COLORADO
Colorado Water
Conservation Board
Department of Natural Resources

1313 Sherman Street, Room 721
Denver, CO 80203

April 16, 2015

Mr. Dick Wolfe
State Engineer
Colorado Division of Water Resources
1313 Sherman St., Room 818
Denver, CO 80203

Bob Hurford
Division Engineer, Water Division 4
Colorado Division of Water Resources
P.O. Box 456
Montrose, CO 81402

Re: Temporary Lease of Water Rights to CWCB for Instream Flow Use from Greg and Patricia Kruthaupt, Colorado Water Trust and Trout Unlimited: Coats Bros Ditch, Water Division 4, Gunnison County.

Dear Mr. Wolfe and Mr. Hurford:

The Colorado Water Conservation Board ("CWCB") hereby requests approval of a Temporary Lease of a water right owned by Greg and Patricia Kruthaupt ("Kruthaupts") and presented to CWCB by Trout Unlimited ("TU") and the Colorado Water Trust ("CWT") for instream flow ("ISF") use pursuant to C.R.S. 37-83-105. The Coats Bros Ditch water rights consist of three separate priorities decreed for a total of 19.152 cfs. The water rights offered for lease by the Kruthaupts include 3.151 cfs, or 50% of the amount decreed to the two most senior priorities ("Leased Water"). The third junior priority decreed for 12.85 cfs is not included in this lease. This request is for a 10-year period beginning on the date the lease is approved by DWR and extending to December 31, 2024. The Kruthaupts intend to lease the subject water rights to CWCB for ISF use in Tomichi Creek for a period not to exceed 120 days in one calendar year, and for not more than three years during the ten year lease term.

The Coats Bros Ditch is decreed for a total of 19.152 cfs and TU will lease a total of 3.151 cfs (16.45%) of the Coats Bros Ditch water right ("Leased Water Rights") to CWCB for ISF use on Tomichi Creek in amounts not to exceed the decreed rates of the ISF water right described in Section III herein. See map at **Attachment 1**.

The CWCB has provided a written notice of this request for approval by electronic mail to all parties listed on the Division 4 substitute water supply plan notification list established pursuant to C.R.S. 37-92-308(6).

I. Summary of Proposal and Statement of Duration

Under a lease agreement among the Kruthaupts, TU, CWCB and CWT, upon approval of this request by the State and Division Engineers, the Kruthaupts will make water available to CWCB for ISF use as conditions permit. See Lease Agreement at **Attachment 2**. The CWCB will use the water for ISF purposes on Tomichi Creek between the Coats Bros Ditch headgate and confluence of Tomichi Creek and Quartz Creek (the lower terminus of the ISF reach). The Leased Water Rights will be used for ISF purposes both upstream and downstream of the point of historical return flow. CWCB proposes to use the historical diversion amounts upstream of the point of historical return flows, and the historical consumptive use amounts below the point of historical return flow. Under this proposal, once the leased water passes the downstream terminus of the Tomichi Creek ISF right at Quartz Creek,both the consumptive use portion and return flow portion of the water will be available for use by others.

Evidence of the proponent's legal right to use the Leased Water Rights is provided as follows: The Colorado Cattlemen's Agricultural Land Trust (CCALT) holds a Conservation Easement **(Attachment 3)** on 470 acres of the Kruthaupt's Creekside Ranch. The Coats Bros Ditch is encumbered by this Conservation Easement; however, paragraph 15 of the Easement does allow the water rights to be leased so long as certain terms and conditions are met. In compliance with the requirements of the Easement, Colorado Parks and Wildlife ("CPW") has reviewed this proposed water right lease for the potential impacts to wildlife, and determined that "…this action would [not] negatively affect the intent of the wildlife values in the easement and could be extremely beneficial to aquatic species, especially in low moisture years". CCALT has also determined that the proposed short term lease would not compromise the terms or intent of the Conservation Easement. The Krupthaupts have also provided copies of the deed as evidence of ownership and the right to use the Leased Water. The decrees in Case Nos. CA0946 and CA1266 also specify the amounts and place of use for water diverted by the Coats Bros Ditch. The documents included in **Attachment 3** are provided as evidence of the Kruthaupt's legal right to lease the encumbered water rights.

Rule 6(k) of the Rules Concerning CWCB's Instream Flow and Natural Lake Level Program sets forth procedures for accepting temporary loans and leases of water for ISF use, in accordance with C.R.S. 37-83-105. Provided that the State Engineer has made a determination of no injury pursuant to C.R.S. 37-83-105(2)(a)(III), the CWCB Board has delegated authority to the CWCB Director to accept loans and leases and to take any administrative action necessary to put the water to ISF use. Such acceptance and water use is subject to Board ratification at the next scheduled Board meeting.

Upon approval of this request by the State and Division Engineers, the Kruthaupts, in coordination with CWT and TU, will make the Leased Water Rights available to CWCB for ISF use in amounts not to exceed the ISF decreed rates of the ISF water right described in Section III herein, and for a period not to exceed 120 days in a calendar year, and up to 3 years in a 10-year period.

II. Historical Use and Reasonable Estimate of Consumptive Use

The Coats Bros Ditch water rights that are the subject of this lease are described below, with the portion of the rights available under this lease listed in the column titled "Kruthaupt Ownership."

CASE NUMBER	STREAM PRIORITY/ ADMIN NO.	AMOUNT (CFS)		ADJUD. DATE	APPROP. DATE
		Total Decreed	Kruthaupt Ownership (50%)		
CA0946	18/ 11474.00000	1.3020 cfs	0.651 cfs	1894-05-01	1881-05-31
CA1266	40/ 16192.10713	5.0 cfs	2.5 cfs	1904-04-29	1879-05-01
CA2079	250/ 28311.13635	12.85 cfs	N/A	1943-04-19	1887-05-01
TOTAL		**19.152 cfs**	**3.151**		

Tyler Martineau, Water Resource Engineer, has prepared a report dated October 20, 2014 that summarizes the historical diversions, historical consumptive use (HCU), and return flow patterns attributable to the Leased Water for both average year and dry year (2002) conditions. See engineering report at **Attachment 4.**

III. Proposed Use

In years when this lease is implemented, the Leased Water will be used for split season irrigation and ISF use. During the early irrigation season, from approximately April through June 30th, the Leased Water will be used for irrigation of hay meadows and pasture grass on the same land historically irrigated by those rights. Beginning July 1st and continuing through the end of the historical irrigation season in late October, irrigation will be suspended and the water rights will be made available for instream flow use by CWCB. However, pursuant to Paragraph 1c. of the Lease, the Kruthaupts may extend the irrigation use of the Water Rights through July 31 (August 1st instream flow start date) so long as they provide written notice to the CWCB, CWT, and TU on or before May 31st of each implementation year. Written notification will also be provided to the Division Engineer.

The ISF water right to be benefitted by this lease is listed below:

Case No.	Stream	Segment	Approp. Date	Segment Length	Amount
4-80CW132 (Segment 2)	Tomichi Creek	Marshall Creek to Quartz Creek	3-7-1980	25.2 miles	18 cfs

Diversions attributable to the Leased Water are fully depletive to Tomichi Creek in the segment of the stream between the point of diversion and the point of historic return flow, located just upstream from the Goodrich Ditch Alternate Point of Diversion (Reach 1 on **Attachment 1**).

This lease seeks to use the historical diversions identified in Tables 1 and 2 below for ISF use in the approximately 2.6 mile segment of Tomichi Creek between the Coats Bros Ditch headgate and the point of historical return flow to Tomichi Creek.

TABLE 1: Historical Diversions Available for July 1st ISF Use[1]
(Reach 1: Tomichi Creek from Coats Bros Ditch headgate to point of historical return flow)

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Avg. AF	0	0	0	113.7	22.6	31.6	35.2	0	0	0	0	0
Avg. cfs	0	0	0	1.85	0.37	0.53	0.57	0	0	0	0	0
2002 Dry Year cfs	0	0	0	1.22	0.03	0.38	0.33	0	0	0	0	0

TABLE 2: Historical Diversions Available for August 1st ISF Use[2]
(Reach 1: Tomichi Creek from Coats Bros Ditch headgate to point of historical return flow)

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Avg. AF	0	0	0	0	22.6	31.6	35.2	0	0	0	0	0
Avg. cfs	0	0	0	0	0.37	0.53	0.57	0	0	0	0	0
2002 Dry Year cfs	0	0	0	0	0.03	0.38	0.33	0	0	0	0	0

The HCU for the Leased Water was computer by Mr. Martineau based upon irrigation of 165 acres of pasture grass and hay. Mr. Martineau also completed AWAS modeling to characterize the amount and timing of return flows. Tables 3 and 4 below reflect the net stream depletion available for ISF benefits in Tomichi Creek downstream from the point of historical return flow. This lease seeks to use the historical net stream depletion to benefit ISF water rights for an approximately 9.7 mile segment of Tomichi Creek between the point of historical return flow and the confluence of Quartz Creek (Reach 2 on **Attachment 1**).

TABLE 3: Historical Net Stream Depletion Available for July 1st ISF Use[3]
(Reach 2: Point of historical return flow to the confluence of Quartz Creek)

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Avg. AF	-0.03	-0.01	0	74.07	3.49	14.54	16.53	-5.62	-1.94	-0.69	-0.25	-0.08
Avg. cfs	0	0	0	1.2	0.06	0.24	0.27	-0.09	-0.03	-0.01	0	0
2002 Dry Year cfs	0	0	0	0.80	-0.10	0.20	0.16	-0.05	-0.02	-0.01	0	0

[1] Table 1, Martineau report, Field Headgate Delivery, July through October ISF use; and Table 6
[2] Table 2, Martineau report, Field Headgate Delivery, August through October ISF use; and Table 7
[3] Table 1, Martineau report, Net Historic River Depletion, July through October ISF use; and Table 8

TABLE 4: Historical Net Stream Depletion Available for August 1st ISF Use[4]
(Reach 2: Point of historical return flow to the confluence of Quartz Creek)

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Avg. AF	-0.03	-0.01	0	0	14.75	18.35	17.89	-5.14	-1.76	-0.63	-0.22	-0.08
Avg. cfs	0	0	0	0	0.24	0.31	0.29	-0.09	-0.03	-0.01	0	0
2002 Dry Year cfs	0	0	0	0	0.02	0.24	0.18	-0.05	-0.02	-0.01	0	0

During years in which this lease is implemented, instream flow use will begin on July 1st. The amount of water to be claimed for Reach 1 is identified in Table 1, and the amount of water to be claimed for Reach 2 is identified in Table 3. However, if the Kruthaupts exercise their option to extend irrigation through July and initiate instream flow use on August 1st, this lease will use the amounts identified in Tables 2 and 4. The water claimed for ISF use in each reach will be used to supplement the Tomichi Creek ISF water right up to the total amount decreed to the ISF water right (18 cfs). The Leased Water will only be used to supplement instream flows in Tomichi Creek within the historical irrigation season from April through October.

Under this lease proposal, 165 acres will be removed from irrigation during the latter part of the season in years when the lease is implemented for ISF use. Return flows will be maintained as needed to prevent injury to other water rights. During the irrigation season, return flows will be maintained by leaving that portion of the historical diversions in the river. However, in Table 3, Mr. Martineau has identified the need to replace depletions to Tomichi Creek during the month of August only when the lease is implemented beginning July 1st of a 2002 type dry year. There is no irrigation season depletion when lease implementation is delayed until August 1st of a 2002 type dry year (see Table 4). Therefore, to prevent injury to downstream senior water rights under the July 1st dry year implementation condition, CWCB would either 1) secure sufficient in-basin augmentation water to replace depletions to Tomichi Creek during the month of August, or 2) delay ISF use and lease implementation until August 1st .

During the non-irrigation season, return flows will be replaced any time a valid water right call is in effect. The Martineau report did not identify any historical, non-irrigation season calls on either the Gunnison River or Tomichi Creek. However, the report indicates that calls from the Redlands Power Canal water right (located downstream from Blue Mesa, Morrow Point and Crystal Reservoirs) are possible any time of year. Additionally, the CWCB's ISF water right on Tomichi Creek could experience small shortages during the non-irrigation season, and could potentially place a call for water. CWT has discussed possible augmentation sources with Upper Gunnison WCD, if needed, to replace depletions to a potential winter call on the Gunnison River downstream from Blue Mesa Reservoir. CWT has also had discussions with CWCB regarding the potential impacts, probability of a winter

[4] Table 1, Martineau report, Net Historic River Depletion, August through October ISF use; and Table 9

instream flow call, and the need to provide replacement water to the instream flow water right under this temporary lease.

In the event that Tomichi Creek and/or the Gunnison basin are projected to experience drought conditions during an implementation year, CWT, TU and CWCB seek approval from the Division of Water Resources to claim historical diversions and net depletions consistent with the dry-year yields for the Leased Water, which are assumed to be equal to the yields available in 2002. The DWR Surface Water Supply Index (SWSI) for Division 4 will be used to determine whether drought conditions exist (Figure 1). If the March SWSI index is equal to or less than the value reported in 2002, the amount of the lease will be equal to the 2002 diversions and calculated HCU (Tables 1-4). If this lease is exercised in non-drought years, CWT, TU and CWCB will use the historical diversions and net depletions consistent with average year conditions as presented in Table 1 of the Martineau report.

