STATE OF COLORADO

Colorado Water Conservation Board
Department of Natural Resources
1313 Sherman Street, Room 721
Denver, Colorado 80203
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www.cwcb.state.co.us

TO: Colorado Water Conservation Board Members

FROM: Linda J. Bassi, Chief
Kaylea White
Stream and Lake Protection Section

DATE: November 9, 2009

SUBJECT: **Agenda Item No. 8, November 16-18, 2009 Board Meeting**
Stream and Lake Protection Section – Proposed Water Acquisition on Washington Gulch and the Slate River

Introduction

The Colorado Water Trust ("CWT") has offered the Colorado Water Conservation Board the opportunity to acquire an interest in water in the Breem Ditch (*aka*, the Breen Ditch), a senior water right located on Washington Gulch near Crested Butte in Water Division 4, for instream flow use. The CWT's offer letter is attached as **Exhibit A.** This proposed acquisition is the result of a unique, collaborative approach, and is intended to preserve the natural environment of two highly visible water-short streams—Washington Gulch and the Slate River. Under the proposal, Skyland Metropolitan District ("Skyland") will purchase the Breem Ditch water right from the seller, a local developer, and the CWT then will purchase a Conservation Use Right from Skyland. The Grant of Conservation Use Right will establish a permanent right to use the Breem Ditch water right to preserve the natural environment to a reasonable degree in Washington Gulch and the Slate River. The CWT will, in turn, assign the Conservation Use Right to the CWCB. The Conservation Use Right will extend from the location of the Breem Ditch headgate on Washington Gulch downstream to Skyland's proposed point of diversion on the Slate River near the Highway 135 Bridge. After the CWCB's ISF use of the water in the specified reach, Skyland will divert the historical consumptive use credits associated with the Breem Ditch from the Slate River for use in its municipal water system, thereby maximizing use of the Breem Ditch water right for both consumptive and non-consumptive purposes. A map of the area and a line diagram showing the stream reaches where the acquired water would be used are attached to this memo.

Staff Recommendation

Pursuant to ISF Rule 6b., the Board's consideration of this proposal at this meeting will initiate the 120-day period for Board review. **No formal action is required at this time.** The initial presentation of this proposal provides an opportunity to the Board and the public to identify questions or concerns that Staff or the CWT will address at this or a subsequent meeting.

1. The Board's Water Acquisition Procedures

Rule 6 of the Rules Concerning the Colorado Instream Flow and Natural Lake Level Program ("ISF Rules") sets forth the Board's procedures for acquiring water for ISF use. Section 37-92-102(3), C.R.S. provides 120 days for the Board to determine what terms and conditions it will accept in an acquisition agreement for water, water rights, or interests in water to preserve or improve the natural environment. ISF Rule 6 requires a minimum of two Board meetings to allow for public input prior to taking final action on a proposed acquisition. The Board's initial consideration of this proposal at this Board meeting initiates the 120-day time period for the Board to consider the terms and conditions of the proposed acquisition. Final action on the proposal could occur at the January 2010 Board meeting. ISF Rule 6m.(4) provides that any person may request the Board to hold a hearing on the proposed acquisition, and that such a request must be filed within twenty days of this Board meeting.

ISF Rule 6e. requires the Board to evaluate the appropriateness of the acquisition and determine how best to utilize the acquired water to preserve or improve the natural environment. The Rules list several factors the Board may consider in its evaluation of the acquisition; those factors are addressed in this memo.

Pursuant to statute, Staff has requested recommendations from the Division of Wildlife, the Division of Parks and Outdoor Recreation, the U.S. Department of Agriculture and the U.S. Department of Interior. Pursuant to ISF Rule 6m.(1), Staff has provided notice of the proposed acquisition to all persons included on the appropriate ISF Subscription Mailing Lists and provided notice to the State Engineer's Substitute Supply Plan Notification List. Three comment letters supporting this proposed acquisition are attached as **Exhibit B**.

2. Water Right Proposed for Acquisition

The water right that is the subject of this proposal is the Breem Ditch (Civil Action No. 1325), which diverts from Washington Gulch, approximately 0.75 mile upstream from the Slate River confluence near the town of Crested Butte in Gunnison County. The total amount of water to be acquired for instream flow use through this transaction is 5.45 cfs. The Breem Ditch was decreed for irrigation purposes by the Gunnison County District Court on September 14, 1906, Civil Action No. 1325, in the amount of 5.45 cfs absolute, with an appropriation date of May 12, 1900 (decree attached as **Exhibit C**). The Ditch diverts from the east side of Washington Gulch, approximately 0.75 mile upstream from the Slate River confluence near the Town of Crested Butte in Gunnison County. It flows in a south-easterly direction to irrigate approximately 145.5 acres of pasture grass. In Case W-576, 0.5 cfs of the Breem Ditch was changed to add domestic and municipal uses.

The Breem Ditch is the senior calling right on Washington Gulch. The Breem Ditch priority is also fairly senior with respect to other water right priorities on the Slate River and within the context of the entire Gunnison River basin. The District 59 Water Commissioner, Richard Rozman, has indicated that the Breem Ditch was not even close to curtailment during the water right administration problems and drought of 2002. Because the Breem Ditch is the calling right on Washington Gulch, it frequently sweeps the stream, resulting in a dry channel below the headgate.

3. Proposed Method of Acquisition

The CWT intends to purchase a Conservation Use Right from Skyland to allow use of the Breem Ditch water right for ISF purposes in Washington Gulch and the Slate River. At closing, Skyland will convey the Conservation Use Right to the CWT by means of a Grant of Conservation Use Right agreement similar in form to **Exhibit D.** Then the CWT will convey to the CWCB the Conservation Use Right in a form similar to the Assignment of Conservation Use Right attached as **Exhibit E.** The Conservation Use Right will not become effective unless and until the CWT assigns it to the CWCB. This transaction will grant the CWCB the permanent right to use the Breem Ditch water right for ISF use and does not involve a lease or loan of water rights to CWCB.

The current Breem Ditch owner and the purchasers (the CWT and Skyland) have developed a Water Rights Purchase and Sale Agreement describing the rights and responsibilities of each of the parties. Although the CWCB is not a required signatory or party to that Agreement, there is specific language in Paragraph 16 of the Agreement (excerpted and attached as **Exhibit F**) that discusses the change of water right applications and development of Joint Operating Principles with the CWCB to govern the filing and prosecution of the change applications, matters related to measuring devices, calls for water, allocation of costs and risks, and other matters related to cooperation between the parties. The Purchase and Sale Agreement does require the CWCB's written consent to be bound by the terms and conditions in Paragraph 16.

In addition to the development of Joint Operating Principles with CWCB, the Purchase Agreement also requires the CWT to resolve any issues with CWCB related to lagged return flows from the Breem Ditch prior to the filing of change of water right applications. CWT staff will work with CWCB staff to develop the Joint Operating Principles and address lagged return flow issues prior to the CWCB taking final action on this proposed acquisition. Staff and the AG's Office intend to discuss these issues with the CWCB in executive session at this Board meeting.

4. Reaches of Stream Proposed for Use of the Acquired Right

Segment 1: Washington Gulch from the headgate of the Breem Ditch, downstream, to the confluence with the Slate River, a distance of approximately 0.75 mile.

Segment 2: Slate River from the confluence of Washington Gulch, downstream, to the point of historic return flow estimated to be near the unnamed tributary on the north bank, a distance of approximately 1 mile (2 river miles*).

Segment 3: Slate River from the estimated point of historic return flow, downstream, to the proposed Skyland point of diversion near the Highway 135 Bridge, a distance of approximately 1.5 miles.

* In this area, the Slate River flows through many tight meanders as it crosses a large alluvial meadow. For that reason, the total length of stream benefitted by this proposed acquisition may exceed the map-measured distances for the proposed reaches.

5. Natural Flow Regime

Washington Gulch originates at an elevation of 10,900 feet near Anthracite Mesa in the Gunnison National Forest, and flows southeast approximately nine miles before joining the Slate River at Crested Butte. Most of the basin lies above 9,000 feet in elevation, and more than half of the basin is comprised of public lands. Although there are no stream gages located on

Washington Gulch, it is expected that stream flow is derived primarily from snowmelt and local precipitation, with peak flows occurring in May and June. To a certain extent, flows on Washington Gulch may be controlled by Meridian Park Lake and Meridian Lake, which are located several miles upstream from the Breem Ditch.

The Slate River originates at approximately 11,000 feet near Purple Mountain and the mining town of Pittsburgh in the Gunnison National Forest. The upper reaches of the drainage include the east slope of the Ruby Range, which includes mountain peaks in excess of 12,000 feet in elevation. The Slate River flows southeast approximately twelve miles before joining Washington Gulch downstream from Crested Butte. As with Washington Gulch, most of the basin lies above 9,000 feet in elevation, and most of the upper basin is comprised of public lands.

There is a USGS gage located on the Slate River just downstream from the confluence of Washington Gulch (#385106106571000), and within the proposed acquisition reach. This gage has been configured with satellite telemetry equipment to provide real-time streamflow information. The drainage area at this station is 73.4 square miles, and streamflow is derived primarily from snowmelt and local precipitation, with peak flows occurring in May and June. There are no significant on-stream storage structures, but there are several reservoirs located off-channel or on tributaries.

6. Existing Instream Flow Water Rights

The CWCB currently holds decreed instream flow water rights on Washington Gulch and the Slate River that could benefit from this acquisition.

Case No.	Stream	Reach	Amount (cfs)	Approp. Date
80CW094	Washington Gulch	Headwaters to confl with the Slate River	2.5 cfs (year-round)	3-17-1980
80CW092C	Slate River	Coal Creek to confl with the East River	12 cfs (12/1 -3/31) 23 cfs (4/1-11/30)	3-17-1980

7. Existing Natural Environment

Washington Gulch is classified as a minor stream (between 4 to 9 feet wide). Fishery surveys conducted by the Colorado Division of Wildlife ("CDOW") indicate that Washington Gulch supports an above-average brook trout fishery. The Slate River is classified as a medium stream (25 to 35 feet wide). Fishery surveys conducted by the CDOW indicate the Slate River primarily supports a brook and brown trout fishery, although a few white suckers were also collected in the CDOW sampling.

8. Proposed Use of the Water Right

Washington Gulch: 2.5 cfs of the 5.45 cfs decreed Breem Ditch water right would be used to preserve the natural environment in this segment of Washington Gulch by firming up the water supply available to the CWCB's existing ISF water right, which was decreed in Case No. 4-80CW094 for 2.5 cfs. The unused portion (2.95 cfs) of the Breem Ditch water right would

remain in Washington Gulch for subsequent ISF use downstream in the Slate River. No additional ISF use will be claimed for the unused water in Washington Gulch.

Slate River (Segment 2): 5.45 cfs of the Breem Ditch water right would be used to preserve the natural environment in this segment of the Slate River by firming up the water supply available to the CWCB's existing ISF water right, which was decreed in Case No. 4-80CW092C for 12 cfs (12/1 – 3/31) and 23 cfs (4/1 – 11/30).

Slate River (Segment 3): The historical consumptive use attributable to the Breem Ditch water right would be used to preserve the natural environment in this segment of the Slate River by firming up the water supply available to the CWCB's existing ISF water right, which was decreed in Case No. 4-80CW092C for 12 cfs (12/1 – 3/31) and 23 cfs (4/1 – 11/30).

9. Proposed Season of Use

The season of use proposed for this acquisition is May 1 – September 30, which is consistent with the historical irrigation season for the Breem Ditch.

10. Stacking Evaluation

The CWCB already holds decreed ISF water rights for Washington Gulch and the Slate River. The proposed acquisition is intended to assist the CWCB in preserving the natural environment by providing additional flow to the stream to help satisfy the Board's existing decrees. The Conservation Use Right to the Breem Ditch water right is not intended to be combined or stacked with existing ISF water rights to provide flows in excess of CWCB's existing decrees.

11. Material Injury to Existing Rights

The Breem Ditch, decreed for irrigation purposes in 1906, is the senior calling right on Washington Gulch. The ditch is approximately 4,000 feet in length and all diversions are fully consumptive to Washington Ditch and a portion of the Slate River. There are no other water rights that divert from Washington Gulch downstream from the Breem Ditch that could be injured if the Breem Ditch is changed to ISF use. Additionally, it appears there is only one junior conditional direct flow water right decreed on the Slate River within the proposed acquisition reach. That conditional water right is junior to the CWCB's existing decreed ISF water right, and would not be injured by the proposed acquisition.

12. Historical Use and Historical Return Flows

Diversion records are available for the Breem Ditch for twenty-four years during the period 1975 – 2008. During that period, the records state that there were times when diversions were not recorded and times when water was available but not taken. Peak daily diversion rates range from 1 cfs to 10 cfs. Diversions generally begin in May and occasionally extended into October.

