

# STATE OF COLORADO

## Colorado Water Conservation Board Department of Natural Resources

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TO: Colorado Water Conservation Board Members

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

DATE: January 19, 2010

SUBJECT: **Agenda Item No. 14, January 26-27, 2010 Board Meeting**  
**Stream and Lake Protection Section**  
**Proposed Water Acquisition on Washington Gulch and the Slate River**

Bill Ritter, Jr.  
Governor

James B. Martin  
DNR Executive Director

Jennifer L. Gimbel  
CWCB Director

Dan McAuliffe  
CWCB Deputy Director

### Introduction

The Colorado Water Trust ("CWT") has offered the CWCB 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 ("ISF") use. The Board first considered this acquisition at its November 2009 meeting. This is the second meeting of the Board's 2-meeting process for acquisitions. This proposed acquisition is intended to preserve the natural environment of two highly visible water-short streams—Washington Gulch and the Slate River, and to improve the natural environment of Washington Gulch. 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

Staff recommends that the Board:

1. Conclude that: (1) the proposed acquisition by purchase of the Breem Ditch Conservation Use Right is appropriate to preserve the natural environments of Washington Gulch and the Slate River to a reasonable degree; and (2) that the proposed acquisition by donation from the CWT of the portion of the Conservation Use Right above that needed to preserve the natural environment of Washington Gulch is appropriate to improve the natural environment of Washington Gulch to a reasonable degree.
2. Determine that the acquired Breem Ditch Conservation Use Right would be best utilized by: (1) combining it with the Board's existing decreed ISF water right on Washington Gulch to maintain flows up to 5.45 cfs to preserve or improve the natural environment; and (2) combining it with the Board's existing decreed ISF water right on the Slate River to maintain flows up to 23 cfs, the amount decreed in Case No. 80CW092C;

3. Approve the purchase and accept the donation of a portion of the Breem Ditch Conservation Use Right from the CWT;
4. Determine that the benefit to the natural environment of Washington Gulch and the Slate River from this acquisition of 5.45 cfs during the irrigation season outweighs the potential detriment to the natural environment from lagged return flows of 0.065 cfs in October on the Slate River.
5. Authorize the Director to execute the portion of the Water Rights Purchase and Sale Agreement documenting the Board's agreement to the terms and conditions of Paragraph 16 of that Agreement;
6. Authorize the Director to execute: (1) an agreement with Skyland regarding the maintenance of return flows; and (2) the Joint Operating Principles, once finalized to the satisfaction of all parties;
7. Pursuant to section 37-60-123.7, C.R.S. (2009), authorize the expenditure and transfer to the CWT of \$335,000 to pay: (1) \$300,000 toward the cost of the Breem Ditch Conservation Use Right; and (2) \$35,000 for costs related to the acquisition of the Breem Ditch Conservation Use Right, as outlined in the financial summary provided to the Board; and
8. Direct staff to work with the Attorney General's Office to negotiate the return flow agreement and Joint Operating Principles, and to file a water court application to change the use of the acquired water right to add instream flow use.

## **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. 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 took place at the CWCB's regular November 2009 Board meeting, which initiated the 120-day time period for the Board to consider the terms and conditions of the proposed acquisition. ISF Rule 6m.(4) provides that any person may request the Board to hold a hearing on the proposed acquisition within twenty days of the Board's initial consideration. No such request was filed and the time for filing such request has expired. Staff will request the Board to take final action on the proposal at this January 2010 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 and/or improve the natural environment. The Rules list several factors the Board may consider in its evaluation of the acquisition, which factors are addressed in this memo.

Pursuant to statute, Staff has requested recommendations from the Colorado Division of Wildlife ("CDOW"), the Division of Parks and Outdoor Recreation, the U.S. Department of Agriculture and the U.S. Department of Interior. The U.S. Forest Service responded and expressed interest in removing the portion of the ditch that crosses Forest Service land. 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 to the State Engineer's Substitute Supply Plan Notification List. Five comment letters supporting this proposed acquisition are attached as **Exhibit A**.

## **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 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. The Breem Ditch flows in a south-easterly direction to irrigate approximately 145.5 acres of pasture grass. The total amount of water to be acquired for ISF 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 B**). 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 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 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**

Under this proposal, Skyland Metropolitan District (“Skyland”) will purchase the Breem Ditch water right from Verzuh Ranch, Inc., a local development company, and the CWT then will purchase a Conservation Use Right from Skyland. 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 C**. 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 D**. The Conservation Use Right will not become effective unless and until the CWT assigns it to the CWCB. The Grant of Conservation Use Right will establish a permanent right to use the Breem Ditch water right to preserve and improve the natural environment to a reasonable degree in Washington Gulch and to preserve the natural environment to a reasonable degree on the Slate River. 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.

On November 19, 2009, the Breem Ditch seller and the purchasers (the CWT and Skyland) entered into a Water Rights Purchase and Sale Agreement describing the rights and responsibilities 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 (attached as **Exhibit E**) that discusses the change of water right applications and development of Joint Operating Principles to govern the filing and prosecution of the change applications and matters related to measuring devices, calls for water, allocation of costs and risks, and 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 by May 18, 2010. The same deadline applies to the development of: (1) the Joint Operating Principles; and (2) change of water right applications to be filed by Skyland and by the CWCB that are acceptable to both parties.

The Purchase Agreement also requires the CWT and the CWCB to address any issues related to lagged return flows from the Breem Ditch by March 8, 2010. CWT and CWCB staff have

developed a draft of the Joint Operating Principles and have provided a copy to Skyland for review and comment (attached hereto as **Exhibit F**). While the Joint Operating Principles address lagged return flow issues, because they will not be finalized until a later date, the parties will need to enter into a separate agreement regarding return flows. This memo discusses return flow issues below in section 14, and staff and the AG's Office intend to discuss these issues with the CWCBC 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 (approximately 2 river 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.

**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.

#### **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, stream flow most likely is derived primarily from snowmelt and local precipitation, with peak flows occurring in May and June. Diversions into and releases from Meridian Park Lake and Meridian Lake, located several miles upstream from the Breem Ditch, affect flows in Washington Gulch.

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 (#385106106571000) located on the Slate River 25 ft. downstream and south of the Highway 135 bridge. The gage is located downstream from the acquisition reach, and downstream from Skyland's proposed point of diversion for the Breem Ditch historical consumptive use. 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, such as Meridian Lake.

## 6. Existing Instream Flow Water Rights

The CWCB currently holds the following decreed ISF 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 R.	2.5 cfs (year-round)	3-17-1980
80CW092C	Slate River	Coal Creek to confl with the East R.	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 small stream (between 10 to 19 feet wide). Fishery surveys conducted by the CDOW indicate that Washington Gulch supports a self-sustaining population of brook trout. The Slate River is classified as a large stream (36 to 59 feet wide). Fishery surveys conducted by the CDOW indicate that the Slate River also supports a self-sustaining population of brook trout.

## 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 year round. The remaining portion, 2.95 cfs of the Breem Ditch water right that will be donated to the CWCB by the CWT, would be used to improve the natural environment in this segment of Washington Gulch by providing water in excess of the existing decreed ISF amount up to 5.45 cfs.