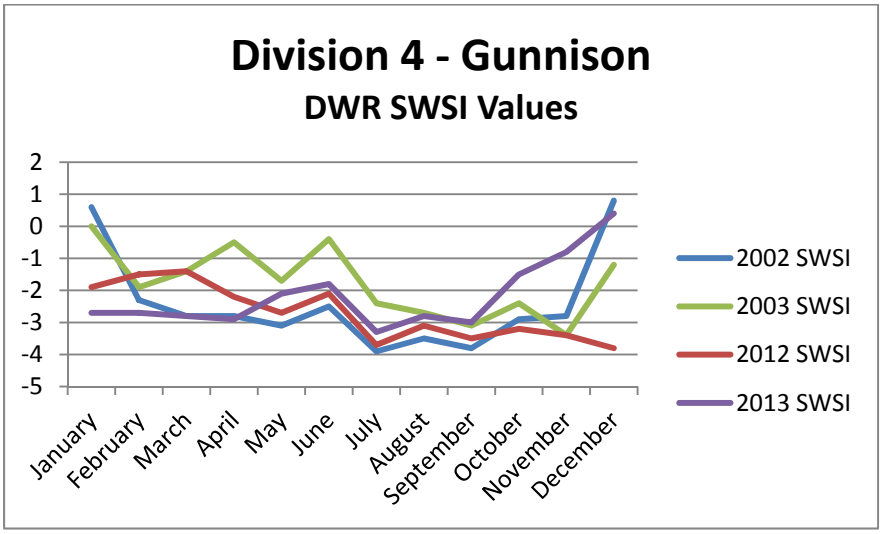


FIGURE 1 – Surface Water Supply Index (SWSI), Division 4, Gunnison River

IV. Terms and Conditions to Prevent Injury

To prevent injury to other water users from the exercise of this lease agreement, CWCB, CWT, and TU ("Proponents") propose to operate the lease in accordance with the following terms and conditions:

- The term of this lease shall begin on the date the State Engineer approves this temporary loan and will terminate on December 31, 2024.
- Each year of the lease agreement, prior to commencement of the irrigation season, CWCB shall notify the State and Division Engineers whether the lease will be implemented for that year.
- For years in which the lease is implemented, CWCB shall notify the State and Division Engineers of the date on which the split season irrigation use will terminate and the date on which the instream flow use will begin.

- The amount of water that CWCB will use under the lease will not exceed the decreed flow rate of the Tomichi Creek ISF water rights.
- If this lease is exercised in years that are characterized as dry years, CWT and CWCB will seek approval from the State and Division Engineers to claim historical diversions and consumptive use consistent with dry year conditions.
- If this lease is exercised in subsequent years that are not characterized as dry years, CWT and CWCB will seek approval from the State and Division Engineers to claim historical diversions and consumptive use consistent with average year conditions.
- During the irrigation season, proponents will maintain historical return flows to Tomichi Creek in time, place and amount. During the non-irrigation season, proponents will maintain historical return flows as may be required by the Division Engineer to prevent injury to a senior call.
- This lease contemplates a split season use for both irrigation and instream flow use. The Leased Water Rights will no longer be used for irrigation once instream flow use begins during a lease implementation year.
- Proponents shall install and maintain any measuring devices or structures required by the State and Division Engineers to administer this lease.
- Proponents shall submit records and accounting as required by the State and Division Engineers to administer this lease.

V. Conclusion

The CWCB respectfully requests approval of the temporary lease of the Coats Bros Ditch water rights offered by CWT and TU for ISF use on Tomichi Creek. If operated in the manner presented herein, no injury will occur to other water rights.

Thank you for your assistance in this matter. Please let us know if you have any questions or require additional information.

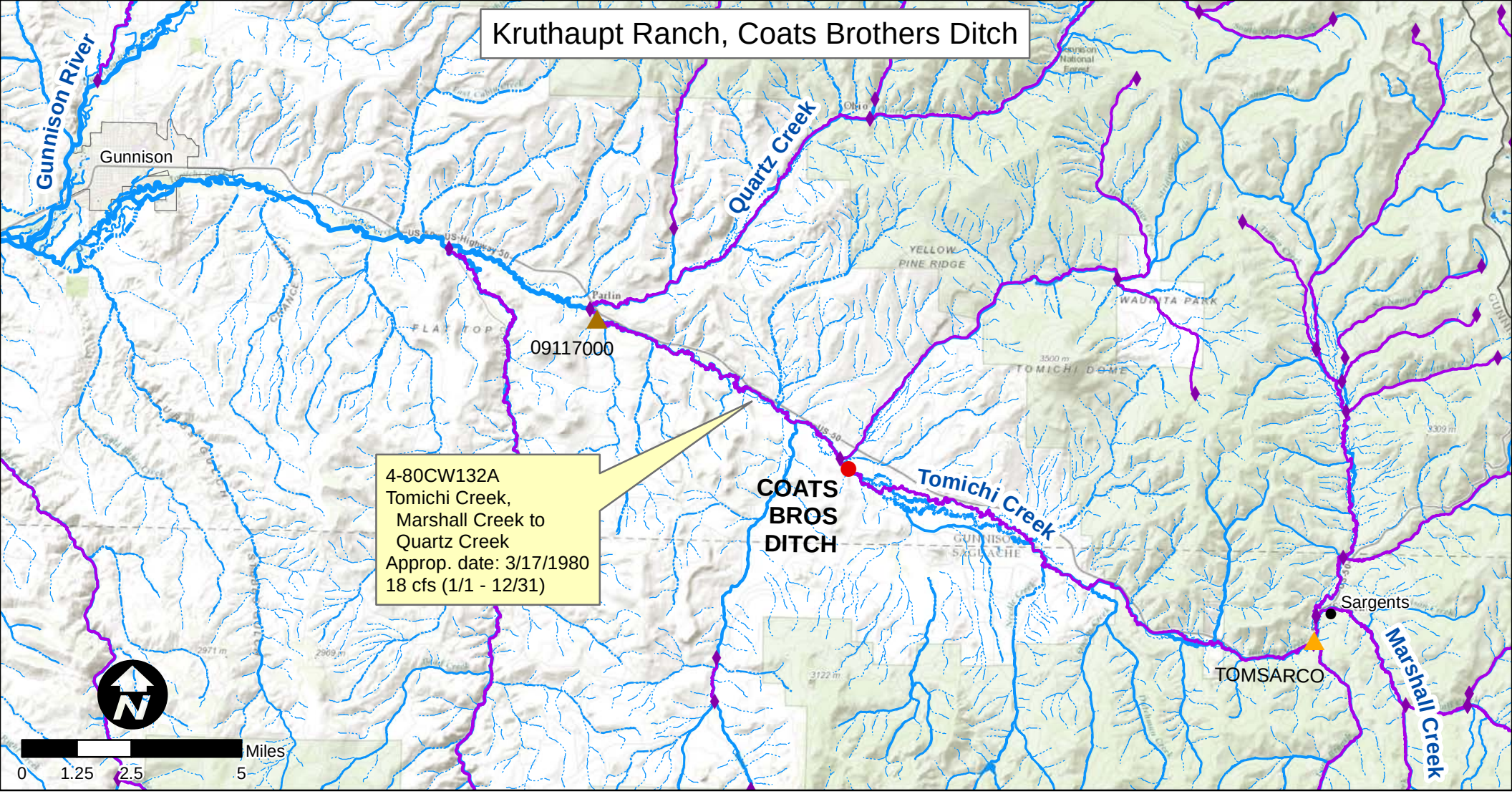
Sincerely,

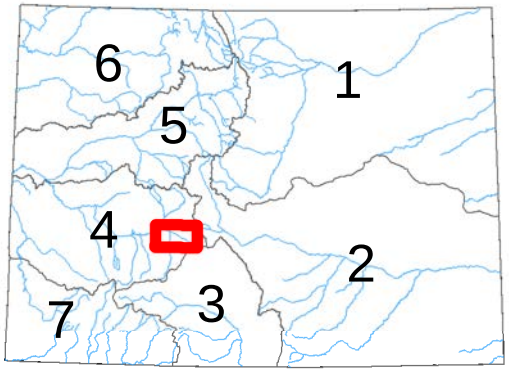
Linda J. Bassi, Chief
Stream and Lake Protection Section

cc: Colorado Water Trust
Trout Unlimited

Encl: Attachment 1 - Map
Attachment 2 - Lease Agreement
Attachment 3 - Easement, Deeds, Decrees
Attachment 4 - Engineering Report
Attachment 5 - CWT & TU Offer Letter to CWCB
Attachment 6 - CWCB letter to CWT and TU

Kruthaupt Ranch, Coats Brothers Ditch





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- Active Stream Gages
- Historic Stream Gages
- Coats Brothers Diversion Structure
- Cities and Towns
- Termini of Decreed Instream Flow Rights
- Streams with Decreed Instream Flow Rights
- Ephemeral and Intermittent Streams
- Perennial Streams

COLORADO WATER TRUST

The Colorado Water Trust is a private, non-profit organization that engages in and supports voluntary efforts to restore and protect streamflows in Colorado to sustain healthy aquatic ecosystems.

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Created 12/11/2014

TEMPORARY WATER LEASE AGREEMENT:
CWT "REQUEST FOR WATER 2013 PROGRAM"

This water lease agreement ("Lease") is entered into by and between the COLORADO WATER CONSERVATION BOARD ("CWCB"), an agency of the State of Colorado; the COLORADO WATER TRUST ("CWT"), a Colorado nonprofit corporation; TROUT UNLIMITED ("TU"), a Michigan nonprofit corporation; and GREGORY AND PATRICIA KRUTHAUPT ("Lessors"), collectively, the Parties.

RECITALS

A. Section 37-92-102(3), C.R.S. (2014) authorizes CWCB to acquire by lease or other contractual agreement such water, water rights, or interests in water as CWCB determines may preserve and improve the natural environment to a reasonable degree.

B. CWT is a Colorado nonprofit dedicated to protecting and restoring streamflows in Colorado through voluntary, market-based efforts. CWT works within CWCB's instream flow acquisition program to accomplish this mission. This Lease supports that mission.

C. TU is a Michigan nonprofit that works to conserve, protect, and restore North America's coldwater fisheries and their watersheds. This lease supports that mission.

D. Section 37-83-105(2) authorizes water rights owners to lease or loan water to CWCB for instream flow use pursuant to a decreed instream flow water right held by CWCB and administrative approval, subject to certain conditions and procedures ("Short Term Lease Program").

E. Under the Short Term Lease Program, a lease may have a term for up to ten years, but may only be used for instream flows for three of those ten years. For each year the water right is used in the Short Term Lease Program, it may only be used for instream flows up to 120 days in that calendar year.

F. In drought years like 2002, many CWCB decreed instream flows were not satisfied and the lack of water negatively impacted the state's aquatic ecosystems. In years when streamflow is expected to be low, CWT and CWCB will use the Short Term Lease Program—not available in 2002—to supply water to those decreed, but not met, instream flows to protect Colorado's aquatic ecosystems.

G. CWT issued a statewide "Request for Water" to solicit water rights to lease into the Short Term Lease Program on March 6, 2013. TU

informed the Lessors of CWT's Request for Water program. This Lease is a result of that effort.

H. Lessors own two water rights ("Water Rights") totaling 3.151 cfs that are the subject of this agreement:

> 0.651 cfs of Priority No. 18 in the Coats Bros Ditch on Tomichi Creek, tributary to the Gunnison River, decreed by the District Court in and for Gunnison County in Civil Action No. 946 on May, 1, 1894, with an appropriation date of May 31, 1881, and
>
> 2.5 cfs of Priority No. 40 in the Coats Bros Ditch on Tomichi Creek, tributary to the Gunnison River, decreed by the District Court in and for Gunnison County in Civil Action No. 1266 on April 29, 1904, with an appropriation date of May 1, 1879.

I. Lessors wish to lease the Water Rights to CWCB for instream flow use on Tomichi Creek, pursuant to the procedures in Section 37-83-105(2), and in Rule 6(k) of the Rules Concerning the Colorado Instream Flow and Natural Lake Level Program ("ISF Rules") and subject to the conditions set forth herein.

J. CWCB holds one instream flow water right on Tomichi Creek to be benefited by the Lease ("Instream Flow"), decreed in Case No. 4-80CW132A for 18 cfs year-round, in the reach of Tomichi Creek extending from the confluence with Marshall Creek to the confluence with Quartz Creek.

K. Subject to the terms of this Lease, Lessors will lease to CWCB the Water Rights for instream flow purposes. CWCB will use the Water Rights to maintain the Instream Flow for a period not to exceed one hundred twenty days in one calendar year, and for not more than three years over the approved ten year period.

L. Subject to the terms of this Lease, TU will pay Lessors for the use of the Water Rights in the Short Term Lease Program.

M. The Water Rights to be leased are not decreed for instream flow use. The use of the Water Rights by CWCB for instream flow purposes will require State and Division Engineer approval pursuant to Section 37-83-105(2) and final ratification by CWCB Board of Directors pursuant to the ISF Rules.

N. The amount of water used by CWCB under this Lease will not exceed the amount of water decreed to the Instream Flow.

O. The Parties acknowledge that the Colorado Cattlemen's Agricultural Land Trust (CCALT) is the holder of a conservation easement encumbering the Water Rights, which was recorded on September 23, 1999 at Reception No. 496498 and amended on December 17, 2013 at Reception No. 624769 in the land record of Gunnison County, Colorado (the "Conservation Easement"). The Parties acknowledge that CCALT has reviewed and approved this lease as being in accordance with the terms of the Conservation Easement.

NOW THEREFORE, in consideration of the mutual agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, CWCB, CWT, TU, and Lessors agree as follows:

LEASE OF WATER RIGHTS

1. Term.

   a. The term of this Lease shall begin on the date when the State Engineer approves the loan during the year 2015, and extends until December 31, 2024 ("Ten-Year Term"), pursuant to Section 37-83-105(2).

   b. The Parties agree to consult on or before April 1 of each year during the Ten-Year Term to determine if the Lease shall be implemented for that year. Lessors and assigns are under no obligation to lease the Water Rights to CWCB for instream flow use in any requested year.

   c. This Lease contemplates split season uses for both irrigation and instream flow. By April 1 for each year the Lease is implemented, the Parties will decide whether instream flow use by CWCB will begin on July 1 ("July 1 Start Date") or July 31 ("August 1 Start Date"). However, so long as Lessors provide written notice to CWCB, CWT, and TU on or before May 31 of each implementation year, the Lessors may delay instream flow use until the August 1 Start Date.

   d. Implementation of this Lease for any year during the Ten-Year Term shall only require the completion and execution of the Water Lease Implementation Agreement, the form of which is attached hereto as Appendix A.

