths of all wells are coded into the model.

A community member asked about the presence of clays or any confining or semi-confining layers. Hydrologist Newman responded that he has read about some confining layers and that there are certainly some clays mixed in.

Commissioner Flower asked how the alluvium is recharged and Hydrologist Newman said that there are lots of ways, including ditches and ponds. Manager Scanga added that the District has been looking at recharge ponds in the Trout Creek area. Suzanne Paschke of the USGS said that a time trial analysis can be conducted to look at how long it takes water to get from one spot to the next based on flow rates. This information can be used in an analysis of where to put recharge features.

As for next steps, Manager Scanga said that Phase 2 will be finished first. Once the final report comes back they can figure out the next step, which could potentially be a sustainability study or a study focusing on Eastern Fremont county.

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### **EX-OFFICIO REPORTS**

There were no ex-officio reports.

### **CONSULTANT REPORT – Ken Baker**

Consultant Baker provided a summary of various bills being reviewed in the Colorado Water Congress State Affairs Committee. He remarked that, under the current administration, once a bill is drafted it is on its way to becoming law.

HB 19-1082, the ditch bill, concerns the rights of a water right easement holder. Consultant Baker reported that this bill confirms the right of a ditch easement owner to clean and repair the ditch to a condition that the ditch will carry the water adjudicated to flow in the ditch. The bill was sponsored in response to ditch owners who were confronted with land owners whose land was servient to the ditch easement, and who tried to restrict the ditch owners from cleaning and repairing the ditch.

Consultant Baker said that the law, when created, will be confronted with the 1995 Amended Rules and Regulations governing irrigation practices in the Arkansas River Basin. In order to comply with the Special Master's ruling in the Kansas v. Colorado law suit, the State Engineer's Office applied for an order of the Water Court to approve the Amended Rules and Regulations, and included in the new rules and regulations restrictions on lining irrigation ditches that may impact the return flows to the river and diminish such flows that the State of Kansas was entitled to receive under the 1948 Treaty. The new law specifically provides that the ditch easement holder may improve the ditch efficiency, including lining or piping. The bill makes no provision that the new law will be subject to existing rules and regulations, or orders contrary to the law.

Director Colon inquired about the status of the ditch bill and expressed appreciation to Consultant Baker for what he has done to raise a flag for the District in the State Affairs Committee.

SB 19-186, which concerns the expansion of agricultural chemical management plans to protect surface water, was highlighted by Consultant Baker. He said that, under current law, the commissioner of agriculture is responsible for the management of the use of agricultural chemicals to protect groundwater and the commissioner adopts rules establishing agricultural management plans for this purpose. This bill expands the scope of commissioner's agricultural management plans to include the protection of state waters, which includes surface and subsurface water. Consultant Baker expressed that there should be an amendment in the Finance Committee and that it would require consultation with a pesticide advisory committee. The State Affairs Committee approved a motion to support the bill.

Consultant Baker remarked that anyone that raises crops on land should pay attention to SB 19-186 because there could be penalties for what is applied to the land. Director Canterbury added that those who make a living from the land and use commercial fertilization should pay close attention.

Consultant Baker also highlighted to the Board a bill that has a lot of implications for water and waste water. He said that HB 19-1279, the Fire Fighters Foam Control Act prohibiting Class B foam, has some things in the language that need to be addressed. Also, an amendment would include adding helicopter landing pads and other kinds of firefighting foam testing not currently in the bill.

Director Goodwin commented that the Fire Fighters Foam Control Act has a lot to do with Fountain Creek and spraying from the military base that has affected wells. He said that certain chemicals within the class B foam would be prohibited.

Also included in Consultant Baker's report was information on HB 19-1303. This bill concerns a grant of immunity from liability for a landowner relative to the landowner's failure to warn against a known dangerous condition on the landowner's land when the landowner has granted a person access to the use of the land for recreational purposes without charging the person. The bill would remove the following exception found under current law: "...except that a landowner is liable to the person for the

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landowner's willful and malicious failure to guard or warn against a known dangerous condition, use, structure or activity on the land likely to cause harm."

Attorney Burgemeister added that approximately ten years ago there was a bill to promote recreational access on various streams and rivers. The issue that was raised at that time was landowner liability. Attorney Burgemeister commented that HB 19-1303 is a property owner friendly piece of legislation as it removes uncertainty with regards to liability. Consultant Baker added that this bill is limited to recreation and only applies when someone is not being charged. Manager Scanga commented that an entity seeking an easement on private property for recreational access would have to be gifted that access rather than purchase it for the landowner to remain free from liability.