Kerry Sundeen of Grand River Consulting has prepared a report that evaluates the historical diversions, irrigation return flows and historical consumptive use associated with the Breem Ditch (attached as **Exhibit G**). Historical consumptive use from the Breem Ditch is estimated to be 244 acre- feet per year. The report indicates that irrigation return flows accrue to the Slate River by way of a small unnamed surface drainage located about two river miles downstream from Washington Gulch. For that reason, Breem Ditch diversions are 100% consumptive to both Washington Gulch and Segment 1 of the Slate River. Return flows are expected to accrue very

quickly to the stream because the irrigated acreage is located in close proximity to the Slate River and because numerous surface return flow channels dissect the irrigated land, routing return flows directly to the river. Additionally, the irrigated land is located in an alluvial meadow and sub-surface return flows are easily transmitted through the soil. Large delays in return flows are not expected to occur. However, based on analyses completed by Grand River Consulting, it does appear that historic irrigation of these lands by the Breem Ditch resulted in 4 AF of lagged return flows accruing to the stream during the month of October.

13. Location of Other Water Rights

The Breem Ditch is the senior, calling right and the most downstream water right on Washington Gulch. The next junior water right and the nearest water right to the Breem Ditch is the Willson Ditch, which diverts about 100 feet upstream on the opposite side of the creek. The Willson Ditch is decreed for 4 cfs for irrigation use. The Rozich Ditch and the Jaklich Ditch, decreed for 3.5 cfs and 2.5 cfs respectively, are decreed for irrigation and domestic use and are junior to both the Willson and the Breem. The Rozich and Jaklich Ditches are located approximately one mile upstream from the Breem Ditch.

Colorado Decision Support System mapping indicates there is only one direct flow water right located on the Slate River within the reach proposed for use of the acquired water. The CBP Ditch is a conditional water right decreed for 0.5 cfs for irrigation, recreation and domestic use. The CBP Ditch is junior to the CWCB's existing decreed Slate River ISF water right.

14. Effect on Interstate Compact Issues

The Breem Ditch was decreed in 1906 as an absolute water right with an appropriation date of May 12, 1900, and therefore pre-dates the Colorado River Compact. After allowing for CWCB's use of the Breem water right for ISF purposes, Skyland intends to use, reuse, and successively use the historical consumptive use as part of its water supply system, so there will be no net change in losses to the stream system. Based on currently available information, the proposed acquisition does not appear to affect any interstate compact.

15. Effect on Maximum Utilization

Historically, the Breem Ditch has been used to irrigate pasture grass, and the consumptive use has been lost to the stream. Skyland's original intent was to purchase the Breem Ditch water right and pipe it across the ditch alignment for use within Skyland's boundaries. The proposal to establish a Conservation Use Right for ISF use will add an additional, nonconsumptive beneficial use to the proposed change, and will contribute to the maximum utilization of the waters of the state. After the CWCB's ISF use, Skyland will re-divert the historical consumptive use from the Slate River for use in its municipal water supply system, thereby maximizing use of the Breem Ditch water right for both consumptive and nonconsumptive purposes.

16. Availability for Downstream Use

The primary use of the Breem Ditch water right will be made by Skyland Metropolitan District. Skyland intends to divert the historical consumptive use water associated with the Breem Ditch diversions at a new, downstream point of diversion on the Slate River. The CWCB's use of the Conservation Use Right will not affect Skyland's ability to use the historical consumptive use downstream from the ISF reaches.

17. Administrability

Preliminary discussions with water administration officials have indicated a willingness to work through any administrative issues that arise. To facilitate administration, there is a USGS satellite gage located on the Slate River within the acquisition reach. CWCB staff currently utilizes this gage to monitor and protect the existing ISF water right on the Slate River.

18. Potential Benefits of This Proposed Acquisition

The proposed acquisition will increase stream flows in Washington Gulch during the irrigation season because up to 5.45 cfs of water will no longer be diverted by the Breem Ditch. As a result of this proposed acquisition, it is expected that Washington Gulch will remain a live stream during the entire irrigation season, and will no longer be dry below the Breem Ditch headgate. Additionally, the proposed acquisition will expand the period of time the existing ISF water right on the Slate River is met. In several of the last five years (2004, 2006, 2007, 2008), the CWCB has placed administrative calls for water to satisfy the decreed Slate River ISF right during the late summer months. Instream flow shortages have typically been around 3 cfs in September and October. When the call is placed, subdivisions relying on junior water rights must curtail certain uses and initiate augmentation releases. Acquisition of the Conservation Use Right to the Breem Ditch would make up to 5.45 cfs available to the Slate River and may alleviate the need to place an administrative call for water in some years.

There are several significant benefits that will result from this proposed acquisition. The first is that annually, as has been previously explained, the historic use of the Breem Ditch caused a section of Washington Gulch to go completely dry by mid to late summer. The east side of the Town of Crested Butte abuts the Slate River. Lower Washington Gulch and its associated wetlands are visible local recreational assets. Through the wetlands is a recreational trail that connects the Town of Crested Butte with Mt. Crested Butte. Wildlife viewing is a significant attraction for this trail. The CWT has learned that locals often inquire about the highly visible reduction of flows in Washington Gulch when the Breem Ditch is calling.

The second benefit is to a public fishery. Just south of the land historically irrigated by the Breem Ditch is Town of Crested Butte open space, through the heart of which flows the section of the Slate River that will benefit from the increased flows the Conservation Use Right will provide. This reach of the Slate River is available to the public for fishing and will provide a significant public benefit.

Lastly, the Breem Ditch water right was on the market and very likely could have been sold to Skyland at some point in the future in a manner that could have forever dried up Washington Gulch. Before the CWT began discussions with the seller and Skyland, the transaction would have involved diversions through the ditch into a holding pond at the end of the ditch to allow for delivery to Skyland at the end of the ditch. This arrangement would have resulted in a dry reach of Washington Gulch and the Slate River being water-short. The CWT and the CWCB staff are very appreciative of the both the seller's and Skyland's willingness to collaborate on this arrangement.

19. Cost to Complete Transaction

There are various costs associated with completing this transaction. The purchase cost will be covered by Skyland and the CWT through various funding arrangements, including a request by the CWT for partial funding under CWCB's Financial Policy 19. Potential CWCB costs beyond any requests made under Policy 19 to date have included costs associated with analysis of the

water right acquisition proposal. Costs that could be incurred in the future are those associated with negotiating the Joint Operating Principles, and those associated with preparing, filing, and prosecuting a change of water right application for ISF use. Because the Board already holds and protects existing ISF water rights on Washington Gulch and the Slate River, there should not be any significant additional costs to protect the acquired water. In fact, the CWCB may realize some cost savings as a result of this proposed transaction if it no longer needs to place administrative calls for water to satisfy the existing decreed Slate River ISF water right.

20. Policy 19 Funding Request

Purchase Price

Skyland is purchasing the Breem Ditch water right for $1.65 million. The CWT is purchasing the Conservation Use Right for $400,000, and is requesting the CWCB to pay $300,000 of the purchase price using funds available to it under section 37-60-123.7, C.R.S. (2009). The CWT is contributing $100,000 toward the purchase price of the Conservation Use Right. Staff will discuss the underlying bases for these figures with the Board in executive session per the request of the seller and Skyland for confidentiality.

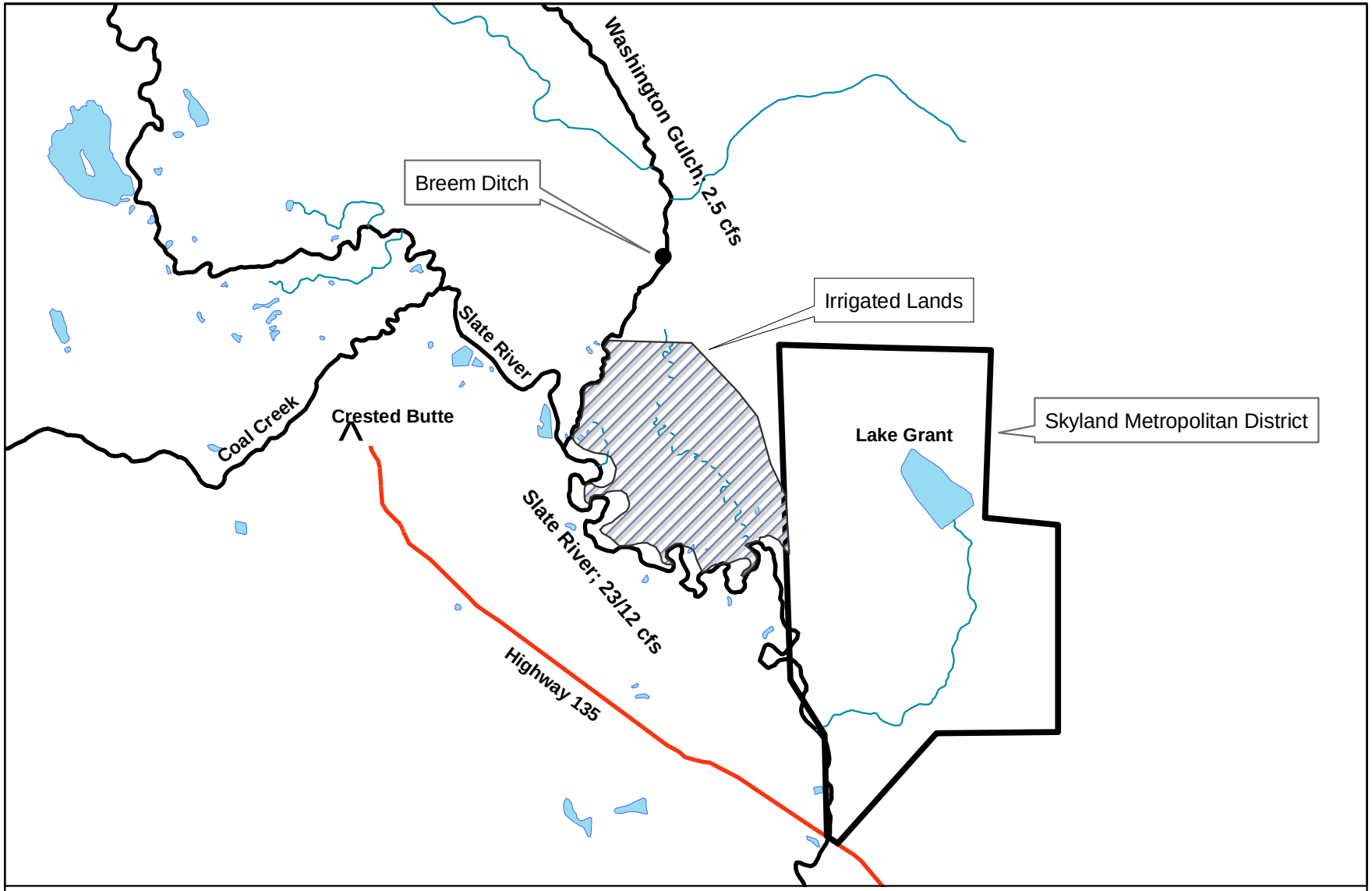
Related Costs

The CWT is requesting approximately $35,000 from the Board to cover costs of: (1) the preliminary evaluation of the feasibility of using the Conservation Use Right for ISF use; (2) the historical consumptive use analysis of the Breem Ditch water right; (3) a water rights title search; and (4) negotiating and finalizing the agreements necessary for the transaction. The CWT is contributing a portion of these costs and providing in-kind services. Staff will provide the Board with more details on these costs at the Board meeting.

Staff Recommendation

Pursuant to ISF Rule 6b., the Board's consideration of this proposal at this meeting will initiate the 120-day period for Board review. **No formal action is required at this time.** Staff believes that this proposed acquisition will benefit the ISF Program. The initial presentation of this proposal provides an opportunity to the Board and the public to identify questions or concerns that Staff or the CWT will address at this or a subsequent meeting.