2. Purchase Price and Payment Procedure.

   a. For and in consideration of the payment of the sum of $14,600 ("July 1 Purchase Price") for a July 1 Start Date or $5000 ("August 1 Purchase Price") for an August 1 Start Date paid to Lessors by TU and the keeping and performance of the covenants and agreements contained herein, Lessors shall lease to CWCB the Water Rights. Subject to availability of funds, CWCB may provide funding for all or a portion of the lease purchase price. Before deciding to implement this Lease in any given year, TU or the Lessors may request to renegotiate the purchase price.

   b. For each year of implementation, TU shall pay the Lessors one half of the August 1 Purchase Price (regardless of the start date) four weeks after the Water Lease Implementation Agreement is signed by all the Parties. TU shall pay the remaining amount owed by September 30 of that implementation year.

   c. Payment by TU to Lessors shall occur only upon the approval by the State and Division Engineers and acceptance by CWCB Director of the use of the Water Rights in the Short Term Lease Program and the Lease and pursuant to an executed Water Lease Implementation Agreement attached hereto as Appendix A.

3. Operations, Accounting, and Monitoring.

   a. For each year of implementation, CWCB shall notify the State and Division Engineers prior to using the Water Rights for instream flow consistent with the terms of the Lease approval.

   b. CWCB, CWT, and Lessors agree to coordinate record keeping and accounting as reasonably required by the State and Division Engineers to administer the Water Rights when used for instream flow purposes.

   c. CWCB, CWT, and Lessors agree to coordinate to install and maintain any measuring devices or structures reasonably required by the State and Division Engineers to administer the Water Rights when used for instream flow purposes.

4. CWCB Acceptance of Lease. CWCB's acceptance of the Lease of the Water Rights is contingent upon the State and Division Engineers'

determination that CWCB's use of the Water Rights in the Short Term Lease Program will not injure existing water rights of others and will not affect Colorado's compact entitlements. Approval may include terms and conditions to ensure the non-injury standard is met pursuant to Section 37-83-105(2)(b)(VI).

5. Cessation of Historic Use. Lessors agree and acknowledge that Lessors may not irrigate with the Water Rights during the time period when the Lease is implemented except as provided in Paragraph 1.c. herein. In any year that the Water Rights are not used for instream flow during the Ten-Year Term of this Lease, the Lessors may use the Water Rights for irrigation or other decreed uses.

6. Protections of Lessors' Water Rights. The Lessors' Water Rights are protected from diminishment of historical consumptive use and abandonment under this Lease by Sections 37-83-105(2)(c) and 37-92-103(2)(b)(V).

7. Use of Water Leased. CWCB will use the Water Rights to maintain the Instream Flow to preserve the natural environment to a reasonable degree. Downstream of the Instream Flow, the Water Rights will be available for other water users and other beneficial uses.

8. Inspections.

    a. Lessors grant CWCB, CWT, and TU staff and any of their representatives any and all of Lessors' access rights to the Water Rights and rights to inspect all facilities related to the Water Rights (e.g. source, headgate, other diversion structures, ditch system, irrigated acreage) upon request and at reasonable times, for the purpose of evaluating the stream and habitat characteristics in the reach of stream that would benefit from the Lease.

    b. Lessors grant CWCB, CWT, and TU staff and any of their representatives access to any of the Lessors' land subject to the Lease upon request and at reasonable times to ensure compliance with the terms of the Lease.

9. No Obligation to Repair or Maintain. CWT, CWCB, and TU shall not be responsible for repairs or replacements to or any routine maintenance necessary to maintain or operate the ditch/reservoir infrastructure associated with the Water Right or for any expenses related to such activities.

STATE AND DIVISION ENGINEER APPROVAL OF LEASE

10. Statement to State Engineer. Prior to accepting the Lease, CWCB shall compile a statement requesting approval of and explaining the Lease in sufficient detail for the State Engineer to determine that such Lease does not injure existing decreed water rights. Lessors and CWT shall use best efforts to assist CWCB in compiling said statement and in obtaining State and Division Engineer approval of the Lease as described below. Lessors shall have a reasonable opportunity to review and comment on said statement for the purpose of protecting their interests in the Water Rights.

11. Request for Approval. Upon review and approval by Lessors, CWCB shall file the request for approval of the Lease with the State and Division Engineers pursuant to Section 37-83-105, which request shall include the following information:

    a. Evidence of proponent's legal right to use the Water Rights;

    b. A statement of the duration of the Lease;

    c. A description of the original points of diversion, the return flow pattern, the stream reach, and the time, place, and types of use of the Water Rights;

    d. A description of the stream reach, and the time, place, and types of use of the Water Rights; and

    e. A reasonable estimate of the historic consumptive use of the Water Rights.

12. Notice to Substitute Water Supply Plan. CWCB shall provide written notice of the request for approval of the Lease by first-class mail or electronic mail to all Parties on the substitute water supply plan notification list established pursuant to Section 37-92-308 (6) for the water division in which the proposed Lease is located, and shall file proof of such notice with the Division Engineer.

13. Compliance. The Parties shall use their best efforts to comply with all the requirements of Section 37-83-105(2), to obtain approval of the Lease, and to address any comments submitted by any party concerning potential injury to that party's water right(s), either as part of the initial approval process or a year in which the Lease has been implemented.

14. Denial and/or Termination.

a. If the request for approval is denied in whole or in part, or if the approval is conditioned in such manner as to prevent this Lease from being completely fulfilled, then this Lease may be terminated within 30 days of written notice by any Party to this Lease.

b. The Lease shall terminate at the end of the Ten-Year Term.

c. If this Lease is not implemented during the Ten-Year Term, the Parties agree in good faith to consult on or before October 1 of the last year of the Ten-Year Term to discuss renewal of this Lease. The Parties must provide written notice to CCALT of any such renewal.

15. Miscellaneous Provisions.

a. CWCB shall take such action as is necessary or desirable to protect the use of the Water Rights for instream flow purposes, including requesting the Division Engineer to administer the Water Rights; however, CWCB shall not take any action to adversely impact the Water Rights' use for other purposes during the term of this Lease. CWT and Lessors shall work with CWCB to provide information concerning implementation and monitoring of this Lease.

b. The Parties will implement this Lease in accordance with any terms and conditions imposed by the State and Division Engineers.

c. This lease does not and is not intended to confer any rights or remedies upon any person other than the Parties.

d. This Lease shall not be assignable by the Lessors without prior notice to the other Parties. This Lease shall not be assignable by CWCB, CWT, or TU without the prior written consent of the other Parties.

e. This Lease shall not be modified except by a written agreement duly executed by the Parties and approved by CCALT prior to execution. The Parties must provide written notice of any such modifications to CCALT, which must approve any modifications to this Lease in writing.

f. This Lease shall be a covenant that runs with the Water Rights and shall be binding upon the Parties hereto, their successors, and assigns. CWCB shall record this Lease with the Clerk and Recorder of Gunnison County, Colorado, with a conformed copy provided by CWCB to the Lessors, CWT, and TU.

g. Any notices required or permitted hereunder shall be sent to the addresses or email addresses set forth below, as may be changed from time to time by proper notice.

If to CWT:

Colorado Water Trust
1420 Ogden Street, Suite A2
Denver, CO 80218
Attn: Amy Beatie, abeatie@coloradowatertrust.org
Attn: Anne Janicki, ajanicki@coloradowatertrust.org

If to CWCB:

Colorado Water Conservation Board
Stream and Lake Protection Section
1313 Sherman Street, Room 721
Denver, CO 80203
Attn: Kaylea White, kaylea.white@state.co.us
Attn: Linda Bassi, linda.bassi@state.co.us

If to TU:

Trout Unlimited, Colorado Water Project
222-1/2 F Street
Salida, CO 81201
Attn: Drew Peternell, dpeternell@tu.org

If to Lessors:

Greg Kruthaupt
3161 County Road 730
Gunnison, CO 81230
gpkruthaupt@gmail.com

If to CCALT:

The Colorado Cattlemen's Agricultural Land Trust
883 Ralston Road
Arvada, CO 80002
Attn: Megan Knott, megan@ccalt.org

16. Limited Representations By Lessors.

a. Lessors represent and warrant that they have full power and authority to execute this Lease, lease the Water Rights, and perform their obligations hereunder.

b. Lessors represent and warrant that the Water Rights have been used in compliance with decreed terms during the period from 2004 to 2014.

17. Enforcement of this Lease.

a. Pursuant to Section 37-92-102(3), the terms of this Lease shall be enforceable by each Party as a water matter in a court of competent jurisdiction; provided, however, that before commencing any action for enforcement of this Lease, the Party alleging violation shall notify the other Parties in writing of the alleged violation and the Parties shall make a good faith effort to resolve their differences through informal consultation.

b. Specific performance of this Lease shall be the exclusive remedy for the failure of either Party to comply with any provision of this Lease.

18. Effective Date. The effective date of this Lease shall be the date it is executed by all Parties.

IN WITNESS HEREOF, CWCB, CWT, TU, and Lessors have executed this Lease.

GREGORY KRUTHAUPT (Lessor)

By: Gregory Kruthaupt
NAME
TITLE owner

Date: 3/16/15

PATRICIA KRUTHAUPT (Lessor)

By: Patricia J. Kruthaupt
NAME
TITLE owner

Date: 3.16.15

COLORADO WATER CONSERVATION BOARD

By: _____
James Eklund
Director

Date: _____

COLORADO WATER TRUST

By: _____
Amy Beatie
Executive Director

Date: 3·19·2015

TROUT UNLIMITED

By: _____
Drew Peternell
Director, Colorado Water Project

Date: 3-18-15

COLORADO WATER CONSERVATION BOARD

By: _____
James Eklund
Director

Date: _____

COLORADO WATER TRUST

By: _____
Amy Beatie
Executive Director

Date: _____

TROUT UNLIMITED

By: _____
Drew Peternell
Director, Colorado Water Project

Date: _____

NOTARIZATION

STATE OF COLORADO)
) ss.
COUNTY OF Gunnison)

The foregoing instrument was acknowledged before me on this 16 day of March, 2015, by Gregory Kruthaupt as Owner / Lessor of Property / Water Rights

Witness my hand and official seal.

NOTARY PUBLIC
CHIRIYA L. STOEBER
STATE OF COLORADO

Chiriya L Stoeber
Notary Public

My commission expires: 7-28-2015

NOTARIZATION

STATE OF COLORADO)
) ss.
COUNTY OF Gunnison)

The foregoing instrument was acknowledged before me on this 16 day of March, 2015, by Patricia Jo Kruthaupt as Owner / Lessor of Property / Water Rights

Witness my hand and official seal.

NOTARY PUBLIC
CHIRIYA L. STOEBER
STATE OF COLORADO

Chiriya L Stoeber
Notary Public

My commission expires: 7-28-2015

NOTARIZATION

STATE OF COLORADO)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me on this ___ day of _____, 2015, by _____ as _____ of COLORADO WATER CONSERVATION BOARD.

Witness my hand and official seal.

_____

Notary Public

My commission expires:

NOTARIZATION

STATE OF COLORADO)
) ss.
COUNTY OF Denver)

The foregoing instrument was acknowledged before me on this 19 day of March, 2015, by Amy Beatie as Executive Director of COLORADO WATER TRUST.

Witness my hand and official seal.

_____

Notary Public

My commission expires: April 11, 2017

ALYSE GREENBERG
Notary Public
State of Colorado
Notary ID 20134022579
My Commission Expires Apr 11, 2017

NOTARIZATION

STATE OF COLORADO)
) ss.
COUNTY OF Denver)

The foregoing instrument was acknowledged before me on this 18 day of March, 2015, by Drew Peternell as Director of TROUT UNLIMITED.

Witness my hand and official seal.

ALYSE GREENBERG
Notary Public
State of Colorado
Notary ID 20134022579
My Commission Expires Apr 11, 2017

Notary Public

My commission expires: April 11, 2017

Appendix A

WATER LEASE IMPLEMENTATION AGREEMENT

(CWT REQUEST FOR WATER PROGRAM – 2013)

This Water Lease Implementation Agreement ("Implementation Agreement") is entered into by and between the COLORADO WATER CONSERVATION BOARD ("CWCB"), an agency of the State of Colorado; the COLORADO WATER TRUST ("CWT"), a Colorado nonprofit corporation; TROUT UNLIMITED ("TU"), a Michigan nonprofit corporation; and GREGORY AND PATRICIA KRUTHAUPT ("Lessors"), collectively, the Parties.

RECITALS

1. The Parties have entered into a Water Lease Agreement dated _____ ("Lease") for certain Water Rights for instream flow pursuant to Section 37-83-105 C.R.S.

2. The Parties desire to implement the Lease.

3. This Implementation Agreement expires as of _____.

NOW, THEREFORE, in consideration of the mutual agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

IMPLEMENTATION OF THE LEASE

1. Except as otherwise provided herein, the Lease, and all terms, provisions and conditions set forth therein are hereby activated. In the event of any conflict or discrepancy between this Implementation and the Lease, the terms and conditions of the Implementation shall control and supersede the terms and conditions of the Lease.