**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 to preserve the natural environment by providing additional flows to Washington Gulch and the Slate River to help satisfy the Board's existing decrees, and to provide additional water in Washington Gulch to improve the natural

environment to a reasonable degree. The Breem Ditch Conservation Use Right will be combined or stacked with existing ISF water rights to provide flows in excess of CWCB's existing decrees only within Segment 1 on Washington Gulch, and only in an amount up to the Breem Ditch acquired amount of 5.45 cfs.

## **11. 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, but will be protected through Segment 1 on Washington Gulch. 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. The increased flows in Washington Gulch will provide additional stream habitat and restore year-round connectivity to upstream habitat on Washington Gulch for the brook trout fishery. Also, the additional flows will benefit residents and visitors who walk on the recreational trail connecting the Town of Crested Butte with Mt. Crested Butte, which goes through the wetlands associated with lower Washington Gulch and has a clear view of the portion of Washington Gulch that was historically dried up by the Breem Ditch diversions. This trail is a valuable and visible local recreational asset.

Because the existing R2Cross data collected to date by the CDOW was collected upstream of the Breem Ditch on Washington Gulch, the CDOW plans to collect additional hydrologic, hydraulic and biologic data on Washington Gulch this summer to more accurately determine the benefits of using the Breem Ditch water to improve the natural environment to a reasonable degree on Washington Gulch.

On the Slate River, the proposed acquisition will expand the period of time the existing Slate River ISF water right is met by addressing shortages to the ISF water right in the late irrigation season. This will benefit a public fishery and many water users. Just south of the land historically irrigated by the Breem Ditch is Town of Crested Butte open space, through which flows the section of the Slate River that will benefit from the increased flows the Conservation Use Right will provide. This reach is open to the public for fishing and will provide a significant public benefit. Further, 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. During this time, ISF shortages have been between 3-10 cfs. When the Slate River ISF call is placed, subdivisions relying on junior water rights must curtail certain uses and initiate augmentation releases. Acquisition of the Breem Ditch Conservation Use Right 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 on the Slate River.

Finally, the Breem Ditch water right is a valuable water right in a lucrative market and very likely could have been sold for uses that would have forever dried up Washington Gulch.

## **12. 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.

### **13. 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. As noted above, the CBP Ditch, a conditional direct flow water right junior to the existing Slate River ISF water right, is located on the Slate River within the proposed acquisition reach. This acquisition will not injure the CBP Ditch water right regardless of whether the right is exercised in the future. CWCB will file an application in water court to add ISF use to this decreed water right. The water court will verify and approve the historical consumptive use of the Breem Ditch water right and impose terms and conditions in the decree to ensure that no existing water rights will be injured from this change.

### **14. Historical Use and Historical Return Flows**

Diversion records are available for the Breem Ditch for twenty-four years during the period 1975 through 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.

The engineering analysis for the change case needs to be coordinated among several parties who are involved with this project. The seller, Skyland, and CWT have developed initial engineering estimates to evaluate the historical diversions, irrigation return flows and historical consumptive use associated with the Breem Ditch (see Grand River Consulting report attached as **Exhibit G**). In that analysis, 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 the first segment 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 the initial analysis completed by Grand River Consulting, it appears that historic irrigation of these lands by the Breem Ditch resulted in 4 acre-feet of lagged return flows accruing to the stream during the month of October (an average instantaneous rate of about 0.065 cfs).

As mentioned above, the Purchase Agreement requires the CWCB and Skyland to enter into an agreement regarding maintenance of irrigation return flows. The deadline for finalizing that agreement is March 8, 2010. At this point, Staff understands that Skyland will maintain lagged irrigation return flows to prevent injury to water users downstream of Skyland's diversions by making releases from Lake Grant as required by the water court change decree. Upstream of this point, only two water rights exist that could be impacted if the delayed return flows of 4 acre-feet in October were not maintained. The first is a group of conditional water rights, "CBP water

rights,” and the second is CWCB’s ISF water right on the Slate River decreed in Case No. 4-80CW092C for 12 cfs (12/1 – 3/31) and 23 cfs (4/1 – 11/30). It appears that the CBP conditional water rights will not be impacted because they are diverted into a 6.75 acre-foot conditional pond with a 0.5 cfs diversion rate that is expected to fill easily within the storage period allowed by the CBP decree, as further discussed in the attached Grand River Consulting memorandum dated January 12, 2010 (**Exhibit H**). If the delayed return flow is not maintained, CWCB’s Slate River ISF could be impacted. However, the benefit to the natural environment of Washington Gulch and the Slate River from this acquisition of 5.45 cfs during the dry late irrigation season outweighs the potential detriment to the natural environment on the Slate River by 0.065 cfs in October. The CDOW recommends the CWCB accept the acquisition regardless of this potential impact because the “benefits of providing year-round connectivity to upstream habitat on Washington Gulch and additional Washington Gulch habitat will compensate for the loss of instream habitat benefits from the smaller delayed late season irrigation return flows” for the short reach of the Slate River. See attached CDOW recommendation letter dated January 7, 2010 (**Exhibit I**).

#### **15. 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.

#### **16. Effect on Maximum Utilization**

Historically, the Breem Ditch has been used to irrigate pasture grass, and the consumptive use has been lost from 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 non-consumptive 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 non-consumptive purposes.

#### **17. Availability for Downstream Use**

The primary use of the consumptive portion 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.

#### **18. Administrability**

Discussions with the District 59 Water Commissioner have confirmed that the acquired water right can be administered, but there would be a need for a new measuring device at the location of the Breem Ditch historic headgate. To facilitate administration, there is also a USGS satellite gage located on the Slate River immediately downstream from the acquisition reach. CWCB



staff currently utilizes this gage to monitor and protect the existing ISF water right on the Slate River. The Division Engineer and water commissioner have indicated willingness and the ability to work through any further administrative issues that arise.

## **19. Cost to Complete Transaction**

There are various costs associated with completing this transaction. If the Board approves staff's recommendation to spend \$335,000 under Policy 19, the CWCB and CWT will share the purchase cost of \$400,000 and related costs of the transaction, as set forth below. Costs that could be incurred in the future are those associated with negotiating the Joint Operating Principles, and 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 Breem Ditch 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. The CWT is contributing \$100,000 toward the purchase price of the Conservation Use Right and donating a portion of that right to the CWCB. 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.

Because the CWCB may only use funds available to it under section 37-60-123.7 for the costs of water rights acquisitions to preserve the natural environment to a reasonable degree, the CWT is donating to the CWCB that portion of the Breem Ditch Conservation Use Right that may be used to improve the natural environment of Washington Gulch to a reasonable degree, which is 2.95 cfs. This equates to the CWCB paying 75 % of the purchase price of the Conservation Use Right and realizing 90% of the benefits of the Right (45% of .75 mile + 100% of 3.5 miles). The CWCB's share of the purchase price will buy the ability to use 2.5 cfs to preserve the natural environment on a .75 mile reach of Washington Gulch, 5.45 cfs to preserve the natural environment on a 2 mile reach of the Slate River, and the historical consumptive use amount (up to 0.57 cfs) to preserve the natural environment on a 1.5 mile reach of the Slate River. The portion of the Conservation Use Right donated to the CWCB by the CWT potentially can be used to improve the natural environment on a .75 mile reach of Washington Gulch with 2.95 cfs. By paying 75% of the cost of the Conservation Use Right, the CWCB will be able to preserve the natural environment to a reasonable degree on 3.5 miles of stream, and the donated water right will allow CWCB to improve the natural environment to a reasonable degree on a .75 mile reach of Washington Gulch.