Attachments



November 16-18, 2009 Board Meeting
Agenda Item 8; Proposed Water Acquisition
Water Division 4; Washington Gulch & Slate River

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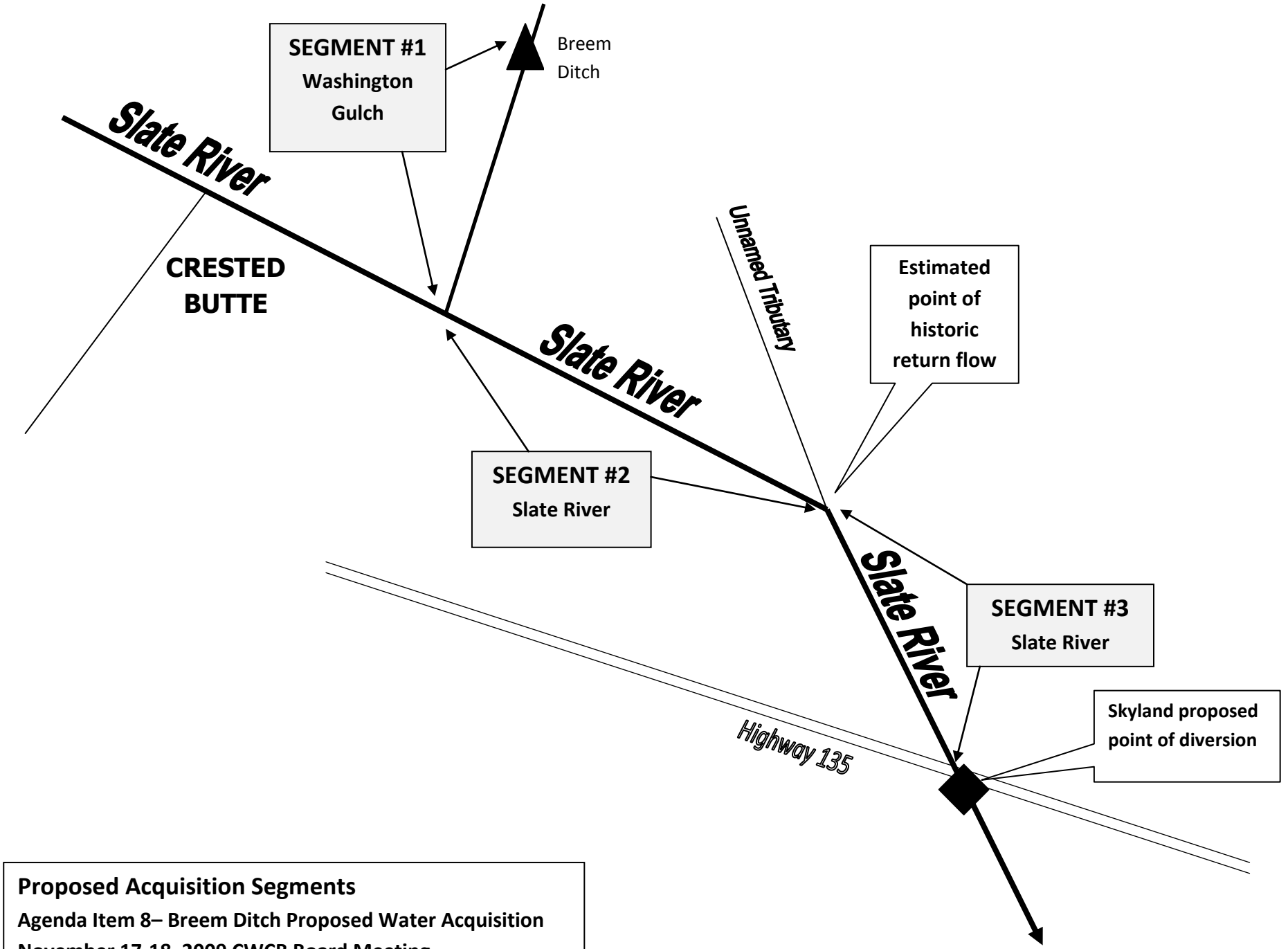


Proposed Acquisition Segments

Agenda Item 8– Breem Ditch Proposed Water Acquisition

November 17-18, 2009 CWCB Board Meeting

Exhibit A

COLORADO WATER TRUST

1430 Larimer Street, Suite 300
Denver, Colorado 80202

TEL: 720.570.2897
FAX: 303.996.2017
WEB: coloradowatertrust.org

November 9, 2009

Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, Colorado 80203

Dear Members of the Board:

As you know, the Colorado Water Trust ("CWT") is a non-profit organization that acquires water rights from willing parties in order to place those water rights in Colorado's Instream Flow Program. CWT is pleased to offer to the Colorado Water Conservation Board ("CWCB") an interest in a water right decreed to the Breem Ditch, which diverts from Washington Gulch, a tributary to the Slate River, located in Gunnison County. CWT is asking the CWCB to consider the first step towards acceptance of this interest in the Breem Ditch water right during the Board's November 2009 meeting.

This will be CWT's third formal offer of an interest in water rights for the CWCBs use in the instream flow program. You may recall that our first, a donation to the CWCB which the CWCB accepted in 2004, was a senior water right decreed to the Peabody Ditch for the benefit of Boulder Creek and the Blue River in Summit County (often called the Moser transaction). The second, which the CWCB accepted in 2007, was a senior water right decreed to the Hat Creek Ditch for the benefit of Hat Creek, a tributary of upper Brush Creek in Eagle County.

Under our newest proposed transaction, CWT will obtain a Conservation Use Right to allow the use in the Instream Flow Program of 5.45 cubic feet per second of water that was historically diverted from Washington Gulch, a tributary to the Slate River, and was used to irrigate pasture in Gunnison County.

The benefit to the Instream Flow Program from this water right is substantial: the CWCB holds an instream flow right on Washington Gulch in a section of stream that is completely dried up below the headgate of this water right, even in water plentiful summers like this past one. The CWCB also holds an instream flow right on the Slate River below its confluence with Washington Gulch that will benefit. Obtaining this right for the Instream Flow Program will cause no injury; will bolster two existing, junior instream flow rights held by CWCB; and will help preserve the natural environment.

Over the past year, CWT has worked closely with Linda Bassi and staff in the Stream and Lake Protection Section of the CWCB to make the following offer to you. In addition, I will attend your November meeting

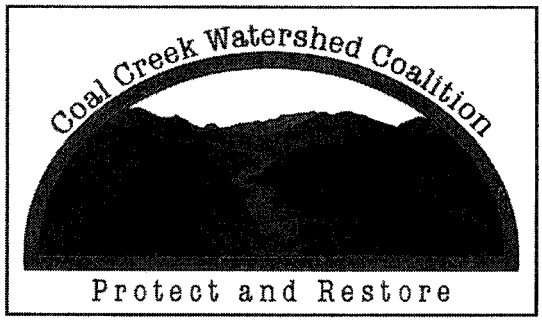
and will be prepared to describe the proposed transaction in more detail. We look forward to working with the CWCB to complete this transaction.

Sincerely,

Amy W. Beatie
Executive Director

Exhibit B

September 1, 2009



Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, Colorado 80203

Dear Board:

In 2003, the High Country Citizens' Alliance ("HCCA") initiated an investigation of water quality impairment in Coal Creek, a tributary to the Slate River that runs right through the heart of the Town of Crested Butte. Once the extent of the impairment was understood, HCCA engaged the local community and found considerable interest in Coal Creek water matters. This public interest eventually led to the founding of the Coal Creek Watershed Coalition ("CCWC"). The CCWC has been operating for nearly three years with the mission to "restore and preserve" the entire Coal Creek watershed.

Although the CCWC focuses its attention on the Coal Creek Watershed, we understand the importance of local stream-flow restoration efforts and how successful flow enhancement on nearby streams can contribute to improving the greater local environment, from improving local ecology and aquatic ecosystem health to improving local economic health by helping to preserve and protect tourism and the local recreational economies. It is for this reason that we are writing on behalf of the Board of Directors of the CCWC to express our support for the acquisition of the Breem Ditch water right by the Colorado Water Trust for use in the state's instream flow program.

The Breem Ditch transaction will help re-water a section of local stream that even in this water plentiful summer was completely de-watered by the middle of July due to diversions to the ditch. This de-watering starves the immediate creek and the nearby wetlands through which the Town of Crested Butte's Recreation Path north and east of Rainbow Park meanders. It is our understanding that, if completed, this water rights transaction will make the instream flow on Washington Gulch whole even in dry years and will help fix the shortage to the instream flow on a section of the Slate River. We put strong support behind this effort, and hope that a similar effort will be brought to Coal Creek, which is just as needy and has similar opportunities.

Sincerely,

Anthony Poponi
Coordinator

Steve Glazer
President, Board of Directors

HIGH COUNTRY CITIZENS' ALLIANCE

PO Box 1066 • Crested Butte, Colorado 81224
(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

September 2, 2009

Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, Colorado 80203

Re: Water right acquisition in Washington Gulch

Dear Board:

High Country Citizens' Alliance is a local grassroots conservation organization in Gunnison County whose mission is to champion the protection, conservation and preservation of the natural ecosystems within the Upper Gunnison River Basin. We have a membership of over 600 people living within our basin, as well as residents throughout the state and across the nation. We have had an active water resource protection program for over 20 years. Colorado's Instream Flow Program is the centerpiece of our efforts to protect our local environment.

The state's Instream Flow Program has a long history of accomplishments that we can all be proud of. As comprehensive as it is, there are some areas that can always be improved upon. Although the CWCB has had the authority to acquire water rights to provide instream flows for some time, it is only recently that the legislature has actually appropriated money to implement this tool.

We are extremely pleased that an opportunity has presented itself to allow the Board, with the assistance of the Colorado Water Trust, to improve flows in the lower reach of Washington Gulch and a segment of the Slate River. The historic use of the Breem Ditch has caused this section of stream to go dry by mid to late summer almost annually. The lower Washington Gulch and its associated wetlands are a very visible local recreational asset. There is a highly used recreational trail that traverses the valley connecting the Town of Crested Butte with Mt. Crested Butte. Wildlife viewing is a significant attraction for this trail. We frequently field inquiries about the reduction of flows when the Breem Ditch is calling. We use this opportunity to help local citizens and visitors alike understand how Colorado water law works.

We are writing to offer our support for this proposed water right acquisition which will facilitate an improvement to riparian and aquatic ecosystem integrity while transferring the water right from one consumptive use to another. We also wish to acknowledge that this benefit to the environment would not be possible without the cooperation of both the seller and buyer of the water. Although we are losing some irrigated pasture, this transaction will improve the reliability for junior domestic users. This transaction could bypass the ecological benefits but the two parties are allowing that benefit to be added to the transfer. Your participation in this effort allows the community and environment to enjoy this new benefit and is essential to keep water flowing in Washington Gulch.

Sincerely,

Dan Morse, Executive Director

Steve Glazer, Water Program Director

Mt. Crested Butte
COLORADO AT ITS BEST!

PO BOX 5800 MT. CRESTED BUTTE, COLORADO 81225-5800
PHONE: 970.349.6632 FAX: 970.349.6326

October 6, 2009

Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, Colorado 80203

RE: Washington Gulch Water Rights Acquisition

Dear Board:

The Town Council of the Town of Mt. Crested Butte, Colorado supports the proposed transfer of water rights on the Breem Ditch to improve the year-round flow of Washington Gulch and the Slate River. The aquifer that feeds the Breem Ditch is an essential component of the recreation areas adjacent to Town, and the consequences of increased water flow in this area will benefit the people and ecology of the Upper Gunnison River Watershed.

The Water Conservation Board is in an excellent position to affect the impacts of senior and junior water rights on our local watershed. While the use of these water rights irrigates essential fields and provides much needed water to dryer areas, draining aquifers up-stream to irrigate down-stream areas has a deleterious effect on plants, wildlife and overall ecological quality in headwater basins like ours. The proposed water rights acquisition will reverse some of these negative impacts and benefit the local environment, upon which much of our local tourism-based economy depends. Thus the Town Council of the Town of Mt. Crested Butte supports the proposed action.

Sincerely,

William Buck
Mayor
Town of Mt. Crested Butte

Exhibit C

CA1325

Ditch No. 146. Priority No. 136.

Breem Ditch.

THAT SAID DITCH IS ENTITLED TO PRIORITY NO. 136.

IT IS CLAIMED BY Eugene V. McCormick, J. P. Breem.

THE HEADGATE OF SAID DITCH IS LOCATED ON THE East BANK OF Washington CREEK, A TRIBUTARY OF THE Gunnison River, AT A POINT WHENCE the N.W. Cor. Sec.1, T. 14, S.R.86 W. (N.M.)M. bears S. 8° 55' E. 2056.9 feet,

6th

GENERAL COURSE South Easterly ; LENGTH OF DITCH 4072 feet; WIDTH 5 FEET; DEPTH 1.6 FEET; GRADE 10.56 FEET PER MILE; CARRYING CAPACITY 23.13 CUBIC FEET PER SECOND.

IT IS A DITCH USED FOR THE IRRIGATION OF LAND, TAKING ITS SUPPLY OF WATER FROM Washington Creek, a tributary of Slate River, a tributary of East River, which is a tributary of the Gunnison River,

AND THERE ARE 218 ACRES OF LAND BELONGING TO CLAIMANTS, lying under said Ditch,

WHICH HAVE BEEN IRRIGATED BY ITS WATERS.

AND IT IS HEREBY ORDERED, ADJUDGED AND DECREED THAT THERE BE ALLOWED TO FLOW INTO SAID DITCH FROM SAID Washington Creek, FOR THE USE AFORESAID, FOR THE BENEFIT OF THE PARTY LAWFULLY ENTITLED THERETO UNDER AND BY VIRTUE OF SAID ORIGINAL CONSTRUCTION AND ACTUAL APPROPRIATION, PRIORITY NO. 136, NOT TO EXCEED 5.46 CUBIC FEET OF WATER PER SECOND OF TIME.