2. The Implementation Term shall be from _____ to _____.

3. Purchase Price and Payment Procedure

   a. For and in consideration of the payment of the sum of _____ for a July 1 Start Date or _____ for an August 1 Start Date ("Purchase Price") paid to Lessors by TU and the keeping and performance of the covenants and agreements contained herein, Lessors shall lease to the CWCB the Water Rights, more particularly described below:

0.651 cfs of Priority No. 18 in the Coats Bros Ditch on Tomichi Creek, tributary to the Gunnison River, decreed by the District Court in and for Gunnison County in Civil Action No. 946 on May, 1, 1894, with an appropriation date of May 31, 1881, and

2.5 cfs of Priority No. 40 in the Coats Bros Ditch on Tomichi Creek, tributary to the Gunnison River, decreed by the District Court in and for Gunnison County in Civil Action No. 1266 on April 29, 1904, with an appropriation date of May 1, 1879.

b. Instream flow use by the CWCB shall begin on _____, except as provided by Paragraph 1(c) of the Lease.

c. TU shall pay the Lessors one half the August 1 Purchase Price (regardless of the start date) four weeks after this Lease is signed by all the Parties. TU shall pay the remaining amount owed by September 30, 20__ Subject to availability of funds, CWCB may provide funding for all or a portion of the lease purchase price.

4. Except as expressly amended hereby, all of the terms, conditions, provisions, and agreements of the Lease shall remain unchanged.

IN WITNESS HEREOF, the CWCB, CWT, TU, and Lessors have executed this Implementation as of the ___ day of_____ 20__.

GREGORY KRUTHAUPT (Lessor)

By: _____ Date: _____
NAME
TITLE

PATRICIA KRUTHAUPT (Lessor)

By: _____ Date: _____
NAME
TITLE

COLORADO WATER CONSERVATION BOARD

By: _____ Date: _____
James Eklund
Director

COLORADO WATER TRUST

By: _____ Date: _____
Amy Beatie
Executive Director

TROUT UNLIMITED

By: _____ Date: _____
Drew Peternell
Director, Colorado Water Project

NOTARIZATION

STATE OF COLORADO)
) ss.
COUNTY OF _____)

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

Witness my hand and official seal.

_____

Notary Public

My commission expires:

NOTARIZATION

STATE OF COLORADO)
) ss.
COUNTY OF _____)

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

Witness my hand and official seal.

_____

Notary Public

My commission expires:

NOTARIZATION

STATE OF COLORADO)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me on this ___ day of _____, 20__, by _____ as _____ of COLORADO WATER CONSERVATION BOARD.

Witness my hand and official seal.

_____

Notary Public

My commission expires:

NOTARIZATION

STATE OF COLORADO)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me on this ___ day of _____, 20__, by _____ as _____ of COLORADO WATER TRUST.

Witness my hand and official seal.

_____

Notary Public

My commission expires:

NOTARIZATION

STATE OF COLORADO)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me on this ___ day of _____, 20__, by _____ as _____ of TROUT UNLIMITED.

Witness my hand and official seal.

_____

Notary Public

My commission expires:

496498 09/23/1999 04:01P 174
1 of 15 R 75.00 D 0.00 N 0.00 Gunnison County

9908022

Recording requested by and return to:
Isaacson, Rosenbaum, Woods & Levy, PC
Attn: Lawrence R. Kueter
633 17th Street, Suite 2200
Denver, CO 80202

AIAIS DOCUMENTARY FEE
SEP 23 1999
No Fee

DEED OF CONSERVATION EASEMENT
FOR THE
CROSSON RANCH

NOTICE: THIS CONSERVATION EASEMENT HAS BEEN ACQUIRED IN PART WITH A GRANT FROM THE STATE BOARD OF THE GREAT OUTDOORS COLORADO TRUST FUND (THE "BOARD"). THIS DEED CONTAINS RESTRICTIONS ON THE USE AND DEVELOPMENT OF THE PROPERTY WHICH ARE INTENDED TO PROTECT ITS OPEN SPACE, AGRICULTURAL AND CONSERVATION VALUES. THE STATE BOARD OF THE GREAT OUTDOORS COLORADO TRUST FUND HAS FOUND THAT THE ADOPTION OF THIS DEED RESTRICTION IS IN THE PUBLIC INTEREST.

THIS CONSERVATION EASEMENT HAS ALSO BEEN ACQUIRED IN PART WITH A GRANT FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE ("NRCS").

THIS CONSERVATION EASEMENT HAS ALSO BEEN ACQUIRED IN PART WITH A GRANT FROM THE GUNNISON COUNTY LAND PRESERVATION FUND.

THIS DEED OF CONSERVATION EASEMENT ("Deed") is granted effective as of the 17th day of September, 1999, by Barbara D. Crosson, whose address is 1405 Rancho Del Sol, Pueblo, CO 81008 ("Grantor"), to COLORADO CATTLEMEN'S AGRICULTURAL LAND TRUST, a Colorado nonprofit corporation ("Grantee") having its principal office at 8833 Ralston Road, Arvada, Colorado 80003, for the purpose of forever conserving the open space character, agricultural productivity, wildlife habitat, and scenic qualities of the subject property.

WITNESS THAT:

Grantor is the only owner in fee simple of the ranch property ("Property") legally described in **Exhibit A** attached to and made a part of this Deed, which consists of 470 acres of land, together with buildings and other improvements, located in Gunnison County, State of Colorado.

The Property is primarily open ranchland, and is an important part of the productive agricultural land still remaining in Gunnison County. The Property also includes relatively natural habitat with a variety of wildlife species, including elk, deer, red fox, coyote, yellow-bellied marmot, a number of small mammal species dependent on wet meadows and sagebrush uplands, and approximately 75 species of birds, including Gunnison sage grouse and a number of migratory songbirds restricted to riparian habitats.

The Property contains 260 acres of irrigated land, 110 acres of pasture and 100 acres of dry upland sagebrush. A major portion of the ranch constitutes habitat for elk, deer, sage grouse and a variety of riparian-dependent species. The upland areas provide seasonal dry land pasture and the hay meadows provide significant feed and winter range resources for the agricultural activities. The lush wet meadows and rolling hillsides of the Crosson Ranch provide scenic vistas enjoyed by travelers through the Tomichi Valley, along U.S. Highway 50 west of Gunnison.

The agricultural, ecological and other characteristics of the Property, its current use and state of improvement, will be described in a present condition report to be prepared by Grantor with the cooperation of Grantee, which report is subject to approval by both Grantor and Grantee. The report will be used by Grantee to assure that any future changes in the use of the Property will be consistent with the terms of this Deed. However, this report is not intended to preclude the use of other evidence to establish the present condition of the Property if there is a controversy over its use.

Grantor intends to make a charitable gift of a portion of the property interest conveyed by this Deed to Grantee for the exclusive purpose of assuring that, under Grantee's perpetual stewardship, the agricultural productivity, open space character, wildlife habitat, and scenic qualities of the Property will be conserved and maintained forever, and that uses of the land that are inconsistent with these conservation purposes will be prevented or corrected. The parties agree, however, that the current agricultural use of, and improvements to, the Property are consistent with the conservation purposes of this Deed.

The conservation purposes of this Deed are recognized by, and the grant of this Deed will serve, at least and without limitation, the following clearly delineated governmental conservation policies:

- The Farmland Protection Policy Act, P.L. 97-98, 7 U.S.C. §§4201, *et seq.*, whose purpose is "to minimize the extent to which Federal programs and policies contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government and private programs and policies to protect farmland;"

- The Colorado Department of Agriculture statutes, Colorado Revised Statutes §§35-1-101, *et seq.*, which provide in part that "it is the declared policy of the State of Colorado to conserve, protect, and encourage the development and improvement of its agricultural land for the production of food and other agricultural products."

- Colorado Revised Statutes §§38-30.5-101, *et seq.*, providing for the establishment of conservation easements to maintain land "in a natural, scenic or open condition, or for wildlife habitat, or for agricultural . . . or other use or condition consistent with the protection of open land having wholesome environmental quality or life-sustaining ecological diversity."

- The Colorado Wildlife and Parks and Outdoor Recreation statutes, Colorado Revised Statutes §§33-1-101, *et seq.*, which provide that "it is the policy of the State of Colorado that the wildlife and their environment and the natural, scenic, scientific, and outdoor recreation areas of this state are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and visitors to this state."

- The Land Use Resolution of Gunnison County, §§ 2-102 Economic Land Use Policies, Item (1) "To encourage and strengthen the existing industries of agriculture, tourism, ...", and item 4 "To identify

land use change on agricultural land, to protect ditches and stock drive routes, to encourage land use change which will retain the agricultural productivity of the land and to discourage land use change which will adversely affect agricultural operations...", also §§ 2-103 Item (2), "To protect and preserve lands from activities that will cause material damage to significant wildlife habitat."

Grantee warrants that it is a "qualified conservation organization," as defined by the Internal Revenue Code, and accepts the responsibility of enforcing the terms of this Deed and upholding its conservation purposes forever.

The Grantor owns the fee simple interest in the Property, subject to two deeds of trust held by U.S. Bank and Trust, which will be paid off with the proceeds of this transaction.

NOW, THEREFORE, for the reasons given, and in consideration of their mutual promises and covenants, Grantor voluntarily grants and conveys to Grantee, and Grantee voluntarily accepts, a perpetual Conservation Easement, an immediately vested interest in real property defined by Colorado Revised Statutes §§ 38-30.5-101, *et seq.*, and of the nature and character described in this Deed, exclusively for the purpose of conserving and forever maintaining the agricultural productivity, open space character, wildlife habitat, and scenic qualities of the Property (the "Conservation Values").

1. *Use of Property*. It is the intention of Grantor to preserve the ability of the Property to be agriculturally productive, including continuing farming and ranching activities, to engage in future ranching activities, and to preserve the open space character, wildlife habitat, and scenic qualities of the Property. The Property may not be used for industrial activities (other than farming and ranching), but may be used for other activities which are not prohibited by the terms of this Deed.

2. *Prohibited Acts*. Grantor promises not to perform, nor knowingly allow others to perform, any act on or affecting the Property that is inconsistent with the covenants herein. Grantor hereby authorizes Grantee to enforce these covenants in the manner described below. However, unless otherwise specified, nothing in this Deed shall require Grantor to take any action to restore the condition of the Property after any fire, Act of God or other event of any kind over which Grantor had no control. Grantor understands that nothing in this Deed relieves them of any obligation or restriction on the use of the Property imposed by law.

3. *Construction of Buildings and Other Structures*. The construction of any building or other structure, except those existing on the date of this Deed or those approved by Grantee subsequent to the date hereof but prior to construction, is prohibited except in accordance with subparagraphs A through D below. Before undertaking any construction that requires advance permission, Grantor shall notify Grantee of such request.

A. *Fences*. Existing fences may be repaired and replaced, and new fences may be built anywhere on the Property for purposes of reasonable and customary management of livestock, without any further permission of Grantee. Grantor shall not be required to erect any new fences for any purpose, including, but not limited to, fencing out livestock from riparian areas or other designated habitats, unless such fencing is necessary to implement an NRCS approved management plan, and except as provided for in Paragraph 7 "Critical Area" below.

B. *Agricultural Structures and Improvements.* All existing agricultural buildings and agricultural structures may be repaired, reasonably enlarged and replaced at their current location without further permission of Grantee. The existing bunkhouse may be repaired, reasonably enlarged, not to exceed 1,500 square feet, and reconstructed, for the housing of seasonal ranch help and the non-commercial housing of youths. New buildings and improvements to be used solely for agricultural purposes, including processing or sale of farm or ranch products predominantly grown or raised on the Property, may be built within the building envelope described on **Exhibit B** attached to and made a part of this Deed (the "Building Envelope"). Loafing sheds, corrals and other minor agricultural buildings and improvements may be constructed anywhere on the Property. Grantor will notify Grantee prior to construction within the Building Envelope, so Grantee can update its records. No construction of any other new agricultural buildings or improvements other than those covered by the preceding three sentences shall be constructed.

C. *Single-Family Residential Dwellings.* The two existing single-family residential dwellings may be repaired, reasonably enlarged and replaced at their current location, and one may be relocated to **"Site A"** in **Exhibit B,** without further permission of Grantee. At the time that reconstruction and/or moving of either dwelling is to commence, Grantee shall be notified so that its records can be updated. No additional new residential dwellings shall be constructed on the Property.

D. *Repair and Replacement.* All buildings which are permitted to be constructed hereunder may be repaired, reasonably enlarged, and replaced at their permitted location without further permission from Grantee. At the time that construction is to commence, Grantee shall be notified so that its records may be updated.

4. *Subdivision.* The division or subdivision of the Property into two or more parcels, whether by physical or legal process, is prohibited.

5. *Development Rights.* Grantor hereby grants to Grantee all development rights except as specifically reserved herein, and the parties agree that such rights are terminated and extinguished, and may not be used on or transferred off of the Property to any other property adjacent or otherwise.

6. *Conservation Practices.* Grantor recognizes the importance of good resource management and stewardship to present and future generations. To this end, all agricultural uses of the Property shall be conducted using standard stewardship and management practices, which shall include compliance with governmental noxious weed control regulations. Grantor and the NRCS will cooperatively develop a Conservation Plan within six months of the date of this Deed, and Grantor agrees to implement the Conservation Plan and to work with the NRCS to update the Conservation Plan periodically.

7. *Critical Area.* The property so indicated in **Exhibit B** attached hereto is hereinafter referred to as the "Critical Area". The Critical Area consists of approximately 260 acres along both banks of Tomichi Creek for one and three-quarters miles, and approximately 100 acres of adjacent upland sagelands that lie to the south of Tomichi Creek. The Critical Area provides significant habitat resources for terrestrial and aquatic wildlife species, and specifically provides year-round habitat resources for the Gunnison sage grouse. The Conservation Values of the Critical Area are more specific than for the remainder of the area of this conservation easement. The Critical Area Conservation Values include wetlands protection and enhancement, and provision of habitat for wildlife species such as the Gunnison sage grouse and neotropical migratory birds. The Colorado Division of Wildlife has recognized these Conservation Values, and agrees that the expenditure of Board funds designated to benefit these wildlife resources do in fact provide wildlife

benefits. Grantor has the right to continue agriculture and ranching, including the harvest of hay, on the Critical Area, subject to the following restrictions:

A. *Five-year Management Plan.* Grantor agrees to establish management plan, which shall be renewed not less than every five years, for the Critical Area with the Colorado Division of Wildlife that coordinates established best management practices for the wetland habitats and for the Gunnison sage grouse with sound agricultural practices, both as determined by the Natural Resources Conservation Service ("NRCS") (the "Plan"). The Plan shall be established within one (1) year of the execution date of this Easement. Management priority within the Critical Area will be for the overall health of the riparian wetland ecosystem and adjacent sagebrush uplands. Agricultural practices, including grazing by cattle, shall be considered a management tool available to promote the health of the ecosystem. Between the date of closing of this conservation easement and the establishment of the Plan, no significant changes in current agricultural management practices shall be made. The Plan will be reviewed annually and modified or amended as agreed to by the Grantor and the Colorado Division of Wildlife in order to address changing management and agricultural practices, or the changing character of the property. A copy of the Plan, as modified or amended in accordance with this subparagraph (A), shall be provided by Grantor to Grantee. Appropriate fencing shall be constructed by Grantor as is reasonably necessary to implement the terms of the five-year management plans.