### Related Costs

Under Policy 19, the CWCB may use funds allocated to it under section 37-60-123.7 to reimburse a party for the costs of bringing a water acquisition to the Board. The CWT is requesting \$35,000 from the Board to cover costs of: (1) the preliminary evaluation of the feasibility of using the Breem Ditch 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.

#### Financial Summary

To date, CWT's expenses under this transaction are as follows:

**Grand River Consulting** (costs to date for all manner of consulting support for acquisition, from historical consumptive use analyses to spot research and memoranda drafting as transaction-specific issues arise): **\$10,513.77**

**FlyWater, Inc.** (report on administration and gauging options): **Time donated, no estimate kept**

**Title work** (includes document searches and procurement at the Gunnison County Clerk and Recorder's Office; interviews with the local water commissioner; review and analysis of water rights documents; and hard costs such as mileage, hotels, and copies, all related to producing a water rights title opinion): **\$9,836**

**CWT staff time** (preliminary feasibility analyses, technical transaction details such as research of nearby water rights, strategy creation, travel, and negotiating and managing the acquisition): total of 368.3 hours, equal to **\$36,830.00**, assuming an average of \$100/hour per person.

**CWT special counsel time:** Given the complexity of the transaction, CWT used a combination of donated and paid-for time from experienced water counsel. The paid work has been limited to purchase agreement negotiations, execution of requirements under the purchase agreement, and pre-water court filing considerations, for a total of 110 hours. At a reduced rate of \$195/hour, this work amounts to **\$21,450**.

The CWT's total costs were just under \$80,000, not including the work donated by FlyWater, Inc. The request for \$35,000 will reimburse the CWT for approximately 43% of those costs, with the CWT bearing the unreimbursed costs. The CWT also will incur and intends to bear ongoing costs as this transaction makes its way to water court.

#### Staff Recommendation

The Staff recommendation is set forth on pages 1 and 2 of this memo.

#### Attachments

- Exhibit A** – Comment Letters
- Exhibit B** – Decree
- Exhibit C** – Grant of Conservation Use Right
- Exhibit D** – Assignment of Conservation Use Right
- Exhibit E** – Paragraph 16 terms
- Exhibit F** – Draft Joint Operating Principles
- Exhibit G** – Grand River HCU Report
- Exhibit H** – Grand River Supplemental Report
- Exhibit I** – CDOW Recommendation Letter



January 12, 2010

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

Re: Breem Ditch water rights acquisition

Dear Board:

The Colorado Watershed Assembly is a coalition of local watershed groups across the state working within their communities to protect, conserve and enhance the natural resources of their watersheds. The Assembly acts as an advocate for the needs of these groups and supports them with information and capacity building assistance.

Many of these groups struggle with low summer flows or dried up streams altogether. The State's Instream Flow Program, specifically the new appropriations filed for by the Colorado Water Conservation Board under that program, has made a considerable difference. But acquisitions can truly solve water shortages. In this case, the grant of a Conservation Use Right that will allow the Instream Flow Program to use very senior water rights in a stream that is completely dried up even in average years is the exact kind of transaction the acquisition program was designed for. The Conservation Use Right has all of the attributes of a deeded interest; it is a milestone in allowing willing buyers and sellers to negotiate a contract that works for both parties and for the state's rivers and streams. The Breem Ditch transaction will add much needed water to Washington Gulch and the Slate River but even more important is the precedent it will set by adding another tool in the toolbox for communities to develop collaborative solutions to often contentious problems over water.

The Colorado Watershed Assembly supports the approval of this transaction.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeff Lane', is written over a light blue circular background.

Executive Director



## *Upper Gunnison River Water Conservancy District*

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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

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,

A handwritten signature in dark ink, appearing to read "Anthony Poponi", written over a horizontal line.

Anthony Poponi  
Coordinator

A handwritten signature in dark ink, appearing to read "Steve Glazer", written over a horizontal line.

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





RECEIVED  
OCT 13 2009  
Colorado Water Conservation Board

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

CA1325

Ditch No. 146.

Priority No. 136.

Broom

Ditch.

THAT SAID DITCH IS ENTITLED TO PRIORITY NO. 136.

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

THE HEADQUARTERS 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 V. (N.M.) bears S. 8° 55' E. 2056.9 feet,

6th

GENERAL COURSE South Easterly ; LENGTH OF DITCH 4072 <sup>feet</sup> ~~feet~~

WIDTH 5 FEET; DEPTH 1.5 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,

~~XXXXXX~~ 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 LAW-  
FULLY 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

164



## EXHIBIT C

### 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 D

## 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 E

**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.

**JOINT OPERATING PRINCIPLES**

(Breem Ditch)

**RECITALS**

WHEREAS, by Water Rights Purchase and Sale Agreement dated November 19, 2009 (the “Contract”) among Verzuh Ranch, Inc. (“Verzuh”), Skyland Metropolitan District (the “District”) and the Colorado Water Trust (the “CWT”), the District and the CWT are to purchase from Verzuh the 5.45 cfs decreed to the Breem Ditch in Civil Action No. 1325 by the District Court, Gunnison County, Colorado on September 14, 1906, with an appropriation date of May 12, 1900 (the “Water Right”).

WHEREAS, the Contract contemplates that the Water Right will be used by the Colorado Water Conservation Board (the “CWCB”) for instream flow purposes in the following stream segments pursuant to a Grant of Conservation Use Right from the District (the “Instream Flow Use”):

- A. Washington Gulch from the headgate of the Breem Ditch to the confluence of Washington Gulch and the Slate River (“Segment 1”);
- B. The Slate River from its confluence with Washington Gulch to a point on the Slate River where return flows from the historical irrigation use of the Water Right returned to the Slate River, estimated to be near where an unnamed tributary enters the Slate River from the north (“Segment 2”);
- C. The Slate River from the end of Segment 2 to a new point of diversion (the “New POD”) to be constructed by the District (the “New POD”) on the Slate River near where the North Section Line of Section 12, T. 14 S., R. 86 W. of the 6<sup>th</sup> P.M. crosses the Slate River (“Segment 3”).

WHEREAS, the District will divert the historical consumptive use associated with the Water Right at its New POD for use in its municipal water system, or will leave such consumptive use credits in the Slate River for augmentation and replacement purposes (the “Municipal Use”).

WHEREAS, at the Closing under the Contract, the CWT will assign its rights under the Grant of Conservation Easement Use Right to the CWCB, which will make the Instream Flow Use of the Water Right.