164

Exhibit D

EXHIBIT D

GRANT OF CONSERVATION USE RIGHT

This GRANT OF CONSERVATION USE RIGHT is executed and delivered as of this _____ day of _____, 20___, from SKYLAND METROPOLITAN DISTRICT, a duly organized Colorado special district ("Skyland"), whose mailing address is 350 Country Club Dr., Suite 112A, Crested Butte, Colorado 81224, to the COLORADO WATER TRUST, INC., a Colorado non-profit corporation (the "Trust").

1. Water Right. The following water right is located in the County of Gunnison, State of Colorado, and was conveyed to Skyland Metropolitan District, a Colorado special district ("Skyland") by Special Warranty Deed dated the _____ day of _____, 20___(the "Water Right"):

> The 5.45 cubic feet of water per second of time originally decreed to the Breem Ditch (a.k.a. the Breen Ditch) in Civil Action No. 1325 in District Court, Gunnison County, Colorado, September 14, 1906, with an appropriation date of May 12, 1900. The decreed point of diversion of the Breem Ditch is located at a point whence the NW corner of Section 1, Township 14 South, Range 86 West of the Sixth Principal Meridian bears South 8 degrees 55' East 2056.9 feet.

2. Grant of Right for Conservation Use. Subject to the covenants and reservations hereinafter contained, Skyland, for due and sufficient consideration, the receipt and sufficiency of which is hereby acknowledged, by these presents does hereby (a) grant unto the Trust, and its successors and assigns forever, the permanent right to use the Water Right to preserve the natural environment to a reasonable degree in Washington Gulch and the Slate River from the decreed location of the Breem Ditch headgate, downstream through Washington Gulch, and then down the Slate River to the point where the North Section line of Section 12, Township 14 South, Range 86 West of the Sixth Principal Meridian crosses the Slate River (the "New Skyland Diversion Point") and (b) covenant and agree that Skyland and its successors and assigns shall never divert the Water Right above the New Skyland Diversion Point, subject to the provisions of Section 3 below.

3. Covenants and Reservations.

A. Until final decrees (without regard to any period of retained jurisdiction), not subject to appeal ("Final Change Decrees"), are entered in the Change Cases (defined below), Skyland reserves the right to divert the Water Right at its historical point of diversion and to use the Water Right to irrigate the lands historically irrigated by the Water Right.

B. Skyland reserves the right to use and fully consume the historical consumptive use of the Water Right ("HCU") for any uses and at any place at or below the New

Skyland Diversion Point as may be approved in the Change Cases.

C. Skyland reserves the right to use any portion of the Water Right that may be required by the Final Change Decrees to maintain historical return flows from the irrigation of the lands historically irrigated by the Water Right, including without limitation the right to divert water into, operate and maintain a pond or other structure to store, control and/or release water under the Water Right to maintain historical return flows.

D. Skyland reserves the right to use any portion of the Water Right that may be necessary to obtain approval of the water court in the Change Cases to allow Skyland to divert and use the full amount of the HCU at or below the New Skyland Diversion Point.

E. From and after the date the Final Change Decrees are entered in the Change Cases, Skyland covenants that it will not use the Water Right or its HCU to irrigate the land historically irrigated by the Water Right or otherwise use the Water Right in Washington Gulch and the Slate River from the decreed location of the Breem Ditch headgate, downstream through Washington Gulch, and then down the Slate River to the New Skyland Diversion Point except as otherwise set forth above.

F. Skyland and the Trust may divert the Water Right at its historic point of diversion if required to do so by the Water Court to determine the amount of water available to the Water Right at such historic point, provided that the water is immediately returned to Washington Gulch without beneficial use.

4. Change Cases. The Trust intends to assign its rights under this Grant of Conservation Use Right to the Colorado Water Conservation Board (the "CWCB") for use in the CWCB's instream flow program on Washington Gulch, and then down the Slate River to the New Skyland Point of Diversion (the "Instream Flow Use"). Skyland and the CWCB shall file separate applications in water court to allow such Instream Flow Use, and to allow Skyland's use of the HCU associated with the Water Right (the "Change Cases"). The Change Cases and Skyland's and CWCB's use of the Water Right shall be subject to the Joint Operating Principles that are attached hereto as **Exhibit A**.

5. Successors and Assigns. This Agreement shall bind Skyland and the Trust, and their respective successors and assigns, and shall run with and burden the Water Right against any subsequent transferee of the Water Right or any interest therein.

6. Effective Date. The foregoing Grant shall not be effective until and unless the rights granted herein are conveyed by the Trust to the CWCB.

7. Recording. This Agreement shall be recorded in the office of the Gunnison County Clerk and Recorder.

IN WITNESS WHEREOF, Skyland has executed this Conservation Use Assignment on the date set forth above.

SKYLAND METROPOLITAN DISTRICT

_____

Name:

Title:

COLORADO WATER TRUST

_____

Name:

Title:

NOTARIZATION

STATE OF COLORADO)

) ss.

COUNTY OF _____)

The foregoing instrument was acknowledged before me on this ___ day of _____, 20__, by _____ as _____ of the Skyland Metropolitan District.

Witness my hand and official seal.

_____

Notary Public

My commission expires: _____

Exhibit A

Joint Operating Principles

(to be developed by Skyland, the Trust and CWCB

pursuant to Paragraph 16

of the Water Rights Purchase and Sale Agreement)

Exhibit E

EXHIBIT E

ASSIGNMENT OF CONSERVATION USE RIGHT

This ASSIGNMENT OF CONSERVATION USE RIGHT is made and delivered as of this _____ day of _____, 20___, from the COLORADO WATER TRUST, INC., a Colorado non-profit corporation (the "Trust"), and the COLORADO WATER CONSERVATION BOARD, a Colorado board duly appointed by the office of the Governor of Colorado (the "CWCB").

1. Water Right. The following water right located in the County of Gunnison, State of Colorado (the "Water Right"), was conveyed to Skyland Metropolitan District, a Colorado special district ("Skyland") by Special Warranty Deed dated the _____ day of _____, 20___ (the "Skyland Deed") :

> The 5.45 cubic feet of water per second of time originally decreed to the Breem Ditch (a.k.a. the Breen Ditch) in Civil Action No. 1325 in District Court, Gunnison County, Colorado, September 14, 1906, with an appropriation date of May 12, 1900. The decreed point of diversion of the Breem Ditch is located at a point whence the NW corner of Section 1, Township 14 South, Range 86 West of the Sixth Principal Meridian bears South 8 degrees 55' East 2056.9 feet.

2. Skyland Conservation Use Right. Skyland granted the Trust the right to use the Water Right to preserve the natural environment to a reasonable degree in Washington Gulch and the Slate River (the "Skyland Conservation Use Right") from the decreed location of the Breem Ditch headgate, downstream through Washington Gulch, and then down the Slate River to the point where the North Section line of Section 12, Township 14 South, Range 86 West of the Sixth Principal Meridian crosses the Slate River (the "New Skyland Point of Diversion"), pursuant to a Grant of Conservation Use Right dated the ____ day of _____, 20___ (the "Skyland Grant").

3. Instream Flow Water Rights. The CWCB currently holds instream flow water rights on Washington Gulch decreed in Case No. 4-80CW094, District Court, Water Division No. 4, February 20, 1987, and on the Slate River decreed in Case No. 4-80CW092C, District Court, Water Division No. 4, October 15, 1985, to preserve the natural environment to a reasonable degree.

4. Assignment of the Conservation Use Right. Subject to the covenants and reservations hereinafter contained and contained in the Skyland Grant, the Trust for due and sufficient consideration, the receipt and sufficiency of which is hereby acknowledged, by these

presents does transfer and assign unto the CWCB, its successors, and assigns the Skyland Conservation Use Right, subject to the terms, conditions and covenants as set forth in therein.

5. Trust's Successors and Assigns. This Agreement shall bind the Trust, its successors and assigns, and shall run with and burden the Water Right against any subsequent transferee or assignee of the Water Right or any interest therein.

6. Remedies. Pursuant to Section 37-92-102(3) C.R.S., the terms of this Agreement shall be enforced by each party as a water matter in the District Court for Water Division 4; provided, however, that before commencing any action for enforcement of this Assignment, the party alleging a breach shall notify the other party in writing of the alleged breach and the parties shall make a good faith effort to resolve their differences through informal consultation. Specific performance shall be the exclusive remedy for failure of either party to comply with any provision of this Assignment.

7. Recording. This Agreement shall be recorded in the office of the Gunnison County Clerk and Recorder.

IN WITNESS WHEREOF, the Trust has executed this Assignment of Conservation Use Right on the date set forth above.

COLORADO WATER TRUST, INC.:

_____

Name:

Title:

NOTARIZATION

STATE OF COLORADO)

) ss.

COUNTY OF _____)

The foregoing instrument was acknowledged before me on this ___ day of _____, 200__, by _____ as _____ of the Colorado Water Trust, Inc.

Witness my hand and official seal.

_____

Notary Public

My commission expires: _____

Exhibit F

EXHIBIT F

Paragraph 16, Water Rights Purchase and Sale Agreement
Verzuh Ranch, Inc , Skyland Metropolitan District & the Colorado Water Trust
November 3, 2009

16. Change Applications.

A. During the Due Diligence Period, Skyland and the Trust shall work with CWCB to do the following:

i. Prepare two change of water rights applications acceptable to Skyland, the Trust, and CWCB. The first change of water rights application ("CWCB Change Application") shall name CWCB as the applicant and shall request changes to the Water Right to allow it to be used for instream flow purposes above the New Skyland Diversion Point. The second change of water rights application ("Skyland Change Application") shall name Skyland as the Applicant and shall request changes to the Water right to allow diversion or other use of the full HCU of the Water Right by Skyland at or below the New Skyland Diversion Point and to make other changes consistent with the rights reserved by Skyland in the form of Grant of Conservation Use Right attached hereto as **Exhibit D**. The CWCB Change Application and the Skyland Change Application will be jointly referred to in this Agreement as the "Change Applications."

ii. Develop joint operating principles consistent with and supplemental to the Change Applications that will govern the filing and prosecution of the Change Applications ("Joint Operating Principles"). The joint operating principles shall contain provisions relating to how calls will be placed for the Water Right after it is changed, what will happen to the Breem Ditch and headgate after the change, installation and operation of measuring devices, calculation of instream flow rates and HCU credits, consolidation of the Change Applications in the water court, cooperation between the parties to address issues as they arise in the water court process, allocation of the costs of the water court cases and the risks associated with the prosecution of those cases, and any other matters that Skyland, the Trust, and CWCB agree to include in the Joint Operating Principles.

iii. Obtain CWCB's signature on this Agreement consenting to the terms and conditions of Section 16.B.

iv. Obtain CWCB's written consent and agreement to the form of the Change Applications and the Joint Operating Principles.

B. If Skyland and the Trust are able to accomplish all of the matters referred to in Paragraph 16.A., above, during the Due Diligence Period, then:

i. Skyland and the CWCB shall file the Change Applications in water court no later than one (1) year after the date of Closing and prosecute them to conclusion with diligence. The Change Applications shall be filed in water court simultaneously on a date mutually agreed upon by Skyland and the CWCB within the one-year period referred to above. Skyland and the CWCB shall provide the Seller with notice of the filing of the Change Applications. After filing the Change Applications in water court, Skyland and CWCB shall file joint motions in the cases for the Change Applications seeking to consolidate the Change Applications pursuant to Rule 42(a), C.R.C.P. The Change Applications shall be prosecuted in accordance with the Joint Operating Principles, as those Joint Operating Principles may be amended from time to time by the mutual agreement of the Trust, Skyland, and the CWCB.

ii. Skyland and CWCB agree that neither will file a Statement of Opposition to the Change Application filed by the other party. The Trust will not file a Statement of Opposition to the Change Applications of Skyland or CWCB, but the Joint Operating Principles shall provide a mechanism for the Trust to keep fully apprised of all developments in the Change Application.

iii. Skyland bears the risk of quantification of the HCU of the Water Right, and the Skyland Purchase Price shall not be adjusted based on the outcome of such change proceeding.

iv. The Joint Operating Principles shall include a mechanism for CWCB and Skyland (with input from the Trust) to resolve any disputes regarding the terms of any proposed stipulated terms and conditions that one party may desire to include its change case that might affect the other party's interest in the Water Right or change case.

v. The terms and conditions of this Section 16.B survive Closing.