B. *Critical Area Permitted Uses.* Currently the Critical Area is used agriculturally for a summer hay crop, for fall and spring irrigation, and for some cattle grazing. These uses shall be permitted to continue, subject to the terms of the five-year management plan mentioned in subparagraph A.

C. *Assignment.* Nothing herein shall preclude Grantee from assigning any right of enforcement of the provisions of this paragraph 7 to the Colorado Division of Wildlife.

8. *Timber Harvesting.* Trees may be cut to control insects and disease, to prevent personal injury and property damage, and for timber and domestic uses, including firewood and construction of permitted buildings and fences on the Property. Any commercial timber harvesting on the Property shall be conducted on a sustainable yield basis and in substantial accordance with a forest management plan prepared by a competent professional forester. Timber cutting that occurs within the Critical Area shall be managed by the terms of the Plan referenced in paragraph 7 herein.

9. *Mining.* The commercial mining or extraction of soil, sand, gravel, oil, natural gas, fuel, or any other mineral substance, using any surface mining method is prohibited; provided that mineral extraction is permitted if such extraction is not accomplished by any surface mining method and the method of extraction has a limited, localized impact on the real property that is not irremediably destructive of the Conservation Values of the Property, and provided further that the proposed mining or extraction will not substantially diminish or impair the Conservation Values of the Property. No extraction permitted pursuant to this paragraph shall occur without prior written notice to Grantee, which notice shall include a description of the type of extraction, the areas within which such extraction shall occur, and the anticipated impact thereof.

10. *Grantor Extractions.* Notwithstanding anything in paragraph 9 above to the contrary, soil, sand, gravel or rock may be extracted without further permission from Grantee so long as such extraction is solely for use on the Property, is in conjunction with activities permitted herein, is accomplished in a manner which is consistent with the Conservation Values expressed in this Deed, and that not more than one acre of the Property is disturbed by such extraction. This provision shall be interpreted in a manner

consistent with § 170(h) of the United States Internal Revenue Code and the Treasury regulations adopted pursuant thereto.

11. *Paving and Road Construction*. No portion of the Property shall be paved or otherwise be covered with concrete, asphalt, or any other paving material, nor shall any road for access or other purposes be constructed, except for any unpaved road necessary to provide access to the buildings currently located on or permitted to hereafter be constructed on the Property, or to access activities permitted herein. Any such road permitted by this Paragraph shall be constructed in a manner that does not substantially diminish or impair the Conservation Values of the Property.

12. *Trash*. The dumping or accumulation of any kind of trash or refuse on the Property, other than farm-related trash and refuse produced on the Property, is strictly prohibited. However, this shall not prevent the storage of agricultural products and by-products on the Property in accordance with all applicable government laws and regulations.

13. *Recreational Uses*. Golf courses, airstrips, and helicopter pads are strictly prohibited on the Property. Other buildings and facilities for any other public or private recreational use may only be built on the Property in accordance with Paragraph 3, and then only in a manner that does not substantially diminish or impair the Conservation Values of the Property, except that use of the Property for more than "de minimis" commercial recreation activity is prohibited. The term "de minimis" shall have the meaning as set forth in § 2031(c)(8)(B) of the United States Internal Revenue Code and the Treasury regulations adopted pursuant thereto. Recreational uses that occur within the Critical Area shall be managed by the terms of the Plan referenced in paragraph 7 herein.

14. *Feed Lot*. The establishment or maintenance of a commercial feedlot is prohibited. For purposes of this Deed, "commercial feed lot" is defined as a permanently constructed confined area or facility within which the property is not grazed or cropped annually, and which is used and maintained for purposes of engaging in the business of the reception and feeding of livestock. Nothing in this section shall prevent Grantor from seasonally confining Grantor's livestock into an area for feeding, from leasing pasture for the grazing of livestock owned by others, and from feeding on a seasonal basis cattle owned by others than Grantor.

15. *Water Rights*. Grantor shall retain and reserve the right to use water rights sufficient for use in present or future agricultural production on the Property, and shall not transfer, encumber, lease, sell, or otherwise separate such quantity of water rights from title to the Property itself. Existing water rights for the Critical Area of the Property are shown on **Exhibit C**. Grantor may transfer, encumber, lease, sell or otherwise separate from the Critical Area of the Property only those water rights which grantor has demonstrated to the reasonable satisfaction of the Colorado Division of Wildlife are not necessary for present or future agricultural production on the Critical Area of the Property or to maintain the conservation values of the Critical Area of the Property.

16. *Rights Retained by Grantor*. Subject to interpretation under Paragraph 26, as owner of the Property, Grantor retains the right to perform any act not specifically prohibited or limited by this Deed. These ownership rights include, but are not limited to, the right to exclude any member of the public from trespassing on the Property and the right to sell or otherwise transfer the Property to anyone they choose.

17. *Responsibilities of Grantor and Grantee Not Affected.* Other than as specified herein, this Deed is not intended to impose any legal or other responsibility on Grantee, or in any way to affect any existing obligation of Grantor as owner of the Property. Among other things, this shall apply to:

A. *Taxes.* Grantor shall continue to be solely responsible for payment of all taxes and assessments levied against the Property. If Grantee is ever required to pay any taxes or assessments on its interest in the Property, Grantor will reimburse Grantee for the same.

B. *Upkeep and Maintenance.* Grantor shall continue to be solely responsible for the upkeep and maintenance of the Property, to the extent it may be required by law. Grantee shall have no obligation for the upkeep or maintenance of the Property.

C. *Liability and Indemnification.* If Grantee is ever required by a court to pay damages resulting from personal injury or property damage that occurs on the Property, Grantor shall indemnify and reimburse Grantee for these payments, as well as for reasonable attorneys' fees and other expenses of defending itself, unless Grantee or any of its agents have committed a negligent or deliberate act that is the cause of the injury or damage. In addition, Grantor warrants that Grantee is and will continue to be an additional insured on Grantor's liability insurance policy covering the Property. Grantor shall provide certificates of such insurance to Grantee on an annual basis.

18. *Enforcement.* Grantee shall have the right to prevent and correct or require correction of violations of the terms of this Deed. With reasonable advance notice to Grantor, Grantee or Grantee's agents may enter the Property for the purpose of inspecting for violations. If Grantee finds what it believes is a violation, Grantee shall immediately notify Grantor and the Board in writing of the alleged violation, and Grantee may at its discretion take appropriate legal action. Except when an ongoing or imminent violation could irreversibly diminish or impair the Conservation Values of the Property, Grantee shall give Grantor written notice of the violation and sixty (60) days following written notice of the alleged violation to correct it, before filing any legal action, which Grantee may take at its discretion. If a court with jurisdiction determines that a violation may exist or has occurred, Grantee may obtain an injunction to stop it, temporarily or permanently, in addition to such other relief as the court deems appropriate. A court may also issue an injunction requiring Grantor to restore the Property to its condition prior to the violation. In any case where a court finds that a violation has occurred, Grantor shall reimburse Grantee for all its reasonable expenses incurred in stopping and correcting the violation, including but not limited to reasonable attorney's fees. The failure of Grantee to discover a violation or to take immediate legal action shall not bar it from doing so at a later time, and Grantor hereby waives any defense available to Grantor pursuant to C.R.S. § 38-41-119, or the defense of laches or estoppel.

In the event that the Grantee fails to enforce any of the terms of this Easement, as determined in the reasonable discretion of the Secretary of the United States Department of Agriculture, the said Secretary of Agriculture and his or her successors and assigns shall have the right to enforce the terms of this Easement or to become substitute holder of this easement in the place and stead of the Grantee.

19. *Transfer of Easement.* With the prior written consent of Grantor (which consent shall not be unreasonably withheld), Grantee shall have the right to transfer the easement created by this Deed to any public agency or private nonprofit organization that, at the time of transfer, is a "qualified organization" under §170(h) of the U.S. Internal Revenue Code, and under Colorado Revised Statutes §§ 38-30.5-101, *et seq.*, only if the agency or organization expressly agrees to assume the responsibility imposed on Grantee by this Deed and only if the transferee is approved by the Board and the NRCS. If Grantee desires to transfer this easement to a qualified organization having similar purposes as Grantee, but Grantor unreasonably

refuses to approve the transfer or, if Grantee ever ceases to exist or no longer qualifies under §170(h) or applicable state law, a court with jurisdiction shall transfer this easement to another qualified organization having similar purposes that agrees to assume the responsibility; provided that Grantor receives notice of and an opportunity to participate in the court proceeding.

In the event no successor organization is qualified , all rights, title, and interest of the Grantee in this Easement may, at the option of the Secretary of the United States Department of Agriculture, become vested in the United States of America.

20. *Transfer of the Property.* Any time the Property itself, or any interest in it, is transferred by Grantor to any third party, Grantor shall notify Grantee and the Board in writing at least twenty (20) days prior to the transfer of the Property, and the document of conveyance shall expressly refer to this Deed.

21. *Amendment of the Easement.* This easement may be amended only with the written consent of Grantee and Grantor by an instrument duly executed and recorded in the real property records of Gunnison County, Colorado. Any such amendment shall be consistent with the purposes of this Deed and shall comply with §170(h) of the Internal Revenue Code, or any regulations promulgated in accordance with that section. Any such amendment shall also be consistent with Colorado Revised Statutes §§ 38-30.5-101, *et seq.*, or any regulations promulgated pursuant to that law, and provided further that the prior written approval of the Board to any such amendment shall be required. Any amendment must be in writing and signed by both parties. In anticipation of any amendment, Grantor shall notify the Board in writing at least twenty (20) days prior to the execution of amendment.

22. *Change of Circumstances; Extinguishment.* If circumstances arise in the future which render the purpose of this easement impossible to accomplish, this easement can only be terminated or extinguished, whether in whole or in part, by judicial proceedings in a court of competent jurisdiction. Each party shall promptly notify the other when it first learns of such circumstances, and shall, in addition, notify the Board of such circumstances. The amount of proceeds to which the Grantee shall be entitled, after the satisfaction of prior claims, from any sale, exchange, or involuntary conversion of all or any portion of the Property subsequent to such termination or extinguishment, shall be determined, unless otherwise provided by Colorado law at the time, in accordance with the "Proceeds" paragraph herein. In the event of condemnation or termination, the Board shall be entitled to receive 55.06% of the net proceeds of the condemnation or sale of the Property payable to the Grantee, and the United States, by and through the Secretary of Agriculture, shall be entitled to receive 19.94% of the net proceeds of the condemnation or sale of the Property payable to the Grantee. The Grantee shall be entitled to retain the remaining 25% of the net proceeds of the condemnation or sale of the Property payable to the Grantee, and shall use such proceeds in a manner consistent with the conservation purposes of this Easement.

23. *Proceeds.* This Easement constitutes a real property interest immediately vested in the Grantee, which the parties stipulate to have a fair market value of 45.93% of the fair market value of the Property. The values at the time of this grant shall be those values used to calculate the deduction for federal income tax purposes allowable by reason of this grant, pursuant to Section 170(h) of the Internal Revenue Code of 1986, as amended. For the purposes of this paragraph, the ratio of the value of the Easement to the value of the Property unencumbered by the Easement shall remain constant.

24. *Condemnation.* If this easement is taken or conveyed, in whole or in part, by threat or exercise of the power of eminent domain, the Grantor and the Grantee shall be entitled to compensation for

the value of their respective interests, in accordance with applicable law. The Board, the United States and the County of Gunnison shall be entitled to compensation from the Grantee in amounts as determined in accordance with the "Change in Circumstances; Extinguishment" Paragraph herein.

25. *Contingent Rights of the United States.* Except for transfer in accordance with paragraph 19, in the event that Grantee attempts to terminate, transfer, or otherwise divest itself of any right, title to the Easement, or interests in this Easement, without prior consent of the Secretary of the United States Department of Agriculture, and payment of consideration to the United States, then, at the option of such Secretary, all right, title and interest to the conservation easement shall become vested in the United States of America.

26. *Interpretation.* This Deed shall be interpreted under the laws of the State of Colorado, resolving any ambiguities and questions of the validity of specific provisions so as to preserve the Conservation Values and give maximum effect to its conservation purposes.

27. *Perpetual Duration.* The easement created by this Deed shall be a servitude running with the land in perpetuity. Every provision of this Deed that applies to Grantor or Grantee shall also apply to their respective agents, heirs, executors, administrators, assigns, representatives, and all other successors as their interests may appear. A party's rights and obligations under this Deed terminate upon transfer of the party's interest in this Deed or the Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

28. *Notices.* Any notices required by this Deed shall be in writing and shall be personally delivered or sent by certified mail, return receipt requested, to Grantor and Grantee respectively at the following addresses, unless a party has been notified by the other of a change of address:

To Grantor: Barbara D. Crosson
1405 Rancho Del Sol
Pueblo, CO 81008

To Grantee: Colorado Cattlemen's Agricultural Land Trust
8833 Ralston Road
Arvada, CO 80004

To Board: Executive Director
State Board of the Great Outdoors Colorado Trust Fund
1600 Broadway, Suite 1650
Denver, CO 80202

29. *Grantor's Title Warranty.* Grantor warrants that Grantor has good and sufficient title to the Property and hereby promises to defend the same against all claims from persons claiming by, through or under Grantor.