WHEREAS, the Contract requires that the District, the Trust and the CWCB agree upon various joint operating principles regarding their respective use of the Water Rights and related matters, including the prosecution of two water court changes cases that will be filed: (1) a change of water rights filed by the CWCB to allow the Instream Flow Use in the Segments 1, 2 and 3 (the “CWCB Change Case”), and (2) a change of

water rights filed by the District to allow the Municipal Use by the District (the “District Change Case”).

WHEREAS, the parties have agreed upon such joint operating principles, which are set forth below:

### JOINT OPERATING PRINCIPLES

1. Interim Irrigation Use. Following the Closing under the Contract, and prior to the entry of final decrees in the CWCB Change Case and District Change Case, the District shall continue the historical irrigation use of the Water Right, at its sole cost, expenses and profit. During this period, the District shall maximize beneficial use of the Water Right to the extent practical. Following entry of such final decrees, and the expiration of any appeal periods (but not considering any periods of retained jurisdiction), such irrigation use shall cease.

2. Preparation of Change Applications. The District shall prepare and provide the CWCB and the Trust a draft of the District Change Case application no later than \_\_\_\_\_, 2010. The CWCB shall prepare and provide the District and the Trust a draft of the CWCB Change Case Application by that same date. Counsel for the CWT, CWCB and District shall meet during the subsequent 30 days to exchange comments on their respective change applications. The change applications shall be consistent with these Joint Operating Principles and with each other.

3. Filing and Consolidation of Change Applications. The CWCB and District shall agree on the date on which their respective Change Case applications shall be filed with the Water Court, which shall be no later than one year following the Closing under the Contract. After filing the Change Case applications, the CWCB and District shall file a joint motion in both cases seeking to consolidate the cases for pretrial and trial purposes, but with separate decrees to be entered in each case.

4. Prosecution of Change Cases. Each party shall be responsible for the prosecution of its own Change Case. However, the parties shall consult and coordinate with each other in doing so. Each applicant shall be responsible for its own costs and expenses incurred in connection with the preparation and prosecution of their own Change Case. The District and CWCB may elect to jointly engage expert witness(es) or share other resources on a basis to be determined by them at the time and set forth in a writing signed by each. The District and CWT will enter into a joint defense agreement to protect any confidential information exchanged between them. The CWT shall also be a party to such joint defense agreement.

5. Involvement of CWT. The CWT will not become a co-applicant or objector in either Change Case. However, the District and CWCB will provide the CWT copies of all pleading filed or received in their respective Change Case within five (5) days of such pleading being filed. Moreover, counsel for the CWCB and District shall keep counsel for the CWT advised of any significant developments in their respective

Change Case and shall, upon request, discuss the status of their respective Change Case with counsel for the CWT, subject to the provisions of the joint defense agreement referenced in Section 4 above.

6. Copies to Verzuh. Pursuant to Section 16(B)(vi) of the Contract, counsel for the District and the CWCB shall provide counsel for Verzuh notice and copies of all documents filed in their respective Change Case within five (5) days of such filing.

7. Stipulations and Draft Decrees. The CWCB and the District shall be entitled to enter into stipulations or submit proposed decrees in their respective Change Cases, without the consent of the other party, provided that (a) a copy of the proposed stipulation or decree is provided to the other party (and to the CWT) at least fifteen (15) days prior to the submission thereof to an objector or the Court; (b) the party proposing such stipulation or decree considers in good faith any suggestions or objections to such stipulation raised by the other party or the CWT; and (c) the stipulation or decree is not inconsistent with any of these Joint Operating Principles.

8. Headgate/Measuring Costs. The CWCB and the District will share 50/50 the costs of: (a) eradicating or maintaining (as required by the Water Court) the Breem Ditch headgate and establishing the dry up of the historically irrigated land; (b) constructing and maintaining any measuring devices required by the Water Court to measure flows in Washington Gulch near the Breem Ditch headgate; and (c) diverting, measuring and returning to Washington Gulch the amount of water available for diversion by the Water Right at the original headgate, if required by the Water Court. The CWCB's obligation under this provision is subject to the availability of funds.

9. Calculation of Instream Flow Rates. In the CWCB Change Case, the CWCB will seek to change the Water Right for Instream Flow Use in the Segments #1, 2 and 3 identified above. Within Segments #1 and #2, the full historical diversion rate will be claimed for Instream Flow Use, unless in Segment #1 the CWCB is restricted to the amount of the CWCB's existing instream flow right in this segment. Within Segment #3, the rate claimed will be the rate equal to (a) the historical consumptive use of the Water Right in acre feet, by month, (b) divided by the number of days in that month, (c) divided by 2. For instance, if in June the historic consumptive use was 60 feet, the instream flow rate in Segment #3 would be  $60/30=2/2= 1$  cfs.

10. Calculation of HCU Credits. In the District Change Case, the District will seek to change the Water Right either for re-diversion at its New POD or augmentation or replacement credits in the Slate River below the New District POD, in a daily amount equal to (a) the historical monthly consumptive use by acre feet, by month, (b) divided by the number of days in such month.

11. Delayed Return Flows. In light of the overall benefits that will be obtained as a result of the change of the Water Right to Instream Flow Use, the CWCB agrees not to require the maintenance of any irrigation return flows that may have accrued to Washington Gulch or the Slate River following the irrigation season, as a

result of historical irrigation use of the Water Right. If the Water Court requires in either Change Case that such non-irrigation season return flows be provided in the Slate River below the New POD to protect other water users from injury, the District will provide such replacement water, at its cost and expense, from water available from Lake Grant.

12. Adjustments. If the Water Court adopts a change methodology or terms and conditions other than those contemplated in Sections 9, 10 or 11 above, the parties will endeavor to apply the basic principles set forth herein as much as possible to such different methodology.

13. Calls. Both the District and the CWCB shall be entitled to place a “call” using the priority of the Water Right even if the other party is not using the Water Right. If a call is placed, the calling party shall notify the other party of the call.

14. Amendments. These Joint Operating Principles may be amended or modified only by a document executed by all the parties hereto; however, the final decrees entered in the Change Cases shall supersede any inconsistent provisions of these Joint Operating Principles.

15. Dispute Resolution. In the event of a dispute between the parties regarding their respective rights and obligations under these Joint Operating Principles, the parties shall endeavor to jointly select a mediator to mediate such dispute. If the parties cannot agree on a mediator within ten days of written demand for the same, each party shall select one mediator within the following ten days and those mediators shall select another single mediator within the following ten days to mediate the dispute. Any such mediation shall be completed within 30 days of the selection of the mediator, unless the parties otherwise agree.

16. Termination. If a Closing does not occur pursuant to the Contract, or the CWT does not participate in such Closing pursuant to the terms of the Contract and receive the Grant of Conservation Use Right, then these Joint Operating Principles shall be void and of no force or effect.

Dated and agreed to this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

SKYLAND METROPOLITAN DISTRICT

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its President

COLORADO WATER CONSERVATION BOARD

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its Director

COLORADO WATER TRUST

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its President



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
<u>November</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
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.