C. If Skyland and the Trust are not able to accomplish all of the matters referred to in Paragraph 16.A, above, during the Due Diligence Period, then:

i. Skyland may terminate this Agreement by providing written notice of such termination to Seller and the Trust previous to or on the final day of the Due Diligence Period. If Skyland timely exercises this right of termination, the Earnest Money shall be released by the Title Company to Skyland in the amount of the Earnest Money deposit plus accrued interest, less any non-refundable portions contemplated in Paragraph 5, and the Parties shall have no further rights or obligations under this Agreement.

ii. If Skyland does not terminate this Agreement pursuant to the provisions of Paragraph 16.C.i., above, then the Trust's and CWCB's rights to participate in this Agreement shall automatically terminate upon the expiration of the Due Diligence Period, unless Skyland, the Trust, and the CWCB all otherwise agree in writing. Upon such termination, all rights and obligations of the Trust and CWCB under this Agreement shall

immediately terminate, and the Conservation Use Assignments contemplated in Paragraphs 10.K and 10.L will no longer be required or executed under this Agreement. Skyland will remain obligated to pay the entire Skyland Purchase Price.

iii. If Skyland terminates the Agreement, or the Trust and CWCB chose not to participate in the Agreement pursuant to Paragraph 6, or the Trust's and CWCB's rights to participate are automatically terminated pursuant to Paragraphs 9.D and 16.C.ii, Skyland, CWCB, and the Trust each reserve the right to file a Statement of Opposition to any Change Application filed related to the Water Right.

Exhibit G

November 9, 2009

Ms. Amy W. Beatie, Esq.
Executive Director
Colorado Water Trust
1430 Larimer Street, Suite 300
Denver, CO 80202

RE: Breem Ditch
Evaluation of Historical Use

Dear Amy:

Pursuant to your request, we have completed an assessment of the historical use of the Breem Ditch, located near Crested Butte, Colorado. As a part of this assessment, we have evaluated historical diversions, irrigation return flows, and consumptive water use. We have also estimated the change in local stream flow conditions that may result if this structure is no longer used for irrigation. The results of our assessment are outlined below.

BACKGROUND

The Breem Ditch is an irrigation structure that diverts from Washington Gulch, a tributary to the Slate River. The ditch has a capacity of about 10.0 cubic feet per second (cfs) and commonly diverts the entire flow of Washington Gulch. Diversions by the Breem Ditch commonly dry-up Washington Gulch for about 0.75 miles from the head gate to the confluence with the Slate River (Figure 1). A large portion of irrigation return flows from the ditch return to the Slate River via a surface drainage that provides accumulated return flows to the Slate River about two river miles below the confluence with Washington Gulch. Accordingly, stream flow in this section of the Slate River is also substantially reduced by the Breem Ditch diversions. In total, about 2.75 total miles of stream are significantly impacted by the ditch.

Instream flow water rights have been decreed to the Colorado Water Conservation Board (CWCB) for both Washington Gulch (2.5 cfs) and for the Slate River. The Slate River instream flow right is decreed for 23 cfs in the summer and 12 cfs in the winter. As a result of Breem Ditch diversions, the Washington Gulch instream flow right is not satisfied during most of the irrigation season. For the segment of the Slate River downstream of Washington Gulch, the CWCB instream flow right is not satisfied during a substantial portion of the late irrigation season (portions of August, September and October). The CWCB has placed a call with the Slate River instream flow water right in 2004, 2006, 2007 and 2008.

The Colorado Water Trust seeks to facilitate a change of water rights for the Breem Ditch which would result in increased stream flow of both Washington Gulch and the Slate River. Under this proposal, the area irrigated by the ditch would be permanently removed from irrigation and the ditch would no longer be operated. The historical consumptive use credits associated with the irrigation would be diverted from the Slate River by a downstream water user that is need of a reliable senior water supply. The diversions of the consumptive use credits would occur at a location about 1.5 miles downstream of the pasture irrigated by the Breem Ditch, and about 3.5 river miles downstream of Washington Gulch. The curtailment of diversions by the Breem Ditch will result in additional stream flow within both Washington Gulch and portions of the Slate River.

THE BREEM DITCH

According to tabulations by the State of Colorado the Breem Ditch is decreed a total of 5.45 cfs for irrigation purposes. This irrigation right was adjudicated in 1906 with a May 12, 1900 appropriation date. The structure summary for the ditch is presented in Attachment 1.

The ditch is a senior irrigation structure that is not subject to curtailment by downstream water users. The stream flow of Washington Gulch is commonly less than the capacity of the ditch, and the Breem Ditch often sweeps the stream. In addition, the Breem Ditch is the most senior right on Washington Gulch (Attachment 2), and the ditch can "call out" upstream users on Washington Gulch whenever stream flow is less than its decreed capacity. A call by the Breem Ditch "pulls water down Washington Gulch" and helps maintain instream flow conditions upstream of the Breem Ditch head gate.

Ditch Capacity. Based on a site visit and upon diversion records, we conclude that the capacity of the ditch exceeds the amount of its decreed water rights (5.45 cfs). Diversion records maintained by the State reflect that the Breem Ditch has diverted as much as 10 cfs in recent years.

Irrigated Area. We have mapped the area irrigated by the Breem Ditch to be about 145.5 acres (Figure 1). This irrigated area is based on recent aerial photography, a site visit, and an interview with the ditch owner. This estimate of irrigated pasture does not include sub-irrigated areas. The State of Colorado structure summary estimates that as much as 358 acres may be irrigated by the ditch. Upon review, we have determined that the State's irrigated parcel mapping includes large areas that are actually sub-irrigated, and that the State has over-estimated the actual amount of pasture irrigated by the ditch.

Water Supply. Diversion records for the ditch are incomplete. Based on an interview with the owner of the ditch, and upon a site visit, we believe that the Breem Ditch has a physical and legal water supply adequate to irrigate the entire 145.5 acres of pasture in most years. However, in critically dry years such as 1977 or 2002, the stream flow in Washington Gulch is not likely adequate to fully irrigate the entire pasture area, particularly in the latter portion of the irrigation season (August and September).

HISTORICAL CONSUMPTIVE WATER USE

A consumptive use analysis for the Breem Ditch was completed with the use of the Colorado Decision Support Systems (CDSS) StateCU Consumptive Use Model. An original Blaney-Criddle was based upon weather data from the Crested Butte Climate Station. We have updated the StateCU Model estimates with a recent Upper Gunnison lysimeter study for high altitude consumptive use of pasture grass completed by Smith and Brummer 2006. Based on discussions with water resource experts in the Gunnison Basin, we estimate that the updated net irrigation requirement is reflective of current climate data in the Upper Gunnison basin.

Based on the assumptions outlined above, our updated net consumptive use estimate is 1.67 acre-feet per acre per year for pasture grass (Table 1).

Table 1
Net Irrigation Requirement for Pasture Grass*
(1971 – 2000)

	Potential Cons. Use (in)	Effective Precip. (in)	Net Irrigation Requirement (in)	Net Irrigation Requirement (ft)
May	5.39	1.28	4.11	0.342
June	7.17	1.03	6.14	0.512
July	6.42	1.56	4.86	0.405
August	4.36	1.46	2.91	0.242
September	3.44	1.36	2.07	0.173
ANNUAL	26.78	6.69	20.09	1.67

*The Blaney-Criddle calculation is based upon weather data from Crested Butte Climate Station (30 year normals). Crop: Upper Gunnison Meadow (utilizes crop coefficients calculated from lysimeter consumptive use data by D.H. Smith and J.E. Brummer in "Consumptive Irrigation Water Use in the Upper Gunnison River Basin", 2006.

Assuming a full water supply and a historically irrigated area of 145.50 acres, we have estimated the historical consumptive use (HCU) for the Breem Ditch to be approximately 244 acre-feet per year (Table 2).

Dry Year Consumptive Use. As previously outlined, the ditch may not receive a water supply that is adequate to fully irrigate the 145 acres of pasture in critically dry years. Accordingly, we also developed a dry year consumptive use estimate for the ditch. The dry-year diversion estimates (Column 2, Table 3) are based upon 1977 and 2002 State diversion records for the Breem Ditch (Attachment 1), an interview with the ditch owner, and professional judgment. Incidentally, records for July through September indicate that no water was diverted during the 2002 period. However, 1977 diversion records indicate a substantial amount of water was diverted throughout the late summer months and thus, our best estimate is that the same amount of water would have been available in the later portion of 2002 as was

available in 1977. The dry year assessment reflects that approximately 78 AF of total annual dry year HCU credits from the Breem may be available in these types of years (Column 5, Table 3).

Table 2
Historical Consumptive Use Estimate
Breem Ditch

(1) Crops	(2) Irrigated Area (acres)	(3) Average Monthly C.U. (acre feet)					
		May	Jun	Jul	Aug	Sep	Annual (AF/yr)
Pasture Grass	145.50	49.82	74.47	58.91	35.27	25.15	243.63

(1) Type of crop irrigated
(2) Number of total acres irrigated by the Breem Ditch
(3) Average monthly consumptive use (ft) * Column (2)
*Average monthly consumptive use estimates derived from Table 1, Original Blaney-Criddle, Crested Butte weather station data (30 year normals)

Table 3
Preliminary Dry Year HCU for Breem Ditch

	(1) Net Irrigation Requirement (ft)	(2) Dry Year Diversion Est. (AF)	(3) Duty of Water (acres)	(4) Irrigated Area (acres)	(5) Consumptive Use Credits (AF)	(6) Total Jul, Aug & Sep (AF)
May	0.34	50	40	32	11.05	
June	0.51	100	40	67	34.12	
July	0.40	75	40	48	19.59	19.59
August	0.24	50	40	32	7.82	7.82
September	0.17	50	40	33	5.76	5.76
TOTAL	1.67	325			78.34	33.17

(1) Blaney-Criddle based upon weather data from Crested Butte Climate Station, 30 year normals (1971 - 2000) Crop: Upper Gunnison Meadow (Smith and Brummer, 2006)
(2) Dry year (1977 & 2002) diversion approximation based on State diversion records
(3) Duty of Water = 1 cfs for every 40 acres
(4) Column (2) converted to cfs times Column (3)
(5) Column (1) times Column (4)
(6) Column (5) for July, August and September only

IRRIGATION RETURN FLOWS

We have assessed irrigation return flow patterns from the Breem Ditch to determine the influence that historical return flows may have had on the discharge of the Slate River downstream of the irrigated area. For purposes of this assessment we have developed a water balance for the Slate River below the

area irrigated by the Breem Ditch. This area is in close proximity to the proposed location that the consumptive use credits associated with the ditch will be re-diverted. The results of this assessment are summarized in Table 4.

Table 4
Breem Ditch Water Balance
Slate River near Crested Butte Stream Gage
(acre feet)

	(1)	(2)	(3)	(4)	(5)
	Historical Crop Consumptive Use	Total Ditch Diversion	Short-Term Return Flow (60%)	Long-Term Lagged Return Flow (40%)	Historical Net Stream Depletion Considering Delayed Return Flows
May	50	167	70	39	58
June	75	250	105	66	79
July	59	197	83	57	57
August	35	117	49	37	31
September	25	83	35	25	23
October	0	0	0	4	-4
November	0	0	0	0	0
Annual	244	813	342	228	244

(1) From Table 2
(2) Assumes 70 % irrigation efficiency, and a full water supply
(3) 60% of return flow immediately accrues to Slate River
(4) 40% delayed return flow; transmissivity = 100,000 ft/day, specific yield = 0.15
(5) Column (2) minus Column (3) minus Column (4)

Based upon this assessment, we estimate that the issue of delayed return flows from the Breem Ditch is minor. Irrigation return flows accrue very quickly to the stream for the following reasons:

1. The area irrigated by the Breem Ditch is directly adjacent to the Slate River. Further, numerous surface return flow channels dissect this irrigated area, and much of the irrigation return flow is directly routed to the river. Based on studies of similar irrigated areas, we have conservatively estimated that 60% of the irrigation return flow will immediately accrue to the Slate River.
2. The Breem Ditch irrigates land in an alluvial meadow. The 40% of return flows that may be routed to the stream as groundwater are readily transmitted through this material and large delays in return flow are not judged to occur.

The delayed component of the return flow was assessed with the Alluvial Water Accounting System program developed by Colorado State University's Integrated Decision Support Group. A transmissivity of 100,000 ft per day, a specific yield of 0.15, and an average distance to a stream of 400 feet was assumed.

As shown on Table 2, annual consumptive use of irrigation by the Breem Ditch is estimated to be 244 acre feet (column 1, Table 4). Assuming a flood irrigation efficiency of 70%, approximately 570 acre feet of irrigation return flow is associated with irrigation by the Breem Ditch. About 342 acre feet of this return is estimated to immediately return to the Slate River (column 3, Table 4). The remaining 228 acre feet of return flow is estimated to accrue to the river as groundwater in a slightly delayed manner (column 4, Table 4). The net stream depletions, when considering delayed irrigation return flow, are illustrated in Table 4 (column 5). Please note that May and June stream depletions are calculated to be slightly greater than the crop consumptive use, while July through September stream depletions are slightly less than the crop water requirements.