30. *Grantor's Environmental Warranty and Indemnity.* Grantor warrants that Grantor has no actual knowledge of a release or threatened release of hazardous substances or wastes on the Property and hereby promises to defend and indemnify Grantee against all litigation, claims, demands, penalties, and damages, including reasonable attorneys' fees, arising from or connected with any release of hazardous waste or violation of federal, state, or local environmental laws. Without limiting the foregoing, nothing in

this Deed shall be construed as giving rise to any right or ability in Grantee, nor shall Grantee have any right or ability, to exercise physical or managerial control over the day-to-day operations of the Property, or otherwise to become an operator with respect to the Property within the meaning of The Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

31. *Subsequent Liens on the Property.* No provisions of this Deed of Conservation Easement shall be construed as impairing the ability of Grantor to use this Property as collateral for subsequent borrowing, provided that any mortgage or lien arising from such a borrowing shall be subordinated to this Deed of Conservation Easement.

32. *No Merger.* Unless the parties expressly state that they intend a merger of estates or interests to occur, then no merger shall be deemed to have occurred hereunder or under any document executed in the future affecting this Deed.

33. *Acceptance.* As attested by the signature of its President affixed hereto, Grantee hereby accepts, without reservation, the rights and responsibilities conveyed by this Deed.

34. *Jurisdiction and Venue.* Any litigation concerning this conservation easement shall take place only in Gunnison County, Colorado. Any court action shall take place in the County Court or District Court in Gunnison County, Colorado. Grantor and Grantee consent to personal jurisdiction in Gunnison County, Colorado and in the County Court or District Court and waive their right to maintain any proceeding relating to this conservation easement in any other court.

35. *Termination of the Board.* In the event that Article XXVII of the Colorado Constitution, which established the State Board of the Great Outdoors Colorado Trust Fund, is amended or repealed to terminate the Board or merge the Board into another entity, the rights and obligations of the Board hereunder shall be assigned to and assumed by such other entity as provided by law, but in the absence of such direction, by the Colorado Department of Natural Resources or its successor.

TO HAVE AND TO HOLD, this Deed unto Grantee, its successors and assigns, forever.

IN WITNESS WHEREOF, Grantor and Grantee, intending to legally bind themselves, have set their hands on the date first written above.

GRANTOR:

Barbara D. Crosson

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STATE OF COLORADO)
) ss.
COUNTY OF GUNNISON

EXHIBIT A
LEGAL DESCRIPTION

Township 48 North, Range 3 East, N.M.P.M.

Section 3: W1/2NE1/4 and NW1/4

Township 49 North, Range 3 East, N.M.P.M.

Section 34: SW1/4 and W1/2SE1/4

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCELS:

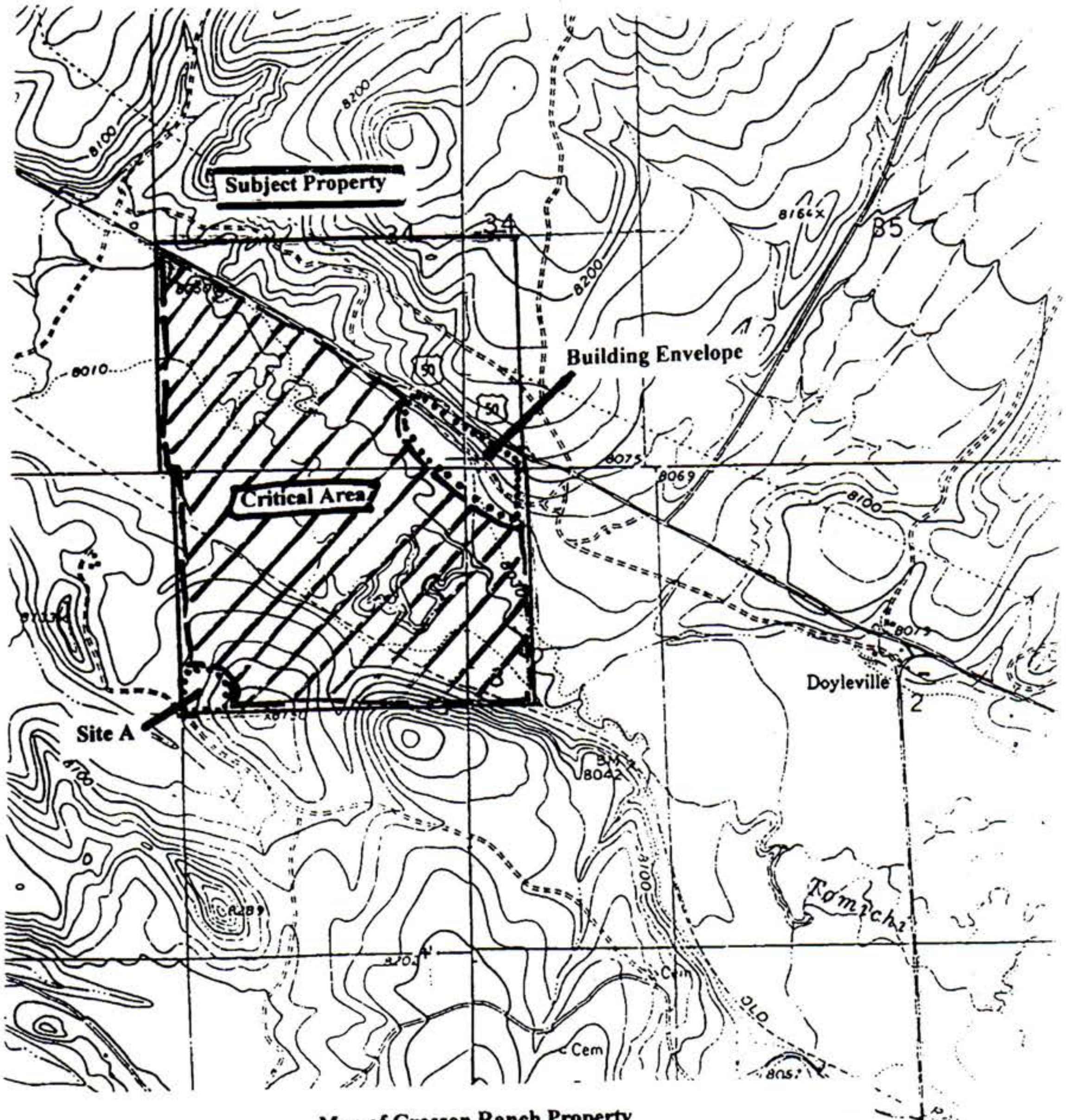
a) That property in the Right of Way Deed to the County of Gunnison, State of Colorado recorded April 19, 1937 in Book 253 at page 206 located in the N1/2SW1/4 and SW1/2SE1/4 of Section 34, Township 49 North, Range 3 East, N.M.P.M., described as follows:

Beginning at a point on the west boundary of the SW1/2 of said Section 34, said point being identical with engineer's sta. 938, plus 03: whence the west quarter corner of said Section 34, bears North 118 feet more or less; thence a strip of land 100 feet wide lying 50 feet on either side of the following described center line: South 61'10" East 697 feet; thence a strip of land 125 feet wide lying 75 feet on the left and 50 feet on the right of the following described center line: South 61'10" E 500 feet; thence a strip of land 100 feet wide lying 50 feet on either side of the following described center line: South 61'10" East 3300 feet; thence a strip of land 130 feet wide lying 65 feet on either side of the following described center line: South 61'10" East 100 feet to a point on the east boundary of the SW1/4SE1/2 of said Section 34, said point being identical with Engineer's Sta. 984 plus 00; whence the southeast corner of said Sec. 34 bears South 80'45" East 1343.0 feet more or less.

b) The right of way and easement for U. S. Highway 50 conveyed to the Department of Highways, State of Colorado in Warranty Deed recorded July 22, 1966 in Book 389 at page 95, more fully described in said document.

County of Gunnison, State of Colorado

EXHIBIT B
PROPERTY MAP



Map of Crosson Ranch Property
Source: USGS topographic quads "Doyleville" and "Houston Gulch," 1:24,000

EXHIBIT C
CRITICAL AREA WATER RIGHTS

The following water rights pertain to the designated Critical Area of the Crosson Ranch property receiving this conservation easement:

Water District 28, Division 4, Tomichi Creek and tributaries, to the Gunnison River

ID#	*Name of Structure*	*Stream*	*Location*	*Decreed Amount*	*Adjud. Date*	*Prev. Adjud. Date*	*Approp. Date*	*Admin. #*	*Court Case*	*Sec #*	*Comments*
532	Coats Bros. Ditch	Tomichi Creek.	NENESEsec3T49 NR3E NMPM	1.3 cfs	05/1/1894	-none-	05/31/1881	114740	946	20	-none-
532	Coats Bros. Ditch	Tomichi Creek.	NENESEsec3T49 NR3E NMPM	5.0 cfs	04/29/1904	05/1/1894	05/01/1879	16192.10713	1266	49	DPN40 HGT on S.Bank P47
537	Cox Irrigating Ditch	Hot Sprgs Creek.	SWSWSEsec36T 49NR3E NMPM	.88 cfs	01/29/1904	05/1/1894	05/30/1878	16192.10377	1266	45	DPN 37 HGT on W Bank P44
680	S. Davidson&Co Feeder Ditch No.1	Tom. Crk. Trib Spgs	SENWSWsec16T 48NR4E NMPM	5.0 cfs	12/15/1961	04/16/1956	06/03/1957	39235	5591	959	CA 5591-DPN398-P797A
680	S. Davidson&Co Feeder Ditch No.2	Tom. Crk. Trib Spgs	SESESWsec7T48 NR4E NMPM	10.0 cfs	12/15/1961	04/16/1956	06/03/1957	39235	5591	1675	ABS4-25-1966 total DPN400+419
680	S. Davidson&Co Feeder Ditch No.3	Tom. Crk. Trib Spgs	NESESWsec12T4 8NR3E NMPM	15.0 cfs	12/15/1961	04/16/1956	06/03/1957	39235	5591	1674	ABS4-25-1966 total DPN400+419
3590	40 shares Hot Springs Reservoir Assoc.	Hot Sprgs Creek	NENWNWsec16 T49NR4E NMPM	410.19 af	4/16/1956	04/15/1946	06/09/1947	35588	5266	557	DPN356 COND P591
3590	40 shares Hot Springs Reservoir Assoc.	Hot Sprgs Creek	NENWNWsec16 T49NR4E NMPM	410.19 af	4/16/1956	04/15/1946	06/09/1947	35588	5266	558	DPN356 CA 4-21-1958 P459
3590	40 shares Hot Springs Reservoir Assoc.	Hot Sprgs Creek	NENWNWsec16 T49NR4E NMPM	192.81 af	12/15/1961	04/16/1956	05/05/1956	38841	5266	555	DPN396 P726

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Crosson Ranch

Existing buildings and structures as of September 13, 1999

All structures listed are contained in the building envelope.
The structures are listed from west to east, with their approximate size.

1. Cabin	35ft.x 30ft.	two stories & loft
2. Shed small	10 ft x 10 ft.	dirt floor
3. Shed	35 ft. x 25 ft.	underground garage, dirt florr
4. Farmhouse	30 ft. x 50 ft.	1 ½ stories
5. Shed	10 ft. x 12 ft.	bunk house
6. Shed	10 ft. x 5 ft.	chicken coop
7. Root Cellar	10 ft. x 6 ft.	underground
8. Barn	35 ft. 20 ft.	2 stories with loft
9. Corrals	100 ft. x 60 ft.	

The foregoing instrument was acknowledged before me this 17th day of SEPTEMBER, 1999, by BARBARA D CROSSON.

WITNESS my hand and official seal.

My commission expires: 3-23-2003

Notary Public

NOTARY PUBLIC CHERI L. MOYER STATE OF COLORADO

ACCEPTED:

COLORADO CATTLEMEN'S AGRICULTURAL LAND TRUST, a Colorado nonprofit corporation

By: _____
Name: Jay Fetcher
Title: Pres

STATE OF COLORADO)
) ss.
COUNTY OF Routt

The foregoing instrument was acknowledged before me this 16th day of September, 1999, by, ~~John~~ Jay Fetcher as President of Colorado Cattlemen's Agricultural Land Trust, a Colorado nonprofit corporation.

WITNESS my hand and official seal.

My commission expires: 11/12/2001

Notary Public

JACKIE HAYES 320 Lincoln Ave. Steamboat Springs, CO 80477

Exhibit A Legal Description of Property
Exhibit B Property Map
Exhibit C Critical Area Water Rights
~~**Exhibit D** Conservation Plan~~

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Recording requested by and return to:
Colorado Cattlemen's Agricultural Land Trust
8833 Ralston Road
Arvada, CO 80002

13-08-015

SECOND AMENDMENT TO DEED OF CONSERVATION EASEMENT FOR THE KRUTHAUPT'S CREEKSIDE RANCH, FORMERLY KNOWN AS THE CROSSON RANCH

THIS SECOND AMENDMENT TO THE DEED OF CONSERVATION EASEMENT (the "Second Amendment") made this 13th day of December, 2013 by GREGORY F. KRUTHAUPT and PATRICIA J. KRUTHAUPT, whose address is 57564 East Highway 50, Gunnison, Colorado 81230 (collectively "Grantor") and the COLORADO CATTLEMEN'S AGRICULTURAL LAND TRUST, a Colorado nonprofit corporation, having its principal office at 8833 Ralston Road, Arvada, Colorado, 80002 ("Grantee").