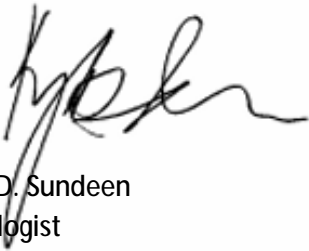
Slate River. In the 1.5 mile segment of the Slate River that is downstream of the area irrigated historically by the Breem Ditch, but upstream of the new point of diversion associated with the proposed change of water right, the discharge of the Slate River will commonly increase by about 244 acre feet 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*

A handwritten signature in black ink, appearing to read 'Kerry D. Sundeen', with a stylized, flowing script.

Kerry D. Sundeen  
Hydrologist

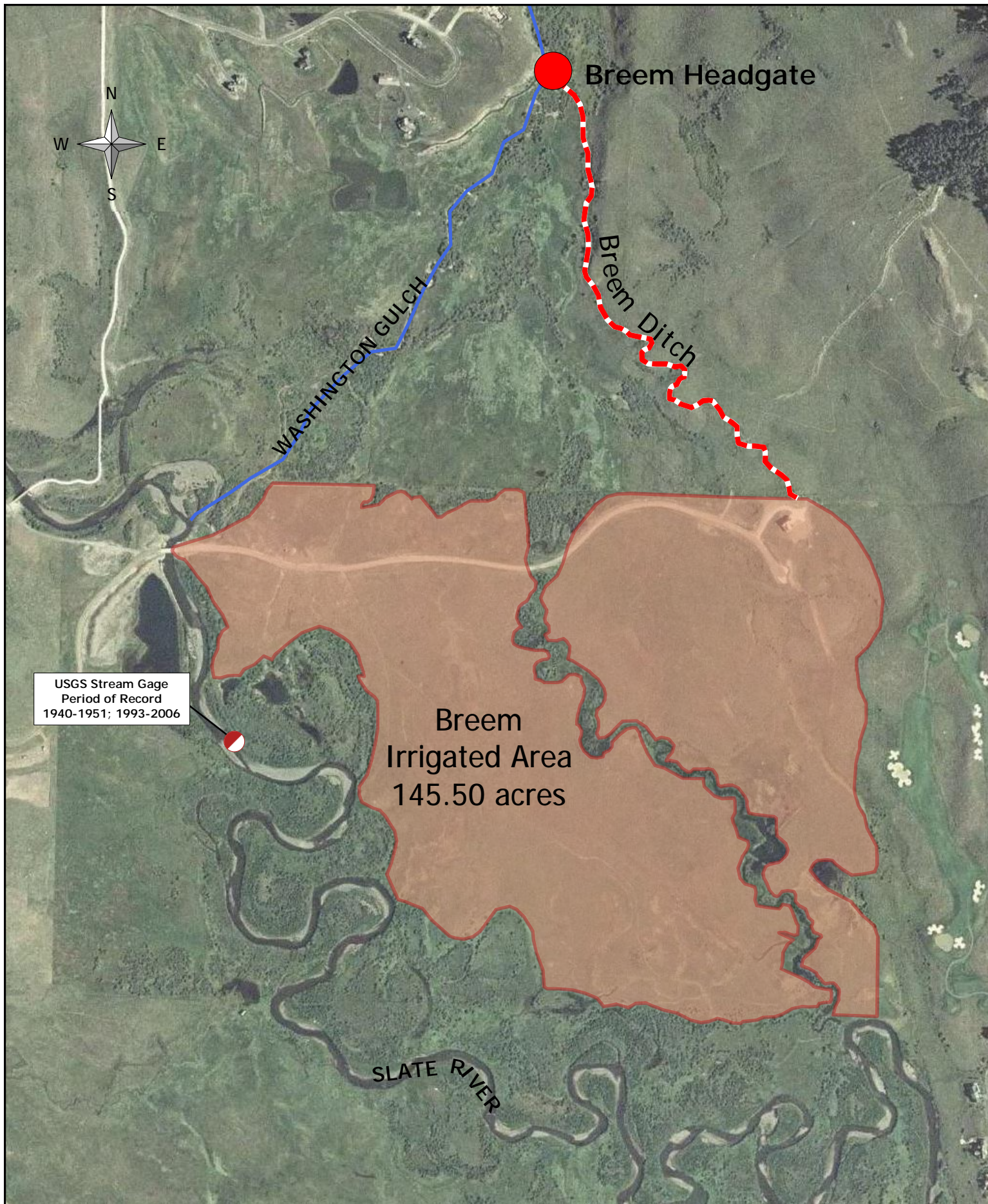
A handwritten signature in black ink, appearing to read 'Maria Pastore', with a stylized, flowing script.

Maria Pastore  
Hydrologist

KDS/eod

Enclosures





**FIGURE 1**  
**Breem Ditch Vicinity Map**  
**Gunnison County, Colorado**

Date: 08-31-2009  
Map By: M.P.  
File Name: breemditch.map



## ATTACHMENT 1

### STRUCTURE SUMMARY FOR BREEM DITCH



# Structure Summary Report

HydroBase

State of Colorado

**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
				<i>Minimum</i>	0	0	0	0	0	0	0	0	0	0	0	0	2
				<i>Maximum:</i>	10	0	0	0	0	6	344	340	277	219	388	239	1270
				<i>Average</i>	3	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			Legal Location															HydroBase					
Name of Structure	Struct Type	Name of Source	WD	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	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	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	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			Legal Location														HydroBase								
Name of Structure	Struct Type	Name of Source	WD	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				Use Type	Net Abs	Net Cond	AltP/Exch	Units	Adj Date	Padj Date	Apro Date	O #	Admin No	ID #	Pr#/Case #	
				Q10	Q40	Q160	sec ts													rng
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	12568	AW	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	15789	W	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	16789	W	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	59	A	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	1789	W	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	167	W	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	167	AW	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	167	AW	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	12489	A	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.



## MEMORANDUM

DATE: January 12, 2010

TO: Amy Beatie  
Mike Browning

FROM: Kerry Sundeen

SUBJECT: Influence of Breem Ditch on CBP Augmentation Plan  
Case No. 84CW119

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The proposed transfer of the Breem Ditch to instream flow purposes will substantially increase stream flow of Washington Gulch and the Slate River during the irrigation season. However, the transfer could potentially cause a slight reduction in stream flow of the Slate River immediately following the irrigation season, in response to a reduction in delayed irrigation return flows. As outlined in our November 9, 2009 memo, we estimate that in a worst-case situation, the dry-up of the Breem Ditch could reduce Slate River discharge during the month of October by a total of about 4 acre feet (an average instantaneous rate of about 0.065 cubic feet per second). However, this is an estimate of maximum depletions and it is possible that no significant change in delayed return flow patterns will occur, given the close proximity of the irrigated area to the Slate River.

It is our understanding that in the event that delayed irrigation return flows are actually diminished, a like amount of water may be provided to the Slate River from Lake Grant. This release of stored water would protect all water users from injury, downstream of the Lake Grant releases. Releases from Lake Grant accrue to the Slate River about one mile below the location of the historical Breem Ditch irrigation return flow. As a result, stream flow of the Slate River could be diminished by a maximum of about 0.065 cfs in October, through this intervening reach.