The water balance illustrated in Table 4 is for irrigation years in which a full water supply is available to the Breem Ditch. In critically dry years, the stream flow of Washington Gulch is likely reduced to the extent that a full irrigation supply is not available (see Table 3). In dry years, the efficiency of irrigation on the site probably increases and the amount of delayed return flows is likely decreased.

The slight reduction in delayed irrigation return flows associated with dry-up under the Breem Ditch may be offset by the "re-watering" of Washington Gulch. Currently, Washington Gulch is dry during most of the irrigation season, particularly during the later portion of the summer. The re-introduction of late summer stream flow to Washington Gulch will result in some amount of stream bank storage, and some of the water will also recharge the alluvial aquifer beneath Washington Gulch. The amount of water that is supplied to bank storage and aquifer recharge will not be consumed but will return to Washington Gulch and the Slate River in a delayed manner, much like the irrigation return flows currently associated with the Breem Ditch.

NET CHANGE IN STREAM FLOW

Curtailment of irrigation under the Breem Ditch will increase stream flow of both Washington Gulch and the Slate River.

Washington Gulch. Washington Gulch will remain a live stream during the entire irrigation season, and will no longer be dried up. During the early irrigation season when the discharge of Washington Gulch is high, the flow of Washington Gulch below the Breem Ditch headgate will increase by as much as 5.45 cfs (the decreed capacity of the ditch), in response to a curtailment of diversions by the ditch. When the streamflow of Washington Gulch declines to less than 5.45 cfs in the later part of the summer, the Breem Ditch water right will continue to place a call on upstream junior rights and the flow in Washington Gulch will be equal to the native un-depleted discharge of this stream.

Slate River. In the 1.5 mile segment of the Slate River that is downstream of the area irrigated historically by the Breem Ditch, but upstream of the new point of diversion associated with the proposed change of water right, the discharge of the Slate River will commonly increase by about 244 acre feet per year (Table 4, column 5). In the two river miles of the Slate River between Washington

Gulch and the lower end of the Breem irrigated area, the flow of the Slate River will increase by a greater amount as all prior irrigation return flows will remain in Washington Gulch and the Slate River. The flow of the Slate River downstream of the new point of diversion will be unchanged.

We hope this assessment is helpful. Please do not hesitate to contact us if you have any questions or concerns with this information.

Sincerely,

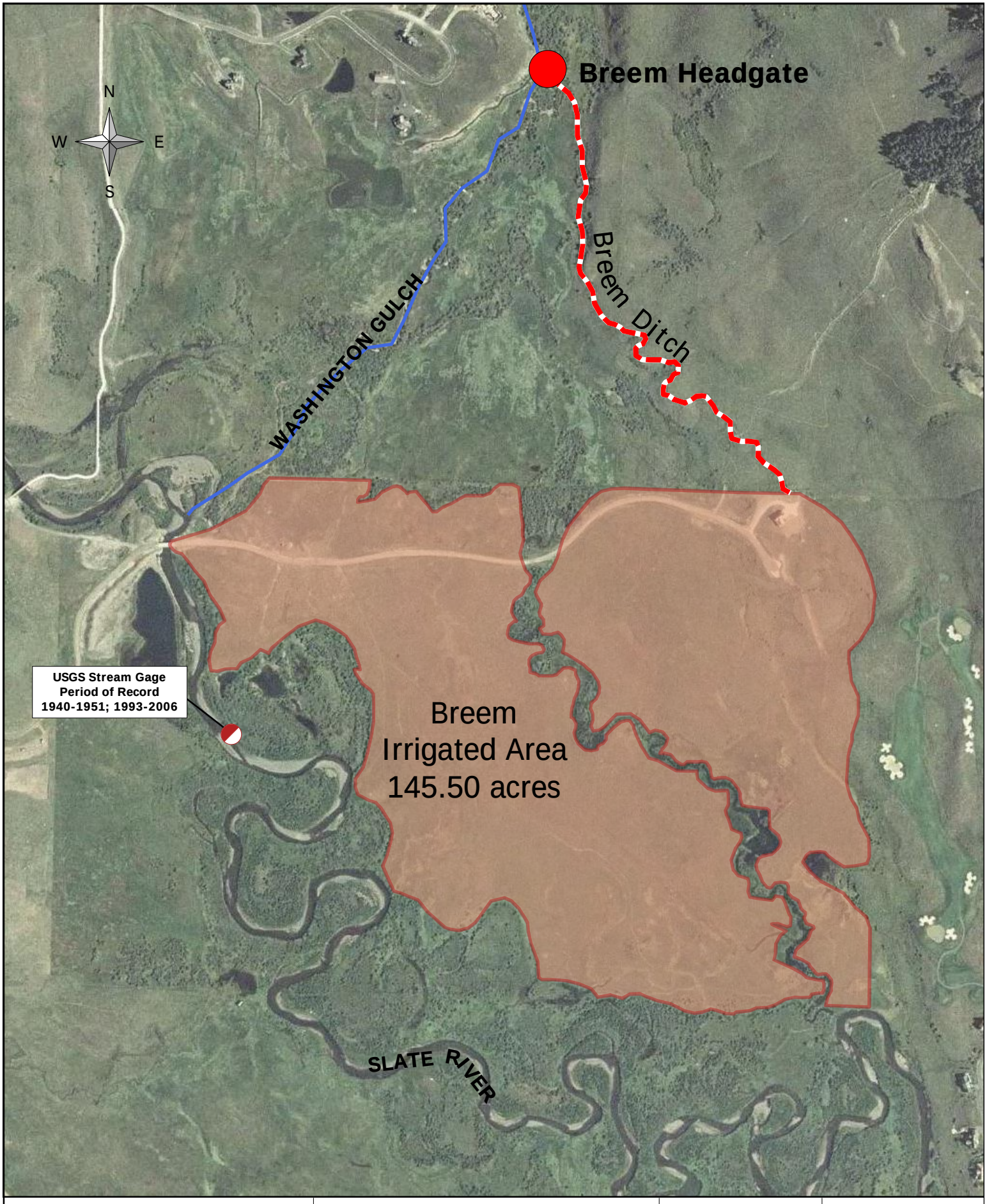
GRAND RIVER CONSULTING CORPORATION

Kerry D. Sundeen
Hydrologist

Maria Pastore
Hydrologist

KDS/eod

Enclosures



0 1000 ft

FIGURE 1
Breem Ditch Vicinity Map
Gunnison County, Colorado

Date: 08-31-2009

Map By: M.P.
File Name: breemditch.map

GrandRiver Consulting Corporation

ATTACHMENT 1

STRUCTURE SUMMARY FOR BREEM DITCH

Structure Summary Report

State of Colorado

HydroBase

Structure Name: **BREEM DITCH** **Water District:** **59** **Structure ID Number:** **525**

Source: WASHINGTON GULCH

Location:	Q10	Q40	Q160	Section	Twnshp	Range	PM
	NW	NE	SE	35	13S	86W	S

Distance From Section From N/S Line: From E/W Line:

UTM Coordinates (NAD 83): Northing (UTM 4305200 Easting (UTM x): 329639.2 Spotted from PLSS distances from section lines

Latitude/Longitude (decimal degrees): 38.879158 -106.963982

Water Rights Summary:						
Total Decreed Rate(s) (CFS):	Absolute:	5.9500	Conditional:	0.0000	AP/EX:	0.0000
Total Decreed Volume(s) (AF):	Absolute:	0.0000	Conditional:	0.0000	AP/EX:	0.0000

Water Rights -- Transactions

Case Number	Adjudication Date	Appropriation Date	Administration Number	Order Number	Priority Number	Decreed Amount	Adjudication Type	Uses	Action Comment
CA1325	1906-09-14	1900-05-12	18394.00000	0	136	5.4500 C	O	1	SOURCE WASHINGTON CR TRIB OF SLATE RI P97
W0576	1906-09-14	1900-05-12	18394.00000	0		0.5000 C	O	128	CHANGE IN USE TO MUN + DOM
91CW0123	1961-01-27	1900-05-12	39252.18394	0	531	16.3500 C	S,AB	1	ABANDONED BY COURT 12-23-1992
CA5590	1961-01-27	1900-05-12	39252.18394	0	531	16.3500 C	S	1	E BK WASHINGTON G P757
91CW0123	1961-01-27	1952-04-01	39252.37346	0	559	1.0000 C	S,AB	89	ABANDONED BY COURT 12-23-1992
CA5590	1961-01-27	1952-04-01	39252.37346	0	559	1.0000 C	S	89	WASHINGTON CR STOCK WATER SEE STIP P759

Water Rights -- Net Amounts

Adjudication Date	Appropriation Date	Administration Number	Order Number	Priority/Case Number	Rate (CFS)			Volume (Acre-Feet)		
					Absolute	Conditional	AP/EX	Absolute	Conditional	AP/EX
1906-09-14	1900-05-12	18394.00000	0	136	5.9500	0	0	0	0	0

Irrigated Acres Summary -- Totals From Various Sources

GIS Total (Acres):	282.4799	Reported:	2000
Diversion Comments Total (Acres):	0	Reported:	2006
Structure Total (Acres):		Reported:	

Irrigated Acres From GIS Data

Year	Land Use	Acres Flood	Acres Furrow	Acres Sprinkler	Acres Drip	Acres Groundwater	Acres Total
1993	***Year Total***	358.60	0	0	0	0	358.60
1993	GRASS_PASTURE	358.60	0	0	0	0	358.60
2000	***Year Total***	282.48	0	0	0	0	282.48
2000	GRASS_PASTURE	282.48	0	0	0	0	282.48

Diversion Summary in Acre-Feet - Total Water Through Structure

Year	FDU	LDU	DWC	Maxq & Day	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Total
1975	1975-07-08	1975-07-17	10	0 07-08	0	0	0	0	0	0	0	0	2	0	0	0	2
1976	1976-06-09	1976-09-19	37	0 06-09	0	0	0	0	0	0	0	3	0	1	4	0	7
1977	1977-05-07	1977-10-19	164	1 08-18	0	0	0	0	0	0	25	28	22	45	65	41	227
1978	1978-07-25	1978-08-20	27	0 07-25	0	0	0	0	0	0	0	0	3	5	0	0	8
1981	1981-07-22	1981-08-19	29	0 07-22	0	0	0	0	0	0	0	0	2	4	0	0	6
1983	1983-10-01	1983-10-31	31	1 10-01	0	0	0	0	0	0	0	0	0	0	0	31	31
1987	1987-06-22	1987-10-31	132	5 08-04	0	0	0	0	0	0	0	38	73	184	73	50	418
1988	1988-06-14	1988-10-09	110	5 06-14	0	0	0	0	0	0	0	96	33	13	12	4	157
1989	1989-06-05	1989-10-30	148	2 06-05	0	0	0	0	0	0	0	83	23	22	21	21	169
1990	1990-05-12	1990-09-14	126	2 06-15	0	0	0	0	0	0	41	85	38	61	19	0	245
1991	1991-06-19	1991-10-26	130	1 06-19	0	0	0	0	0	0	0	24	31	49	33	5	143
1992	1992-06-09	1992-10-30	144	2 06-09	0	0	0	0	0	0	0	55	27	56	52	42	232
1993	1993-06-28	1993-08-24	58	5 06-28	0	0	0	0	0	0	0	27	277	214	0	0	518
1996	1996-06-07	1996-07-23	47	1 06-07	0	0	0	0	0	0	0	38	36	0	0	0	75
1998	1998-08-13	1998-08-30	18	3 08-13	0	0	0	0	0	0	0	0	0	100	0	0	100
1999	1999-07-15	1999-08-29	46	4 07-25	0	0	0	0	0	0	0	0	120	219	0	0	339
2000	2000-05-23	2000-10-27	113	5 08-12	0	0	0	0	0	0	2	5	0	116	80	5	208
2002	2002-04-15	2002-06-25	72	2 05-30	0	0	0	0	0	6	49	99	0	0	0	0	155
2003	2003-05-20	2003-09-26	97	2 05-20	0	0	0	0	0	0	57	138	62	6	14	0	278
2004	2004-06-28	2004-08-16	50	1 06-28	0	0	0	0	0	0	0	6	41	2	0	0	49
2005	2005-08-15	2005-10-31	78	10 08-25	0	0	0	0	0	0	0	0	0	216	388	239	843
2006	2006-05-27	2006-10-15	111	6 06-20	0	0	0	0	0	0	3	133	1	69	178	95	478
2007	2007-05-05	2007-10-31	180	7 05-05	0	0	0	0	0	0	344	340	170	119	165	132	1270
		Minimum		0	0	0	0	0	0	0	0	0	0	0	0	0	2
		Maximum:		10	0	0	0	0	0	6	344	340	277	219	388	239	1270
		Average		3	0	0	0	0	0	0	23	52	42	65	48	29	259

23.00 years with diversion records

Notes: The average considers all years with diversion records, even if no water is diverted.
The above summary lists total monthly diversions.
* = Infrequent Diversion Record. All other values are derived from daily records.
Average values include infrequent data if infrequent data are the only data for the year.