HB 19-1218 concerns the Colorado Water Conservation Board's authority to use water that a water right owner voluntarily loans to the Board for instream flow purposes. Consultant Baker said that, under current law, the CWCB, subject to procedural requirements established to prevent injury to water rights or decreed conditional water rights, may use loaned water for instream flows if the loaned water is used for period of three years out of a ten-year period. The current bill increases the number of years to five years of a ten-year period. Change of use of the decreed water is managed through the office of the State Engineer and a water right owner may file comments of injury by January 1<sup>st</sup> of the year following use of the water by the CWCB. Consultant Baker reported that the State Affairs Committee voted against a motion to support this bill.

Consultant Baker expressed several concerns with this bill, including the exclusion of the water court process for a change of use, water being used for two purposes during the loan period, the instream flow not having a water right, and the fact that the bill differs from standard law.

Consultant Baker reported that HB 19-1271 uses the same principles as HB 19-1218 but water that is loaned is used as augmentation for instream flows. The bill concerns a clarification of the authority of the CWCB to augment stream flows with acquired water rights that have been previously decreed for augmentation use. In his report, Consultant Baker highlighted that attorneys that have been promoting this bill have shared thoughts and legal authority with himself and Manager Scanga. Consultant Baker said that the issues are a full compass of the 1969 Act and the development and use of decreed water rights for use under an augmentation plan. The Upper District has developed many projects using the District's general plan of augmentation. Under the management and direction of Manager Scanga, the augmentation plan has no equal in the State. Consultant Baker added that Manager Scanga could discuss the many issues that may be created under the CWCB bill and said that a motion to support this bill failed to receive the majority votes required by the State Affairs Committee.

Manager Scanga expanded on HB 19-1271 and said that the CWCB is proposing that if an individual has water that is decreed for augmentation use, the CWCB could acquire excess water available to supplement the stream for instream flows. He added that the bill does not allow for exchanges on instream flows. Manager Scanga also highlighted that the CWCB will not have to go to court to add water and change its use, though the District has to do so when adding water to its augmentation plan.

Director Colon expressed confusion about the credit given for historic consumptive use since, with this bill, it appears that the HCU would be credited twice. Director Goodwin asked about the means of measurement if water is left in the stream to augment instream flows and if a call could be placed if there was no means of measurement. Water Commissioner Sutton verified that the CWCB cannot place a call if there is no measurement device. There was also discussion about the timing of return flows if the full amount of decreed water is not diverted and is left in the stream.

Attorney Burgemeister clarified details on the quantification of historic consumptive use. He said that through the water court process you have to have a representative period of years, essentially both the paper right and the wet water. If water is loaned for instream flow purposes, the year of that water loan would not be included in the study period. He also added that an augmentation plan is to help satisfy the problem of injury and that the CWCB will have to get a decree for their augmentation plan for instream flows. He said that delayed return flow provisions should be included in the decree.



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### COMMITTEE REPORTS

None

#### Resume Review Committee

Manager Scanga reported that there was nothing of significance for the District in the resume. Chairman Senderhauf reminded those present that the District reviews the resume of cases filed each month to ensure that water rights are protected.

#### MANAGER'S REPORT – Terry Scanga

Manager Scanga reported that he, Hydrologist Gertson, Attorney Burgemeister, and Engineer Manera attended a recent meeting at the Division 2 offices. A member of the Attorney General's office was present, along with the State Engineer and Division Engineer. The focus of the meeting had to do with a change in the way contract exchanges will be administered. Though the change won't take effect until next year, contract exchanges will be administered similarly to physical exchanges, in that they will be limited to inflow at the upstream terminus.

Attorney Burgemeister expressed that anyone that has historically used a contract exchange has done so because the physical conditions would not allow for a physical exchange. In essence, a contract exchange allowed the colors of water to be switched between two buckets regardless of the flow of the stream. Moving forward, if the physical inflow is 1 cfs that could be the limiting condition on the operation of the exchange. Also, if there is an instream flow below a reservoir, exchange potential would be limited. Attorney Burgemeister said that the exact details on the administration are yet to be determined.

Director Colon asked who is driving this policy change and Attorney Burgemeister responded that the change is being driven by the Attorney General's office and implemented by the State Engineer.

Commissioner Sutton added that both Division and the State Engineer asked for a legal opinion on whether or not water commissioners could approve contract exchanges. The Attorney General said that the statute does not give explicit authority to approve these types of exchanges and that the closest thing that commissioners have the authority to approve is physical exchanges. Commissioner Sutton said that discussion is continuing and there is talk of a committee to look for legal authority. The committee would involve entities that do contract exchanges. Commissioner Sutton concluded by saying that the big specifics on a policy change are unknown, as are details related to implementation.

Manager Scanga offered thoughts on the potential impacts of a change in the administration of contract exchanges, specifically to the Voluntary Flow Management Program. He said that if this policy goes through there will be no VFMP because larger entities will not agree to not exchange if flow is available. Manager Scanga said he believes these entities will make exchanges whenever they can, which will greatly impact recreation and the economy. He added that a physical exchange reduces flows in the river while a contract exchange does not. Manager Scanga said that this could be the worst thing that has happened in the last 50 years and that we need to work to get statutory language so that authority is granted for the approval of contract exchanges.