### CBP Water Rights

A single group of water rights is located on the Slate River within this intervening reach. These water rights are associated with a conditionally decreed plan for augmentation for the CBP Well. As decreed in Case No. 84CW119 (attached), diversions by the CBP Well (200 gpm) are to be augmented by releases from the CBP Pond (6.75 acre feet), which is in-turn to be filled with water diverted from the Slate River through the CBP Ditch (0.5 cfs). To our knowledge, these rights remain conditional, and the decreed plan for augmentation is not in operation at this time.

*We have reviewed the decree for this plan for augmentation and conclude that should a decrease in October stream flow actually occur from the proposed Breem Ditch transfer, this decrease in flow will not affect the CBP water rights.* The reasons for this opinion are:

- By decree, CBP diversions from the Slate River cannot occur in October if the flow of the Slate River is less than the CWCB instream flow of 23 cfs (or more specifically, if the CBP diversions cause the flow in the Slate River to drop below 23 cfs). We have reviewed daily USGS stream flow records of the Slate River at this location for the 26 year period of available record. This analysis reflects that at no time within this period of record would the loss of irrigation return flows cause the discharge of the Slate River to change from greater than 23 cfs to an amount less than 23 cfs. As a result, the number of days that the CBP rights could divert water in-priority would not be changed.
- The CBP rights are limited to a volumetric diversion of 5.02 acre feet per year from September 29 through December 15<sup>th</sup>. During each year of available stream flow data (including the critical dry year of 2002), sufficient water in excess of the CWCB instream flow rights is available from the Slate River to fill the CBP Pond many times over. The CBP Pond can easily be filled each year with or without the proposed Breem Ditch transfer.

We hope this assessment is helpful. Please let us know if you require any additional information at this time.

KDS/eod

Enc.



DATE OF MAILING

JUL 17 1985

7-17-85

Kay Phillips, Clerk \_\_\_\_\_

DISTRICT COURT, WATER DIVISION NO. 4, COLORADO

CASE NO. 84CW-119

WDS9

FINDINGS AND RULING OF THE REFEREE AND DECREE

IN THE MATTER OF THE APPLICATION, AMENDED  
APPLICATION AND SECOND AMENDED APPLICATION FOR  
WATER RIGHTS OF:

NOEL E. ANDRESS, Gunnison County, Slate River  
Drainage.

The above-entitled application, amended application and second amended application were filed in July and October, 1984, and March, 1985, respectively, and were referred to the undersigned Water Referee. The Referee, having considered the application and the evidence presented, having made further investigation and consultation as required by law, and having been fully advised with respect to the subject matter of this application, does hereby make the following findings and ruling in this matter:

FINDINGS

1. Applicant initiated this matter by filing the application for Approval of Plan of Augmentation including Water Rights on July 31, 1982;
2. Applicant filed an amended application and second amended application for Approval of Plan for Augmentation including Water Rights on October 29, 1984 and March 29, 1985, respectively;
3. Timely and adequate notice of the application, amended application and second amended application in this matter was duly published as required by law and the Referee has jurisdiction;
4. A statement of opposition was filed by the Colorado Water Conservation Board;
5. Applicant has applied for the following conditional water rights in Gunnison County:

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a. The CBP Well which derives its source from ground water tributary to the Slate River, with an appropriation date of July 20, 1984, for in-house domestic, irrigation and municipal uses associated with this Plan for Augmentation. It will be located in the N/2 of the SE/4 of the SW/4 of Section 1, Township 14 South, Range 86 West, 6th P.M., more particularly described as located at a point whence the SW corner of said section bears South  $58^{\circ}$  West, a distance of 2400 feet. The depth of the well will be approximately 100 feet with a maximum pumping rate of 200 gallons per minute.

b. The CBP Ditch will divert 0.5 c.f.s. from the right bank of the Slate River in the SW/4 of the NW/4 of the SW/4 of Section 1, Township 14 South, Range 86 West, 6th P.M., more particularly described as located at a point whence the SW corner of said section bears South  $12.5^{\circ}$  West, a distance of 1900 feet. The appropriation date is July 20, 1984. Water will be diverted for domestic, irrigation, recreational and municipal uses associated with this Plan for Augmentation.

c. The CBP Pond will store 6.75 acre feet for its first filling by June 15th of each year and 5.02 a.f. for its second filling between September 29th and December 15th of each year. Slate River water will be diverted to the pond by the CBP Ditch or its alternate points of diversion. The CBP Pond is located in the N/2 of the SE/4 of the SW/4 of Section 1, Township 14 South, Range 86 West, 6th P.M., more particularly described as being located at a point whence the SW corner of said section bears South  $59^{\circ}$  West, a distance of 1800 feet. The appropriation date is July 20, 1984. The water stored will be used for domestic, irrigation, recreational and municipal uses associated with this Plan for Augmentation.

6. Applicant has applied for the following alternate points of diversion for the CBP Ditch in Gunnison County:

a. The CBP Pump and Pipeline, 0.5 c.f.s., conditional, will be diverted from a point on the right bank of the Slate River in the N/2 of the SE/4 of the SW/4 of Section 1, Township 14 South, Range 86 West, 6th P.M., more particularly described as located at a

point whence the SW corner of said section bears South 58° West, a distance of 2150 feet.

b. The CBP Spring, 0.5 c.f.s., conditional, will be diverted from the Spring in the N/2 of the SE/4 of the SW/4 of Section 1, Township 14 South, Range 85 West, 6th P.M., more particularly described as located at a point whence the SW corner of said section bears South 58° West, a distance of 1950 feet.

7. Total diversions at the CBP Ditch and its alternate points of diversion will not exceed 0.5 c.f.s.

8. Applicant desires to augment out-of-priority in-house diversions and irrigation consumptive use through the CBP Well for a subdivision with 42 dwelling units and 1.93 acres of irrigation. Augmentation water will be released from CBP Pond. The CBP Pond will be an enlargement of an existing pond on the CBP Project property. The CBP Well may be out-of-priority during the irrigation season and during the winter low-flow season (see Paragraph 10, below).

9. The State Engineers Office has issued a well permit application denial, A.D.10727 (on March 3, 1985) for the CBP Well.

10. Applicant and the Colorado Water Conservation Board entered into a Stipulation with the following conditions:

a. Applicant shall return to the Slate River a volume of water equal to all diversions, whether in priority or not, from December 15th through March 31st, a period of 3 and 1/2 months, each year. Applicant shall accomplish augmentation to compensate for these diversions by releasing water from the CBP Pond, which releases shall be made at the rate of 0.023 c.f.s., which is the average diversion rate for full occupancy of the Crested Butte Project, or at such other rate as directed by the division engineer in consultation with the board.

b. The board shall not require applicant to augment well diversions made pursuant to the plan for augmentation decreed in this Case No. 84CW-119 between April 1st and December 14th of any year, except that applicant may not fill or refill the CPB Pond under its storage rights decreed in this Case No. 84CW-119 in such a manner as to cause the flow in the Slate River

to fall below 23 c.f.s. between April 1st and October 31st, or below 12 c.f.s. between November 1st and March 31st.

c. Applicant shall provide an annual report on or about December 31st of each year to the Division Engineer describing all diversions and augmentation releases, and shall also provide any information concerning diversions and augmentation at such other times during the year, to the Division Engineer or the board, as either the Division Engineer or the board shall request.