Diversion Comments

IYR	NUC Code	Acres Irrigated	Comment
1975		320	
1976		200	
1979		320	
1980		320	
1981		320	
1983		320	
1984		320	
1994	Water available, but not taken	0	
1995		0	LIKELY UNRECORDED USE PRIOR TO JUNE 29
1996		0	LIKELY ADDITIONAL USE UNRECORDED. DITCH MAINTENANCE NEEDED.
1997	Structure not usable	0	DITCH MAINTENANCE NEEDED.
1998		0	ADDITIONAL DITCH MAINTENANCE NEEDED TO CONTROL BEAVER PROBLEM
2000		0	WENT ON CALL 8/8/00 UNTIL 9/9/00
2001	Water available, but not taken	0	
2002	Water available, but not taken	0	
2006		0	

Note: Diversion comments and reservoir comments may be shown for a structure, if both are available.

ATTACHMENT 2

TABULATION OF WASHINGTON GULCH WATER RIGHTS

Water Rights Tabulation

State of Colorado

HydroBase

Name of Structure	Struct Type	Name of Source	WD	Legal Location Q10 Q40 Q160 sec ts rng pm	Use Type	Net Abs	Net Cond	AltP/Exch	Units	Adj Date	Padj Date	Apro Date	O #	Admin No	ID #	Pr#/Case #
BREEM DITCH	1	WASHINGTON GULCH	59	NW NE SE 35 13 S 86 W S	128	5.9500	0	0	C	1906-09-14		1900-05-12	0	18394.00000	525	136
WILLSON DITCH	1	WASHINGTON GULCH	59	SW NE SE 35 13 S 86 W S	1	4.0000	0	0	C	1906-09-14		1901-05-12	0	18759.00000	708	142
ROZICH DITCH	1	WASHINGTON GULCH	59	SW SW NW 26 13 S 86 W S	1A	3.5000	0	0	C	1906-09-14		1901-08-31	0	18870.00000	661	148
CRESTED BUTTE PROP NO1 D	1	WASHINGTON GULCH	59	NE NW NE 35 13 S 86 W S	1	0	0	3.5000	C	1906-09-14		1901-08-31	0	18870.00000	1331	148
ROZMAN RESERVOIR	3	WASHINGTON GULCH	59	NE NW NE 35 13 S 86 W S	1	0	0	3.5000	C	1906-09-14		1901-08-31	0	18870.00000	3694	148
JAKLICH DITCH	1	WASHINGTON GULCH	59	SW SW 15 13 S 86 W S	18	2.5000	0	0	C	1921-10-25	1906-09-14	1919-06-02	0	25354.00000	964	229
CRESTED BUTTE LTD PL	7	WASHINGTON GULCH	59	SW NW NE 25 13 S 86 W S	128	0	0	1.5000	C	1924-01-07	1921-10-25	1904-06-14	0	26230.19888	541	87CW0304
MALENSEK DITCH	1	WASHINGTON GULCH	59	SE NE NE 26 13 S 86 W S	18	1.5000	0	0	C	1924-01-07	1921-10-25	1904-06-14	0	26230.19888	620	249
COLUMBINE RES & DITCH	1	WASHINGTON GULCH	59	SW NW NE 1 14 S 86 W S	12578	1.5000	0	0	C	1924-01-07	1921-10-25	1906-06-01	0	26230.20605	830	251
MERIDIAN DITCH	1	WASHINGTON GULCH	59	NW SW SE 22 13 S 86 W S	1A	1.5000	0	0	C	1924-01-07	1921-10-25	1910-06-17	0	26230.22082	638	254
CRESTED BUTTE PROP NO1 D	1	WASHINGTON GULCH	59	NE NW NE 35 13 S 86 W S	1	0	0	1.5000	C	1924-01-07	1921-10-25	1910-06-17	0	26230.22082	1331	254
ROZMAN RESERVOIR	3	WASHINGTON GULCH	59	NE NW NE 35 13 S 86 W S	1	0	0	1.5000	C	1924-01-07	1921-10-25	1910-06-17	0	26230.22082	3694	254
MERIDIAN DITCH	1	WASHINGTON GULCH	59	NW SW SE 22 13 S 86 W S	1A	1.5000	0	0	C	1924-01-07	1921-10-25	1912-12-31	0	26230.23010	638	255
CRESTED BUTTE PROP NO1 D	1	WASHINGTON GULCH	59	NE NW NE 35 13 S 86 W S	1	0	0	1.5000	C	1924-01-07	1921-10-25	1912-12-31	0	26230.23010	1331	255
ROZMAN RESERVOIR	3	WASHINGTON GULCH	59	NE NW NE 35 13 S 86 W S	1	0	0	1.5000	C	1924-01-07	1921-10-25	1912-12-31	0	26230.23010	3694	255
CRESTED BUTTE LTD PL	7	WASHINGTON GULCH	59	SW NW NE 25 13 S 86 W S	128	0	0	0.5000	C	1924-01-07	1921-10-25	1913-12-13	0	26230.23357	541	87CW0305
VUDS DITCH	1	WASHINGTON GULCH	59	NW SW NE 25 13 S 86 W S	18	1.5000	0	0	C	1924-01-07	1921-10-25	1913-12-13	0	26230.23357	702	256
MT CR BUTTE UPPER EAST EX	0	WASHINGTON GULCH	59	NW NE SE 29 13 S 85 W S	E	0	0	2.0000	C	1931-07-06		1927-06-01	0	28275.00000	1239	269
ROZICH DITCH	1	WASHINGTON GULCH	59	SW SW NW 26 13 S 86 W S	1	5.0000	0	0	C	1957-06-20	1941-04-29	1901-08-31	0	33356.18870	661	478
CRESTED BUTTE PROP NO1 D	1	WASHINGTON GULCH	59	NE NW NE 35 13 S 86 W S	1	0	0	5.0000	C	1957-06-20	1941-04-29	1901-08-31	0	33356.18870	1331	478
ROZMAN RESERVOIR	3	WASHINGTON GULCH	59	NE NW NE 35 13 S 86 W S	1	0	0	5.0000	C	1957-06-20	1941-04-29	1901-08-31	0	33356.18870	3694	478
MERIDIAN LAKE RESERVOIR	3	WASHINGTON GULCH	59	NW NE NE 21 13 S 86 W S	12489A	138.8300	0	0	A	1957-06-20	1941-04-29	1902-07-25	0	33356.19198	3663	483
MERIDIAN DITCH	1	WASHINGTON GULCH	59	NW SW SE 22 13 S 86 W S	1A	9.0000	0	0	C	1957-06-20	1941-04-29	1909-06-26	0	33356.21726	638	487
CRESTED BUTTE PROP NO1 D	1	WASHINGTON GULCH	59	NE NW NE 35 13 S 86 W S	1	0	0	9.0000	C	1957-06-20	1941-04-29	1909-06-26	0	33356.21726	1331	487
ROZMAN RESERVOIR	3	WASHINGTON GULCH	59	NE NW NE 35 13 S 86 W S	1	0	0	9.0000	C	1957-06-20	1941-04-29	1909-06-26	0	33356.21726	3694	487
MERIDIAN LAKE RESERVOIR	3	WASHINGTON GULCH	59	NW NE NE 21 13 S 86 W S	12489A	554.2700	0	0	A	1961-01-27	1957-06-20	1902-07-25	0	39252.19198	3663	532
CRESTED BUTTE LTD PL	7	WASHINGTON GULCH	59	SW NW NE 25 13 S 86 W S	1238	3.0000	0	0	C	1965-10-28	1961-01-27	1962-09-25	0	41175.00000	541	639
MERIDIAN LAKE RESERVOIR	3	WASHINGTON GULCH	59	NW NE NE 21 13 S 86 W S	56W	279.5500	0	0	A	1972-12-31	1971-12-31	1902-07-25	0	44559.19198	3663	W0545
KAPUSHION SPRING & POND	4	WASHINGTON GULCH	59	NE NW SE 23 13 S 86 W S	19	0.4500	0	0	C	1972-12-31	1971-12-31	1947-06-01	0	44559.35580	973	W0992
KAPUSHION POND	3	WASHINGTON GULCH	59	NE NW 26 13 S 86 W S	9	1.4600	0	0	A	1972-12-31	1971-12-31	1947-06-01	0	44559.35580	3683	W0991
KAPUSHION NAT SPGS DITCH	4	WASHINGTON GULCH	59	NE SW 23 13 S 86 W S	19	0.0230	0	0	C	1972-12-31	1971-12-31	1972-06-01	0	44712.00000	969	W0993
ELKTON SPRING PL NO 1	4	WASHINGTON GULCH	59	NE SE SE 31 12 S 86 W S	8	0.0220	0	0	C	1973-12-31	1972-12-31	1889-05-01	0	44925.14366	889	W2030
ALLEN MEMORIAL SP NO1 PL	4	WASHINGTON GULCH	59	SE SW SW 10 13 S 86 W S	89	0.0040	0	0	C	1973-12-31	1972-12-31	1916-06-01	0	44925.24258	740	W1772
ALLEN HOMESTEAD SP NO 12	4	WASHINGTON GULCH	59	NE NW NW 26 13 S 86 W S	89	0.0110	0	0	C	1973-12-13	1972-12-31	1916-07-15	0	44925.24302	736	W1783
ALLEN MEMORIAL SP NO2 PL	4	WASHINGTON GULCH	59	NE NW NW 15 13 S 86 W S	89	0.0090	0	0	C	1973-12-31	1972-12-31	1952-06-01	0	44925.37407	741	W1773