WITNESS THAT:

A. Barbara D. Crosson ("Original Grantor") conveyed to Grantee that certain Deed of Conservation Easement for the Crosson Ranch dated September 17, 1999 and recorded on September 23, 1999 at reception number 496498 (the "Original Conservation Easement"), which encumbered 470 acres of real property located in Gunnison County, Colorado described on **Exhibit A** attached hereto and made a part hereof (the "1999 Property").

B. By mutual mistake of the parties, the Original Conservation Easement in Paragraph 15 and on Exhibit C to the Original Conservation Easement tied more water than was historically used on the 1999 Property and which rights were not owned by Original Grantor. This error was due to the fact that insufficient detail was provided in Exhibit C regarding fractional ownership of specific rights. In addition, the House Spring and Pappa Spring were inadvertently excluded.

C. Original Grantor subsequently sold the 1999 Property to Grantor.

D. Grantor conveyed to Grantee an Amendment to the Deed of Conservation Easement dated July 24, 2001 and recorded on December 27, 2001 at reception number 516890 in the land records of Gunnison County (the "2001 Amendment"). The purpose of the 2001 Amendment was to relocate Site A, as defined in Paragraph 3.C. of the Original Conservation Easement. Due to a mutual mistake of the parties, the 2001 Amendment instead moved the Building Envelope, as defined in Paragraph 3.B. of the Original Conservation Easement.

E. Grantor and Grantee now intend to Amend the Original Conservation Easement and the 2001 Amendment to eliminate the relocation of the Building Envelope, eliminate the ability to relocate a residential right to Site A, add an accessory residential right to the Building Envelope, and correct the water rights listed in Exhibit C to the Original Conservation Easement. As the 1999 Property is defined as a brood area, a production area, and severe winter range for the Gunnison sage grouse by Colorado Parks and Wildlife, the elimination of an alternative building site on the 1999 Property and clustering the residential rights in the Building Envelope near

FIRST GUNNISON TITLE & ESCROW, INC.
113 EAST GEORGIA AVENUE
GUNNISON, CO 81230

Highway 50 greatly benefits the species and improves the 1999 Property's Conservation Values.

F. Grantor also intends to amend the Conservation Easement and the 2001 Amendment to encumber an additional fifty two hundredths of an acre (0.52 acres) of real property legally described in **Exhibit B** attached hereto and made a part of this Second Amendment (the "2013 Property"), with the grant of a new conservation easement on the 2013 Property.

G. The 1999 Property and the 2013 Property shall be hereafter collectively referred to as the "Property", as described on **Exhibit C** attached hereto and made a part hereof.

H. The 2013 Property is primarily open ranchland and is an important part of the productive agricultural land still remaining in Gunnison County. The 2013 Property as defined as a brood area, a production area, and severe winter range for the Gunnison sage-grouse by Colorado Parks and Wildlife. The 2013 Property includes relatively natural habitat with a variety of wildlife species, including elk, mule deer, black bear, mountain lion, and a wide array of non-game wildlife species. The 2013 Property provides scenic views for the citizens and visitors to Gunnison County and the State of Colorado and contains approximately 380 feet of frontage along Highway 50.

I. The conservation purposes of this Deed are recognized by, and the grant of this Deed will serve, at least and without limitation, the following clearly delineated governmental conservation policies:

- The Farmland Protection Policy Act, P.L. 97-98, 7 U.S.C. §§ 4201, et seq., the purpose of which is "to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government, and private programs and policies to protect farmland;"

- The Colorado Department of Agriculture statutes, Colorado Revised Statutes § 35-3-102(a), which provides, in part, that "the soil resources and fertility of the land, and the … prosperity of the farming population … and the waters of the rivers … are matters affected with a public interest."

- The Colorado Department of Agriculture statutes, Colorado Revised Statutes §35-3-102(b), provides, in part, that the "welfare of this state has been impaired … by destruction of its soil fertility, by uneconomic use and waste of its land, by exploitation and wasteful … use of its soil resources."

- Colorado Revised Statutes § 38-30.5-102, provides for the establishment of conservation easements to maintain land "in a natural, scenic, or open condition, or for wildlife habitat, or for agricultural … or other use or condition consistent with the protection of open land, environmental quality or life-sustaining ecological diversity."

- The Colorado Wildlife and Parks and Outdoor Recreation statutes, Colorado Revised Statutes § 33-1-101 and § 33-10-101, which provide, respectively, that "it is the policy

of the state of Colorado that the wildlife and their environment are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and its visitors" and that "it is the policy of the state of Colorado that the natural, scenic, scientific, and outdoor recreation areas of this state are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and visitors of this state."

- The Colorado Department of Transportation statutes, Colorado Revised Statutes § 43-1-401, et seq., provide that the "preservation and enhancement of the natural and scenic beauty of this state" is a substantial state interest.

- Gunnison County Land Use Resolution, Section 1-103 which includes the following purposes, (A)(3) "protect ranching and other existing industries, the beauty of the landscape and rural character of Gunnison County, in order to enhance recreational opportunities for residents and visitors, preserve important archeological and historic sites and view sheds, and conserve soil, water and forestry resources, (C)(3) "protect ditches and stock drive routes, [and] to encourage land use change that will retain the agricultural properties of the land," and (D)(3) "protect and preserve lands from land use activities and patterns of development that would cause significant adverse net impacts to sensitive wildlife habitat and to discourage land uses that will impair or destroy such habitats, or their utilization by wildlife species, or that would endanger a wildlife species."

- Gunnison County Land Use Resolution, Section 11-106 which states that, "The natural and scenic resources of Gunnison County, including wildlife, are essential components of the County's economic base and help establish the rural character of the County." It goes on to state, "These resources are also a basic element of the quality of life for residents of Gunnison County."

- Gunnison County Land Use Resolution, Section 15-101 states that, "It is the purpose of this Section to conserve, protect, and encourage the continued use and improvement of traditional ranching lands in Gunnison County…."

- Gunnison County Land Use Resolution, Section 15-103 A2 states the following, "Given their importance to the county, the Western Slope of Colorado, and to the State, agricultural lands and operations are worthy of recognition and protection."

- Gunnison County Ranchland Initiative Land Use Process states that, "It is the intent of Gunnison County to support conservation of ranchlands for production of agricultural products."

J. The agricultural, ecological and other characteristics of the 2013 Property, its current use and state of improvement is described in a Baseline Inventory prepared by Grantee and is dated November 4, 2013 and will be used by Grantee to assure that any future changes in the use of the Property will be consistent with the terms of this Deed. However, this report is not intended to preclude the use of other evidence to establish the present condition of the Property if there is a controversy over its use. Grantor and Grantee have executed an acknowledgment of the Baseline Inventory Report, which indicates that the Baseline Inventory Report accurately depicts the

present conditions of the Property as of the date of this Deed, and which acknowledgment is attached as **Exhibit D** hereto and made a part of this Deed.

K. Grantor owns the fee simple interest in the 1999 Property.

L. Grantee is a "qualified conservation organization," as defined by the United States Internal Revenue Code, and filed a DR 1299 (Colorado Gross Conservation Easement Holders Submission of Information) with the Colorado Division of Real Estate on January 8, 2013 and the Colorado Department of Revenue on January 11, 2013. Grantee is a state-certified nonprofit conservation easement holder, having been certified by the Colorado Division of Real Estate as license number CE003. Grantee accepts the responsibility of enforcing the terms of this Deed and upholding its conservation purposes forever.

NOW, THEREFORE, for the reasons given, and in consideration of their mutual promises and covenants, Grantor voluntarily grants and conveys to Grantee, and Grantee voluntarily accepts, a perpetual conservation easement, an immediately vested interest in real property defined by Colorado Revised Statutes §§ 38-30.5-101, et seq., and of the nature and character described in this Second Amendment, exclusively for the purpose of conserving and forever maintaining the open space character, agricultural productivity, wildlife habitat, and scenic qualities of the 2013 Property (the "Conservation Values").

1. Exhibit A to the Original Conservation Easement is hereby deleted and replaced in its entirety by **Exhibit C**, attached to this Amendment and made a part hereof, and the 470.52 acres of real property described in said **Exhibit C** shall henceforth be the Property as that term is defined in the Original Conservation Easement.

2. Paragraph 3.B of the Original Conservation Easement is hereby deleted and replaced in its entirety by the following:

> "B. Agricultural Structures and Improvements. All existing agricultural building and agricultural structures, located within the Building Envelope as described below, may be continued to be used for agricultural purposes and be repaired, reasonably enlarged, and replaced at their current location without further permission from Grantee. New major agricultural buildings and improvements such as barns, sheds, enclosed riding arenas, and garages which are to be used solely for agricultural purposes, including the processing or sale of farm or ranch products predominantly grown or raised on the Property, may be built within the twenty-five (25) acre building envelope (the "Building Envelope") as described and depicted on **Exhibit B** to this Deed, attached hereto and made a part hereof. Loafing sheds, corrals, water lines, water tanks and other minor agricultural structures and improvements, including wind, solar, and hydroelectric generation facilities that are primarily for the generation of energy for use in conjunction with the minor agricultural structures and improvements permitted by this Deed and that are not connected to the electricity utility grid, may be constructed anywhere on the Property. Grantor will notify Grantee prior to any construction within the Building Envelope, so Grantee can update its records. No construction of any other new

agricultural buildings or improvements other than those covered by this subparagraph B shall be allowed."

3. Paragraph 3.C of the Original Conservation Easement is hereby deleted and replaced in its entirety by the following:

"C. Single-Family Residential Dwellings. There are two existing single-family residential dwelling within the Building Envelope. The existing single-family residential dwellings may be repaired, reasonably enlarged and replaced at their current location and may also be relocated anywhere within the boundaries of the Building Envelope without further permission from Grantee. There is currently one existing bunkhouse within the Building Envelope (the "Bunkhouse"). The Bunkhouse may be repaired, reasonably enlarged, not to exceed 1,500 square feet. In addition, one (1) secondary single family residential dwelling which shall not exceed a maximum size of 2,500 square feet, excluding porches or decks, is expressly permitted to be built on the Property within the Building Envelope. In Grantor's sole discretion, but expressly conditioned upon the existing single family residence in the Building Envelope not having been previously enlarged to a total square footage of more than 2,500 square feet, one of the existing single family residences currently located in the Building Envelope may be designated as the secondary single family residence in order that Grantor or its successors or assigns can build a new single family residence within the Building Envelope. The secondary single family residential dwellings may also be repaired, replaced, relocated anywhere within the Building Envelope without the consent of Grantee. Grantor will notify Grantee prior to any construction within the Building Envelope, so Grantee can update its records."

4. Exhibit B to the Original Conservation Easement is hereby deleted and replaced in its entirety by **Exhibit E**, attached to this Amendment and made a part hereof.

5. Exhibit C to the Original Conservation Easement is hereby deleted and replaced in its entirety by **Exhibit F**, attached to this Amendment and made a part hereof.

6. All capitalized terms in this Amendment shall have the meanings assigned to them in the Original Conservation Easement.

7. In the event of a conflict between the terms of the Original Conservation Easement, the 2001 Amendment, and this Amendment, the terms of this Amendment shall prevail.

8. Grantor and Grantee hereby ratify and confirm this modification to the terms of the Original Conservation Easement. Except as amended by this Amendment, the terms of the Original Conservation Easement shall remain in full force and effect, and the perpetual nature of the Original Conservation Easement and the 2001 Amendment are uninterrupted by this Second Amendment. As attested by the signature of an authorized party affixed hereto, Grantee hereby accepts, without reservation, the rights and responsibilities conveyed by this Second Amendment.

9. Real Property Interest. This Second Amendment to the Conservation Easement constitutes a real property interest immediately vested in Grantee.

IN WITNESS WHEREOF, Grantor and Grantee, intending to legally bind themselves, have set their hands on the date first written above.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK
SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, Grantor and Grantee, intending to legally bind themselves, have set their hands on the date first written above.

GRANTOR:
GREGORY F. KRUTHAUPT

STATE OF COLORADO)
) ss.
COUNTY OF Jefferson)

The foregoing instrument was acknowledged before me this 13th day of December, 2013, by Gregory F. Kruthaupt.

WITNESS my hand and official seal.

My commission expires: 10/26/2014

Notary Public

ALYSSA L STREET NOTARY PUBLIC STATE OF COLORADO My Commission Expires 10/26/2014

GRANTOR:

PATRICIA J. KRUTHAUPT

STATE OF COLORADO)
) ss.
COUNTY OF Jefferson)

The foregoing instrument was acknowledged before me this 13th day of December, 2013, by Patricia J. Kruthaupt.

WITNESS my hand and official seal.

My commission expires: 10/26/2014

Notary Public

ALYSSA L STREET NOTARY PUBLIC STATE OF COLORADO My Commission Expires 10/26/2014

ACCEPTED:

COLORADO CATTLEMEN'S AGRICULTURAL LAND TRUST, a Colorado nonprofit corporation

By H. Benjamin Duke III

Name: H. Benjamin Duke III

Title: Secretary

STATE OF COLORADO)
) ss.
COUNTY OF Jefferson

The foregoing instrument was acknowledged before me this 13th day of November 2013, by H. Benjamin Duke III, as Secretary of the Colorado Cattlemen's Agricultural Land Trust, a Colorado nonprofit corporation.

WITNESS my hand and official seal.

My commission expires: 10/26/2014

Notary Public

Exhibit A Legal Description of the 1999 Property
Exhibit B Legal Description of the 2013 Property
Exhibit C Legal Description of the Property
Exhibit D Baseline Inventory Report Acknowledgement
Exhibit E Map of the Property Depicting and Describing the Building Envelope
Exhibit F Water Rights [corrected]

ALYSSA L STREET NOTARY PUBLIC STATE OF COLORADO My Commission Expires 10/26/2014

EXHIBIT A
LEGAL DESCRIPTION OF THE 1999 PROPERTY

Township 48 North, Range 3 East. N.M.P.M.

Section 3: W½ NE ¼; NW ¼

Township 49 North, Range 3 East. N.M.P.M.