d. Applicant shall install and maintain such water measurement devices, recording devices, content guages and inlet and outlet measurement and recording devices as are deemed essential by the Division Engineer to carry out the terms and conditions of the plan for augmentation decreed in this Case No. 84CW119, and consistent with this Ruling of the Referee.

e. The Court determines that the diversions by applicant in compliance with the terms and conditions of this Ruling and the Decree issued in this Case No. 84CW119 will not result in injury to the board's instream flow appropriation as hereinafter decreed in Case No. 80-CW-92.

f. Applicant shall provide a copy of this Ruling to each initial purchaser of lots in the Crested Butte Project, and shall record this Ruling and subsequent Decree with the County Clerk and Recorder of Gunnison County, Colorado, within 60 days of the entry thereof.

g. Applicant may assign all rights and responsibilities under this plan to any association comprised of lot owners of the Crested Butte Project or to any special district of which the Crested Butte Project may become a part. If such assignment is made, the association or district shall be responsible for implementing all provisions assigned to the applicant herein. All such provisions shall be incorporated into any protective covenants formulated by the association or district.

### RULING

Wherefore, the Referee concludes and rules as follows:

1. Applicant's Plan for Augmentation above-described is hereby approved. the Colorado State Engineer, the Division 4 Engineer, and other water administration officials shall administer and comply with the plan for augmentation herein approved as follows:

A. By directing the applicant to release water in storage in the CBP Pond in such amounts and rates of flow as may be necessary, but not inconsistent with the quantities and timing as herein set forth.

B. By directing the applicant to curtail all out-of-priority diversions, whether the wells themselves or the augmentation water is out of priority, the depletions from which are not so replaced as to prevent injury to vested water rights.

C. With respect to the processing of applications for permits for the well described herein, by recognizing the existence and operation of this plan of augmentation, and issuing a well permit for the use of such well. Each permit issued for such well shall incorporate therein by reference the provisions of this ruling and decree.

2. Applicant's application for conditional water rights and alternate points of diversion are hereby approved with appropriation dates as specified above, adjudication date of December 31, 1984;

3. The statements contained in the second amended application are true;

4. Pursuant to Section 37-92-304(6), C.R.S. (1984 Supp.), in order to insure that no injury occurs to vested water rights of any water user during the development of and/or after the completion of this project, this Court shall retain jurisdiction to reopen this decree from time to time to reconsider the question of injury to any vested water rights. This period of retained jurisdiction shall commence on the date applicant notifies the Court and all objectors that the development is complete and shall end five years thereafter. Such retained jurisdiction may be

6.

invoked upon a determination by the Court, or upon motion by any person, that nonoccurrence of injury under the Plan for Augmentation and changes of water rights approved herein has not been conclusively established. Any determination on Motion to invoke retained jurisdiction shall describe specifically the type and manner of injury alleged. If no petition for reconsideration is filed within five years from the date applicant notifies this Court and all objectors that the development is complete, the period of retained jurisdiction for this purpose shall automatically expire.

5. Prior to or during the month of July, 1989, and every four years thereafter, until the conditional right is decreed absolutely, the owner or user thereof, if it is desired to maintain the same, shall file an application for quadrennial finding of reasonable diligence with the Water Clerk of this Court. Upon the sale or other transfer of this conditional water right, the transferee shall file with this Court a notice of transfer which shall state:

- (1) The title and case number of this case;
- (2) The description of the conditional water right transferred;
- (3) The name of the transferor;
- (4) The name and mailing address of the transferee.

Applicant shall notify any transferee of the requirements of this paragraph.

The owner of this conditional water right shall notify the Clerk of this Court of any change in mailing address.

Dated this 17<sup>th</sup> day of July, 1985.

No protest was filed in this matter. The foregoing ruling is confirmed and approved, and is made the judgment and Decree of this court.

Aaron R. Clay  
Aaron R. Clay  
Water Referee  
Division No. 4

Dated: 8-13-85  
Robert A. Brown  
Water Judge

Attested: Copy of this Document to  
all parties to this case.

Dated 8-15-85  
SW  
Deputy Clerk

STATE OF COLORADO

Bill Ritter, Jr., Governor  
DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF WILDLIFE**  
AN EQUAL OPPORTUNITY EMPLOYER

Thomas E. Remington, Director  
6060 Broadway  
Denver, Colorado 80216  
Telephone: (303) 297-1192  
[wildlife.state.co.us](http://wildlife.state.co.us)



*For Wildlife-  
For People*

January 14, 2010

Ms. Linda Bassi  
Colorado Water Conservation Board  
1313 Sherman Street, Room 723  
Denver, CO 80203

Dear Linda,

The following is the Colorado Division of Wildlife's (DOW) analysis and recommendation regarding the possible acquisition and donation of the Breem Ditch Water Right for instream flow purposes on Washington Gulch and the Slate River. The distinction between what part of the Breem Ditch is being acquired by the Colorado Water Conservation Board (CWCB) and what part is being donated by the Colorado Water Trust is further described in the CWCB staff's memo to the CWCB dated January 14 2010.

**General Information**

The Colorado Water Conservation Board (CWCB) requested the DOW to evaluate the benefits and possible impacts associated with accepting the proposed donation of the Breem Ditch Water Right to the fisheries in Washington Gulch and the Slate River. The CWCB currently holds instream flow water rights on Washington Gulch, Case No. 4-80CW094, and the Slate River, Case No. 4-80CW092C, appropriated to preserve the natural environment to a reasonable degree. Washington Gulch is a tributary of the Slate River and both streams are located in Gunnison County near the Town of Crested Butte (see Figure 1).

The CWCB's acquired portion of the Breem Ditch water right will only be used to preserve the natural environment (i.e. use will be limited up to the existing decreed instream flow amounts) on the following reaches of stream:

**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 (approximately 2 river miles); and

**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.

The Colorado Water Trust's donated portion of the Breem Ditch water right will be used to preserve and improve the natural environment (i.e. use could exceed the existing decreed instream flow amount) on Washington Gulch from the headgate of the Breem Ditch, downstream, to the confluence with the Slate River.

### **Biological Survey Data**

The CDOW has conducted field surveys of the fishery resources on these streams and have found natural environments that can be preserved. Washington Gulch is classified as a small stream (between 10 to 19 feet wide) and fishery surveys indicate the stream environment of Washington Gulch supports self-sustaining population of brook trout. The Slate River is classified as a large stream (between 36 to 59 feet wide) and fishery surveys indicate the stream environment of the Slate River supports a self-sustaining population of brook trout.

### **Proposed Field Data Collection**

The existing R2Cross data collected to date by the CDOW was collected upstream of the Breem Ditch on Washington Gulch and downstream of the new proposed point of diversion on the Slate River. The CDOW plans to collect additional hydrologic, hydraulic and biologic data on Washington Gulch and the Slate River this summer to more accurately determine the benefits of acquiring the Breem Ditch water, approximately 5.45 cfs, to preserve the natural environment of segments 1, 2 and 3 above and improve the natural environment in segment 1 above.