Water Rights Tabulation

State of Colorado

HydroBase

Name of Structure	Struct Type	Name of Source	WD	Legal Location Q10 Q40 Q160 sec ts rng pm	Use Type	Net Abs	Net Cond	AltP/Exch	Units	Adj Date	Padj Date	Apro Date	O #	Admin No	ID #	Pr#/Case #
ALLEN MEMORIAL SP NO3 PL	4	WASHINGTON GULCH	59	NW SW NW 15 13 S 86 W S	89	0.0090	0	0	C	1973-12-31	1972-12-31	1952-06-10	0	44925.37416	742	W1774
ALLEN MEMORIAL SP NO4 PL	4	WASHINGTON GULCH	59	SE SW NW 15 13 S 86 W S	89	0.0040	0	0	C	1973-12-31	1972-12-31	1952-06-18	0	44925.37424	743	W1775
ALLEN MEMORIAL SP NO5 PL	4	WASHINGTON GULCH	59	NE NW SW 15 13 S 86 W S	89	0.0040	0	0	C	1973-12-31	1972-12-31	1952-06-20	0	44925.37426	744	W1777
ALLEN MEMORIAL SP NO6 PL	4	WASHINGTON GULCH	59	NW NE SW 15 13 S 86 W S	89	0.0090	0	0	C	1973-12-31	1972-12-31	1952-06-25	0	44925.37431	745	W1776
ALLEN HOMESTEAD SP NO 7	4	WASHINGTON GULCH	59	NE NE NW 23 13 S 86 W S	89	0.0040	0	0	C	1973-12-31	1972-12-31	1952-07-01	0	44925.37437	738	W1778
ALLEN HOMESTEAD SP NO 8	4	WASHINGTON GULCH	59	NW NE NW 23 13 S 86 W S	89	0.0040	0	0	C	1973-12-31	1972-12-31	1952-07-03	0	44925.37439	739	W1779
ALLAN HOMESTEAD SP NO 9	4	WASHINGTON GULCH	59	NE NW NE 22 13 S 86 W S	89	0.0040	0	0	C	1973-12-31	1972-12-31	1952-07-08	0	44925.37444	732	W1780
ALLEN HOMESTEAD SP NO 10	4	WASHINGTON GULCH	59	SW NW NW 23 13 S 86 W S	89	0.0130	0	0	C	1973-12-31	1972-12-31	1952-07-10	0	44925.37446	734	W1781
ALLEN HOMESTEAD SP NO 11	4	WASHINGTON GULCH	59	SW SE NW 23 13 S 86 W S	89	0.0090	0	0	C	1973-12-31	1972-12-31	1952-07-12	0	44925.37448	735	W1782
MERIDIAN LAKE PARK RES	3	WASHINGTON GULCH	59	NE SW 22 13 S 86 W S	1458A	110.0000	30.3000	0	A	1973-12-31	1972-12-31	1973-08-01	0	45138.00000	3689	W2009
OLD HOMESTEAD SPRING PL	4	WASHINGTON GULCH	59	NE SW 26 13 S 86 W S	8	0.0280	0	0	C	1973-12-31	1972-12-31	1973-10-01	0	45199.00000	1048	W2043
ALLEN HOMESTEAD SP NO 13	4	WASHINGTON GULCH	59	SE NE NE 21 13 S 86 W S	89	0.2000	0	0	C	1974-12-31	1973-12-31	1930-06-01	0	45290.29371	737	W2138
CRESTED BUTTE LTD PL	7	WASHINGTON GULCH	59	SW NW NE 25 13 S 86 W S	A	0	0	881.4000	A	1991-12-31		1976-12-01	0	46356.00000	541	91CW0049
MT CR BUTTE SLATE EX REACH	0	WASHINGTON GULCH	59	SW SW NE 23 13 S 86 W S	A	0	0	881.4000	A	1991-12-31		1976-12-01	0	46356.00000	1241	91CW0049
NANCYS SPRINGS PIPELINE	4	WASHINGTON GULCH	59	NE SE NE 35 13 S 86 W S	189	0.0800	0	0	C	1979-12-31	1978-12-31	1901-05-01	0	47116.18748	1206	W3573
RENAS DITCH	1	WASHINGTON GULCH	59	SW NE NE 36 13 S 86 W S	19	3.0000	0	0	C	1979-12-31	1978-12-31	1901-05-20	0	47116.18767	1209	W3572
ECCHER SPRINGS PIPELINE	4	WASHINGTON GULCH	59	NE SE NE 35 13 S 86 W S	189	0.0900	0	0	C	1979-12-31	1978-12-31	1901-06-01	0	47116.18779	1207	W3574
WASHINGTON GULCH	0	WASHINGTON GULCH	59	NW SW NE 31 12 S 86 W S	M	2.5000	0	0	C	1980-12-31	1979-12-31	1980-03-17	0	47558.00000	1561	80CW0094
TWISTER WATER SYSTEM	4	WASHINGTON GULCH	59	NW SE 25 13 S 86 W S	38	0.0500	0	0	C	1982-12-31	1981-12-31	1967-06-16	0	48212.42900	1389	82CW0232
NORTH VILLAGE RESERVOIR	3	WASHINGTON GULCH	59	SW SW NE 23 13 S 86 W S	2AK	0	700.0000	0	A	1983-12-31	1982-12-31	1982-06-11	0	48577.48374	3768	91CW0049
GLACIER LILY WELL NO 1	2	WASHINGTON GULCH	59	NE SW SW 26 13 S 86 W S	18	0.0220	0.3120	0	C	1984-12-31	1983-12-31	1983-06-30	0	48942.48758	5627	84CW0138
NORTH MT SPRING NO 1	4	WASHINGTON GULCH	59	NE SE NE 15 13 S 86 W S	35	0	0.0550	0	C	1986-12-31	1985-12-31	1986-04-21	0	49784.00000	1706	86CW0069
GLACIER LILY WELL NO 1A	2	WASHINGTON GULCH	59	NE SW SW 26 13 S 86 W S	18	0.0220	0.3120	0	C	1988-12-31	1987-12-31	1988-08-01	0	50617.00000	5280	92CW0136
GLACIER LILY WELL NO 1B	2	WASHINGTON GULCH	59	NW SE SW 26 13 S 86 W S	8	0	0.0220	0	C	1992-12-31	1991-12-31	1992-10-17	0	52155.00000	5281	92CW0136
GLACIER LILY WELL NO 1C	2	WASHINGTON GULCH	59	SW SE SW 26 13 S 86 W S	8	0	0.0220	0	C	1992-12-31	1991-12-31	1992-10-17	0	52155.00000	5282	92CW0136
LOIS'S SPRING & PL	4	WASHINGTON GULCH	59	SW NW NE 35 13 S 86 W S	189	0.0330	0	0	C	1994-12-31	1993-12-31	1902-07-25	0	52595.19198	1684	94CW0084
RENAS DITCH	1	WASHINGTON GULCH	59	SW NE NE 36 13 S 86 W S	0	3.0000	0	0	C	1995-12-31	1994-12-31	1994-07-01	0	52960.52777	1209	95CW0013
MOON RIDGE POND	3	WASHINGTON GULCH	59	SE NW SE 35 13 S 86 W S	56A	12.0000	0	0	A	1995-12-31	1994-12-31	1994-07-01	0	52960.52777	3840	95CW0013
WILEY POND	3	WASHINGTON GULCH	59	NE NW SE 35 13 S 86 W S	56	2.0000	0	0	A	1995-12-31	1994-12-31	1994-07-01	0	52960.52777	3841	95CW0013
PARKER POND	3	WASHINGTON GULCH	59	SE NW SE 35 13 S 86 W S	56	7.0000	0	0	A	1995-12-31	1994-12-31	1994-07-01	0	52960.52777	3842	95CW0013
MOON RIDGE WELL NO 2	2	WASHINGTON GULCH	59	NW NW SE 35 13 S 86 W S	8	0	0.0330	0	C	1995-12-31	1994-12-31	1994-07-05	0	52960.52781	6053	95CW0013
MOON RIDGE WELL NO 1	2	WASHINGTON GULCH	59	NW NW SE 35 13 S 86 W S	8	0	0.0330	0	C	1995-12-31	1994-12-31	1994-07-15	0	52960.52791	6052	95CW0013
MOON RIDGE WELL NO 3	2	WASHINGTON GULCH	59	NE NW SE 35 13 S 86 W S	8	0	0.0330	0	C	1995-12-31	1994-12-31	1994-07-15	0	52960.52791	6054	95CW0013
MOON RIDGE WELL NO 4	2	WASHINGTON GULCH	59	NW NE SE 35 13 S 86 W S	8	0	0.0330	0	C	1995-12-31	1994-12-31	1994-07-15	0	52960.52791	6055	95CW0013
MOON RIDGE WELL NO 5	2	WASHINGTON GULCH	59	NW NE SE 35 13 S 86 W S	8	0	0.0330	0	C	1995-12-31	1994-12-31	1994-07-15	0	52960.52791	6056	95CW0013

Water Rights Tabulation

State of Colorado

HydroBase

Name of Structure	Struct Type	Name of Source	WD	Legal Location Q10 Q40 Q160 sec ts rng pm	Use Type	Net Abs	Net Cond	AltP/Exch	Units	Adj Date	Padj Date	Apro Date	O #	Admin No	ID #	Pr#/Case #
MOON RIDGE WELL NO 7	2	WASHINGTON GULCH	59	NW NE SE 35 13 S 86 W S	8	0	0.0330	0	C	1995-12-31	1994-12-31	1994-07-15	0	52960.52791	6058	95CW0013
MOON RIDGE WELL NO 8	2	WASHINGTON GULCH	59	NE NW SE 35 13 S 86 W S	8	0	0.0330	0	C	1995-12-31	1994-12-31	1994-07-15	0	52960.52791	6059	95CW0013
MOON RIDGE WELL NO 9	2	WASHINGTON GULCH	59	NW NW SE 35 13 S 86 W S	8	0	0.0330	0	C	1995-12-31	1994-12-31	1994-07-15	0	52960.52791	6060	95CW0013
MOON RIDGE WELL A	2	WASHINGTON GULCH	59	NW SE SE 35 13 S 86 W S	8	0.0730	0.1270	0	C	1995-12-31	1994-12-31	1994-07-15	0	52960.52791	6061	95CW0013
MOON RIDGE WELL B	2	WASHINGTON GULCH	59	SE SW SE 35 13 S 86 W S	8	0	0.2000	0	C	1995-12-31	1994-12-31	1994-07-15	0	52960.52791	6062	95CW0013
MOON RIDGE WELL NO 6	2	WASHINGTON GULCH	59	NW NE SE 35 13 S 86 W S	8	0	0.0330	0	C	1995-12-31	1994-12-31	1995-07-15	0	53156.00000	6057	95CW0013
MERIDIAN LAKE PRK RES PP	8	WASHINGTON GULCH	59	SE SW SW 22 13 S 86 W S	1278	0	0.5000	0	C	1995-12-31	1994-12-31	1995-12-08	0	53302.00000	1761	95CW0218
MERIDIAN LAKE PARK RES	3	WASHINGTON GULCH	59	NE SW 22 13 S 86 W S	12568AW	0	100.0000	0	A	1995-12-31	1994-12-31	1995-12-08	0	53302.00000	3689	95CW0218
WASHINGTON GULCH PUMP&PL	8	WASHINGTON GULCH	59	NE NW NE 27 13 S 86 W S	15789W	0	0.4000	0	C	1996-12-31	1995-12-31	1996-08-21	0	53559.00000	1775	96CW0296
GANKY POND NO 2	3	WASHINGTON GULCH	59	SE SW NE 27 13 S 86 W S	16789W	0	12.1000	0	A	1996-12-31	1995-12-31	1996-08-21	0	53559.00000	3845	96CW0296
MERIDIAN DITCH	1	WASHINGTON GULCH	59	NW SW SE 22 13 S 86 W S	0	0	0.2500	0	C	1997-12-31	1996-12-31	1997-06-03	0	53845.00000	638	97CW0092
SADDLE RIDGE POND	3	WASHINGTON GULCH	59	NE NW 35 13 S 86 W S	59A	0	4.0000	0	A	1997-12-31	1996-12-31	1997-06-03	0	53845.00000	3822	97CW0092
WASHINGTON GULCH P&PL 1	8	WASHINGTON GULCH	59	NE NW NE 27 13 S 86 W S	1789W	0	0.3000	0	C	1997-12-31	1996-12-31	1997-09-19	0	53953.00000	1778	97CW0237
MERIDIAN DITCH	1	WASHINGTON GULCH	59	NW SW SE 22 13 S 86 W S	167W	0	2.0000	0	C	2000-12-31	1999-12-31	2000-07-14	0	54982.00000	638	00CW0230
GLACIER LILY SPRING	4	WASHINGTON GULCH	59	NE SE SW 26 13 S 86 W S	178	0	0.1100	0	C	2000-12-31	1999-12-31	2000-07-14	0	54982.00000	836	00CW0230
GLACIER LILY POND NO 1	3	WASHINGTON GULCH	59	NW SE SW 26 13 S 86 W S	167AW	0	10.0000	0	A	2000-12-31	1999-12-31	2000-07-14	0	54982.00000	3746	00CW0230
GLACIER LILY POND NO 2	3	WASHINGTON GULCH	59	SE SE SW 26 13 S 86 W S	167AW	0	10.0000	0	A	2000-12-31	1999-12-31	2000-07-14	0	54982.00000	3752	00CW0230
MERIDIAN LAKE RESERVOIR	3	WASHINGTON GULCH	59	NW NE NE 21 13 S 86 W S	12489A	0	407.2100	0	A	2003-12-31	2002-12-31	2002-08-26	0	55882.55755	3663	03CW0107

Explanation of Codes:

Struct Type: 0 - other, 1 - ditch, 2 - well, 3 - reservoir, 4 - spring, 5 - seep, 6 - mine, 7 - pipeline, 8 - pump, 9 - power plant

Use Codes: 0 - Storage, 1 - irrigation, 2 - municipal, 3 - commercial, 4 - industrial, 5 - recreation, 6 - fishery, 7 - fire, 8 - domestic, 9 - stock, A - augmentation, B - export from basin, C - cumulative accretion to river, D - cumulative depletion from river, E - evaporation, F - federal reserve, G - geothermal, H - household use only, K - snow making, M - minimum streamflow, N - net effect of river, P - power generation, Q - other, R - recharge, S - export from state, T - transmountain export, W - wildlife, X - all beneficial use

Admin Number is a number developed by DWR to provide a simple and efficient method of ranking decrees in order of seniority.

Red Flag
AGENDA ITEM #8

Upper Gunnison River Water Conservancy District

234 North Main Street, Suite 3C • Gunnison, Colorado 81230
Telephone (970) 641-6065 • Fax (970) 641-1162 • ugrwcd@ugrwcd.org

November 16, 2009

Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, Colorado 80203

Re: UGRWCD's Support of Water Right Acquisition in Washington Gulch

Dear Board:

The Upper Gunnison River Water Conservancy District is supportive of maintaining and enhancing the riparian environment. One of our 2009 activities is to "coordinate with CWCB and others on instream flow water rights within the Upper Gunnison Basin in support of environmental water use needs." The proposed acquisition of the Breem Ditch water right on Washington Gulch is an example of an innovative approach that enhances the environment while providing much needed water to the Skyland Metropolitan District.

This proposal would allow water to remain in an otherwise frequently dry reach of lower Washington Gulch. The benefits of this proposal are very visible to residents and visitors to the area who use the recreational path between Crested Butte and Mount Crested Butte.

Our District urges your Board to approve the acquisition of the Breem Ditch water right to allow flows to remain in Washington Gulch, thereby enhancing the riparian environment for the benefit of the citizens of Colorado.

Sincerely,

Frank J. Kugel, P.E.
General Manager