As for reasons behind this policy change, Manager Scanga said that there are three possible explanations. The first is a proposed operation on the Poudre River, the second is an exchange operation by the District that irritated the CWCB, and the third is concern expressed by the Lower Arkansas Valley Water Conservancy District about contract exchange operations.

Director Goodwin asked what other entities besides the UAWCD do contract exchanges. Manager Scanga said that Southeastern Colorado Water Conservancy District, Aurora, Board of Water Works Pueblo, Pueblo West, and Colorado Springs Utilities all operate contract exchanges.

Director Hilderbrand asked Director Felt if the local outfitting committee is aware the situation. Director Felt said that he intends to work with the Arkansas River Outfitters Association to put together an opinion and he is also reaching out to the Department of Natural Resources. He said that all entities need to be aware of what a mess this could be.

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Manager Scanga reported that information has been sent to Colorado Parks and Wildlife as they have a ton of operations that do contract exchanges. He said that he also spoke with Jim Broderick from SECWCD. Manager Scanga said that it is important for all water users to work together on this issue because the potential impact is not positive.

Director Felt noted that limitations on contract exchanges may well increase the gap that was identified in the Governor's water plan and that we need to get to a place where authority is given to administer contract exchanges.

Attorney Burgemeister commented that this change is not being driven by Division 2. The Attorney General has said that they need the authority to administer these types of exchanges and that right now they don't have it. He added that the statutes and case law need to be scoured to come up with the argument that authority is not needed or find the language that says that they have the authority. Alternatively, a legislative effort may be needed to get them the authority that is needed. Attorney Burgemeister concluded by saying there is more to come.

### **ENGINEER'S REPORT – Wendy Ryan, Colorado River Engineering (CRE)**

Wendy Ryan provided an update on work being done by Colorado River Engineering. She said that reports were submitted on the Helena Ditch and Cameron Ditch as part of the Multi-Use study. Ms. Ryan said that work is also being done on the engineering report for the Blue Line expansion and that the information presented on the USGS study will be helpful. Ms. Ryan further stated that the Friend Ranch case has been settled and that Colorado River Engineering has been assisting Buena Vista with their application to increase water for their well #3. In conclusion, Ms. Ryan reported that, as part of the Trails West case, work is being done on a projection tool specific to Cottonwood Creek.

### **LEGAL REPORT – Law of the Rockies, Kendall Burgemeister**

Opposition updates and transactional matters are included in the Law of the Rockies legal report in the Board's binders.

Attorney Burgemeister reported to the Board that our stipulation with Security was finalized and approved and that Pueblo West is the last remaining opposer in that case and a stipulation is expected soon. Attorney Burgemeister also highlighted that a decree has been entered in the Super Ditch case.

Attorney Burgemeister said that two substitute water supply plans were filed that piqued the District's interest. Time has been spent evaluating those applications and, though it doesn't look like the District will get involved, Attorney Burgemeister said that he will continue to monitor the applications. One of the applications involves a lease for Sylvan Lakes and the other involves a couple of well ponds near the Thompson Ditch dry up area, which the Water Commissioner is requiring be brought into compliance.

Director Hilderbrand inquired about the status of the Helen Williams decree. Attorney Burgemeister responded that the District is not involved in that case. Commissioner Sutton remarked that Ms. Williams has a signed substitute water supply plan in place.

## **CHAIRMAN AND DIRECTOR REPORTS**

### **NOTICES & MEETINGS**

- **Arkansas Basin Roundtable Meeting – April 23, 2019**
- **Arkansas River Basin Water Forum – VIP Dinner April 23, Forum-April 24-25, 2019, Pueblo Convention Center**


### **ADJOURN**

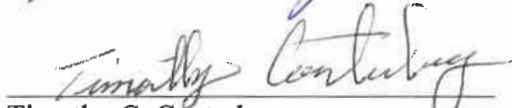
There being no further business to come before the Board, upon motion by Director Donley, second by Director Colon and unanimous approval of the Board, the meeting adjourned at 3:11 pm.

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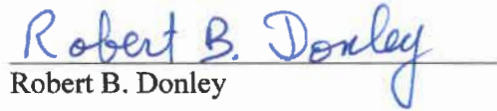
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Respectfully submitted,

  
Ralph L. Scanga, Jr., General Manager


  
Timothy C. Canterbury


*Approval by phone*  
Mannie Colon

  
Robert B. Donley

  
Gregory W. Felt

**Absent from Meeting- No Signature**  
Tom E. French

  
Brett A. McMurry

  
Thomas Goodwin, Treasurer

  
Richard Hilderbrand

  
Franklin J. Moore

**Absent from Meeting- No Signature**  
Jeff Ollinger

  
Tim Payne

  
John H. Sandefur

  
Robert M. Senderhauf