### **Water Right Donation Analysis**

The Breem Ditch historically diverted water from Washington Gulch to irrigate approximately 145.5 acres of land located east of Washington Gulch and north of the Slate River (see Figure 2). Historic irrigation return flows associated with the lands irrigated by the Breem Ditch accrued to the Slate River approximately 1 mile (or approximately 2 river miles) downstream of the Washington Gulch confluence (near the confluence of an unnamed tributary located on the north bank of the Slate River). Diversion records indicate that the Breem Ditch has the potential to dry up Washington Gulch below its diversion point (located approximately 0.75 upstream of the confluence with the Slate River). Moving the point of diversion of the Breem Ditch downstream and to point on the Slate River will provide significant benefits to Washington Gulch and will increase flows in the Slate River upstream of the new point of diversion.

The CDOW believes that the benefits of providing year-round connectivity to upstream habitat on Washington Gulch and additional Washington Gulch stream habitat will compensate for the loss of the instream habitat benefits from the smaller delayed late season irrigation return flows (estimated to be approximately 0.065 cfs) which were tributary to the Slate River. In addition, based on the relative quantity of stream flow in both creeks, the significance of the increased flow in Washington Gulch is much greater than the slightly decreased flow in the Slate River below the new point of diversion.

### **CDOW Recommendation**

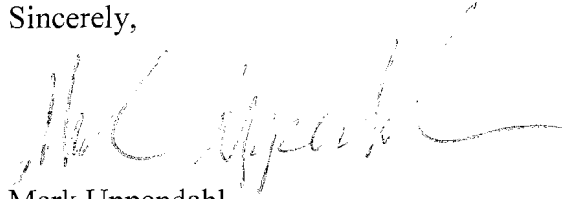
Based on the above analysis, the CDOW recommends the CWCBA acquire and accept the donation of the water rights associated with the Breem Ditch to preserve and improve the natural environments of Washington Gulch and the Slate River. Accepting this senior water right will potentially increase the amount of time the existing instream flow water rights on Washington Gulch and the Slate River will be fully satisfied. Increasing the amount of time these water rights are fully satisfied should increase the quality of the instream habitats associated with both of these two streams. In addition, the CDOW believes that it would also be beneficial to use the Breem Ditch water rights to improve the natural environment of Washington Gulch. However, the existing Washington Gulch R2Cross data collection site was located outside of the stream reach which would benefit from this improvement and the CDOW cannot at this time determine the amount of improvement that would occur by this acquisition. As stated



above, CDOW intends to collect additional hydrologic, hydraulic and biologic data on this reach of Washington Gulch to determine the amount of improvement to the natural environment which can be expected from adding the 2.95 cfs associated with the Broom Ditch to the existing decreed ISF amount of 2.5 cfs.

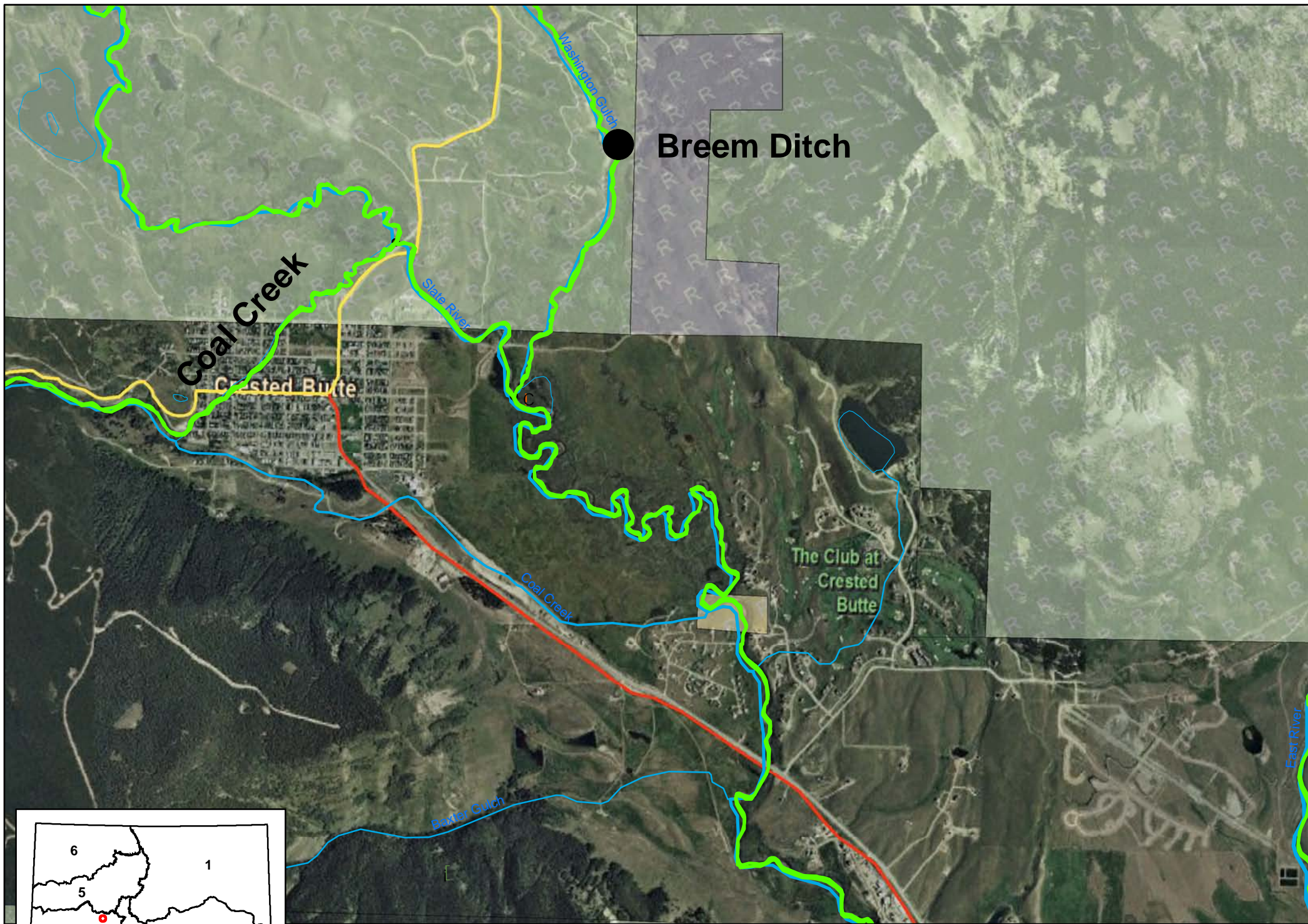
If you have any questions regarding the above recommendation, please contact me at (303)-291-7267.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Uppendahl', with a long horizontal flourish extending to the right.

Mark Uppendahl  
Colorado Division of Wildlife  
Instream Flow Program Coordinator

Cc: Jay Skinner, CDOW Water Unit Program Manager  
John Alves, CDOW Senior Aquatic Biologist – Southwest Region  
Dan Brauch, CDOW Area Aquatic Biologist



**Colorado Division of Wildlife**  
**Breem Ditch Instream Flow Appropriation**

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Miles