Section 34: W½SE¼; SW¼

EXCEPTING FROM THE ABOVE PARCELS OF LAND the following tracts:

That property in Right of Way Deed to the County of Gunnison, State of Colorado, recorded April19, 1937, in Book 253 at Page 206,1ocated in the N½SW¼ and SW¼SE¼, Section 34, Township 49 North, Range 3 East, N.M.P.M., described as follows:

Beginning at a point on the west boundary of the SW ¼ of said Section 34, said point being identical with Engineer's Sta. 938, plus 03; whence the west quarter corner of said Section 34 bears North 118 feet more or less; thence a strip of land 100 feet wide lying 50 feet on either side of the following described center line: South 61°10' East 697 feet; thence a strip of land 125 feet wide lying 75 feet on the left and 50 feet on the right of the following described centerline, South 61°10' East 500 feet; thence a strip of land 100 feet wide lying 50 feet on either side of the following described centerline: South 61°10' East 3300 feet; thence a strip of land 130 feet wide lying 65 feet on either side of the following described centerline: South 61°10' East 100 feet to a point on the east boundary of the SW¼SE¼ , said Section 34, said point being identical with Engineer's Sta. 984 plus 00; whence the southeast corner of said Section 34 bears South 80° 45' East 1343.0 feet more or less;

The right of way and easement for U.S. Highway No. 50 conveyed to the Department of Highways, State of Colorado, in Warranty Deed recorded July 22, 1966 in Book 389 at Page 95, of the Gunnison County Records,

County of Gunnison,
State of Colorado

EXHIBIT B
LEGAL DESCRIPTION OF THE 2013 PROPERTY

A tract of land within the SE¼SE¼ of Section 34, Township 49 North, Range 3 East, New Mexico Principal Meridian, Gunnison County, Colorado; said tract being more particularly described as follows:

Commencing at the southeast corner of said Section 34, (as marked by a USGLO brass cap monument), thence South 89°55'03" West 1040.14 feet along the south boundary of said Section 34 to a point on the southwesterly right of way boundary of US Highway No. 50, said point also being the POINT OF BEGINNING for the herein described tract; thence the following courses around said tract:

1. North 60°45'00" West 327.90 feet along said boundary to a point on the west boundary of said SE¼SE¼;

2. South 00°35'02" East 160.64 feet along said boundary to the southwest corner of said SE¼SE¼;

3. North 89°55'03" East 284.46 feet along the south boundary of said Section 34 to a point on said southwesterly right of way boundary, said point also being the POINT OF BEGINNING of the herein described tract,

County of Gunnison,
State of Colorado.

EXHIBIT C
LEGAL DESCRIPTION OF THE PROPERTY

Township 48 North, Range 3 East. N.M.P.M.

Section 3: W½ NE ¼; NW ¼

Township 49 North. Range 3 East. N.M.P.M.

Section 34: W½SE¼; SW¼

EXCEPTING FROM THE ABOVE PARCELS OF LAND the following tracts:

That property in Right of Way Deed to the County of Gunnison, State of Colorado, recorded April19, 1937, in Book 253 at Page 206,1ocated in the N½SW¼ and SW¼SE¼, Section 34, Township 49 North, Range 3 East, N.M.P.M., described as follows:

Beginning at a point on the west boundary of the SW ¼ of said Section 34, said point being identical with Engineer's Sta. 938, plus 03; whence the west quarter corner of said Section 34 bears North 118 feet more or less; thence a strip of land 100 feet wide lying 50 feet on either side of the following described center line: South 61°10' East 697 feet; thence a strip of land 125 feet wide lying 75 feet on the left and 50 feet on the right of the following described centerline, South 61°10' East 500 feet; thence a strip of land 100 feet wide lying 50 feet on either side of the following described centerline: South 61°10' East 3300 feet; thence a strip of land 130 feet wide lying 65 feet on either side of the following described centerline: South 61°10' East 100 feet to a point on the east boundary of the SW¼SE¼ , said Section 34, said point being identical with Engineer's Sta. 984 plus 00; whence the southeast corner of said Section 34 bears South 80° 45' East 1343.0 feet more or less;

The right of way and easement for U.S. Highway No. 50 conveyed to the Department of Highways, State of Colorado, in Warranty Deed recorded July 22, 1966 in Book 389 at Page 95, of the Gunnison County Records,

TOGETHER WITH:

A tract of land within the SE¼SE¼ of Section 34, Township 49 North, Range 3 East, New Mexico Principal Meridian, Gunnison County, Colorado; said tract being more particularly described as follows:

Commencing at the southeast corner of said Section 34, (as marked by a USGLO brass cap monument), thence South 89°55'03" West 1040.14 feet along the south boundary of said Section 34 to a point on the southwesterly right of way boundary of US Highway No. 50, said point also being the POINT OF BEGINNING for the herein described tract; thence the following courses around said tract:

1. North 60°45'00" West 327.90 feet along said boundary to a point on the west boundary of said SE¼SE¼;

2. South 00°35'02" East 160.64 feet along said boundary to the southwest corner of said SE¼SE¼;

3. North 89°55'03" East 284.46 feet along the south boundary of said Section 34 to a point on said southwesterly right of way boundary, said point also being the POINT OF BEGINNING of the herein described tract,

County of Gunnison,
State of Colorado.

EXHIBIT D

BASELINE INVENTORY REPORT ACKNOWLEDGMENT PAGE

I. OWNER ACKNOWLEDGEMENT STATEMENT

Please complete to satisfy Section 1.170A-14(g)(5)(i)(D) of the federal tax regulations and the Standards and Practices of the Land Trust Alliance.

Grantor: Gregory F. and Patricia J. Kruthaupt
57564 East Highway 50
Gunnison, Colorado 81230

Grantee: Colorado Cattlemen's Agricultural Land Trust
8833 Ralston Road
Arvada, Colorado 80002

Property Description:

The 2013 Property consists of 0.52 acres of land in Gunnison County.

A baseline inventory report has been prepared by Grantee and is dated October 18, 2013 (the "Baseline Inventory Report").

In compliance with Section 1.170-14(g)(5)(i)(D) of the Treasury Regulations, Grantor and Grantee agree that the Baseline Inventory Report is an accurate representation of the Property at the time of the conservation easement donation.

Gregory F. Kruthaupt — Date: 12/13/13

Patricia J. Kruthaupt — Date: 12.13.13

Chris Wint, Executive Director
Grantee - CCALT — Date: 11/15/2013

EXHIBIT E
MAP OF THE PROPETY DESCRIBING THE BUILDING ENVELOPE

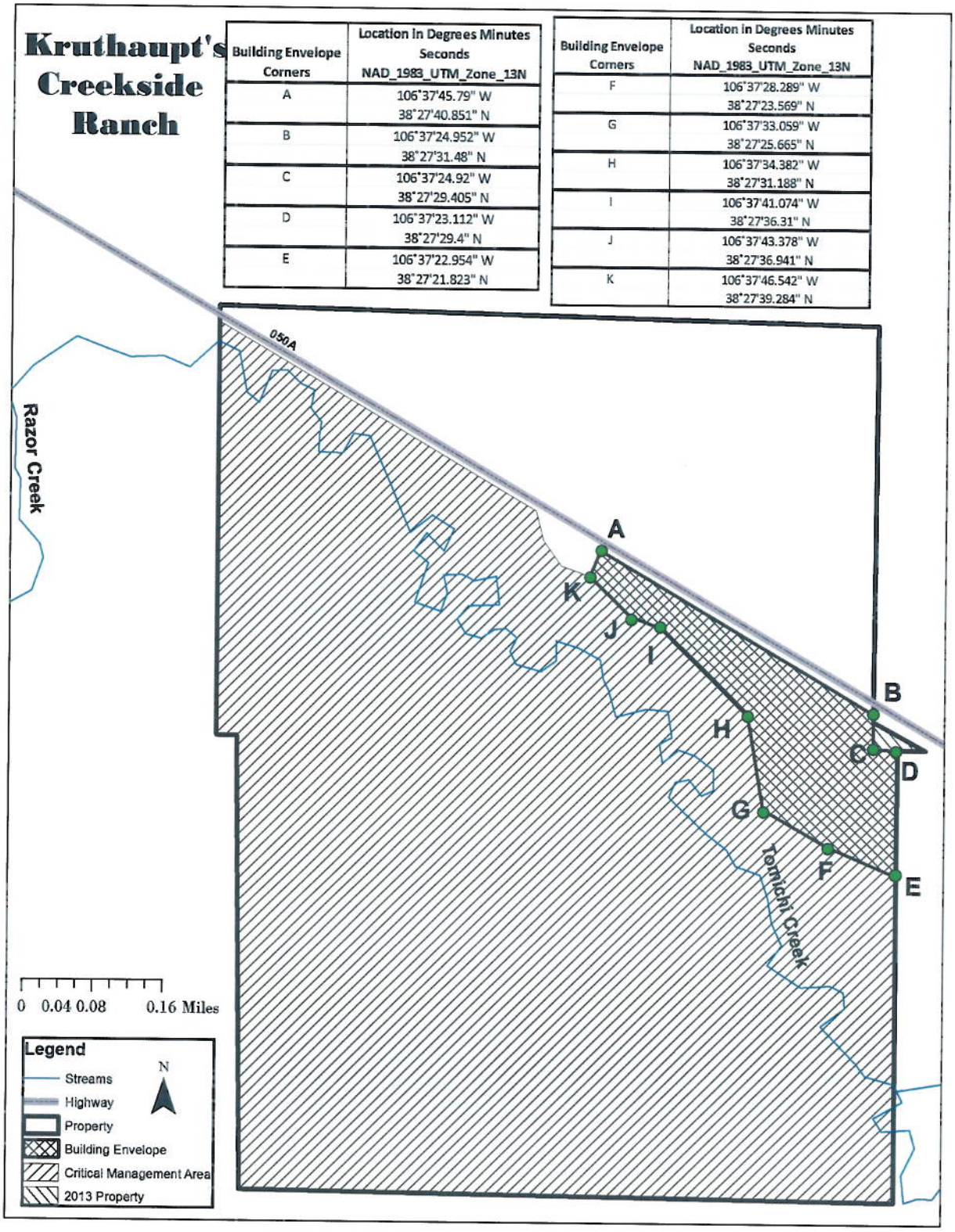

EXHIBIT F
WATER RIGHTS [CORRECTED]

Any and all of the Grantor's interest in and to the following water rights:

Name	Priority	Appropriation Date	Adjudication Date	Decreed Amount	Source	Notes
Coats Bros Ditch	CA0946	5/31/1881	5/1/1894	1.3020 cfs	Tomichi Creek	½ Interest
	40	5/1/1879	4/29/1904	5 cfs		½ Interest
Bennett Morton Ditch	99CW0131	5/30/1878	4/29/1904	0.88 cfs	Hot Springs Creek	Transferred from Cox Irrigating Ditch in 1999
South Davidson & Co. Feeder Ditch No. 1	385	6/1/1915	12/15/1961	5 cfs	Tomichi Creek	188/1153 interest
	398	6/3/1957	12/15/1961	5 cfs		188/1153 interest
	417	2/15/1961	12/15/1961	5 cfs		188/1153 interest
South Davidson & Co. Feeder Ditch No. 2	386	6/1/1915	12/15/1961	10 cfs	Tomichi Creek	188/778 interest
	399	6/3/1957	12/15/1961	10 cfs		188/778 interest
	418	6/3/1957	12/15/1961	10 cfs		188/778 interest Total of priority 399+418 not to exceed 10.cfs p696
South Davidson & Co. Feeder Ditch No. 3	387	6/1/1915	12/15/1961	15 cfs	Tomichi Creek	188/558 interest
	400	6/3/1957	12/15/1961	15 cfs		188/558 interest
	419	6/3/1957	12/15/1961	15 cfs		188/558 interest Abs 4-25-1966 total dpn 400+419 not to exceed 15 cfs
Hot Springs Reservoir Association	396	5/5/1956	12/15/1961	192.81 af	Hot Springs Creek	40 shares
	356	6/9/1947	4/16/1956	410.19 af	Hot Springs Creek	
Pappa Spring	01CW0012	1/1/1975	12/31/2001	0.008 cfs		Livestock
House Spring	01CW0012	1/1/1975	12/31/2001	0.018 cfs		Domestic

QUITCLAIM DEED

STATE DOCUMENTARY FEE
DATE Jan 14, 2002
$ No Fee

THIS DEED, made this 10th day of January, 20 02, between BARBARA D. CROSSON and DAVID L. CROSSON

of the *County of Pueblo and State of Colorado, grantor, and
GREGORY F. KRUTHAUPT and PATRICIA J. KRUTHAUPT

whose legal address is 57564 U.S. Highway 50
Gunnison, CO 81230

of the County of Gunnison and State of Colorado, grantees:

WITNESS, that the grantor, for and in consideration of the sum of Ten Dollars and other good and valuable consideration XXXXARS, the receipt and sufficiency of which is hereby acknowledged, has remised, released, sold and QUITCLAIMED, and by these presents does remise, release, sell and QUITCLAIM unto the grantees, their heirs, successors and assigns forever, not in tenancy in common but in joint tenancy, all the right, title, interest, claim and demand which the grantor has in and to the real property, together with improvements, if any, situate, lying and being in the County of Gunnison and State of Colorado, described as follows:

See Exhibit "A" attached.

~~[illegible]~~
~~[illegible]~~

TO HAVE AND TO HOLD the same, together with all and singular the appurtenances and privileges thereunto belonging, or in anywise thereunto appertaining, and all the estate, right, title, interest and claim whatsoever of the grantor, either in law or equity, to the only proper use, benefit and behoof of the grantees, their heirs and assigns forever.

The singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.

IN WITNESS WHEREOF, the grantor has executed this deed on the date set forth above.

Barbara D. Crosson
David L. Crosson

STATE OF COLORADO
County of Pueblo } ss.

The foregoing instrument was acknowledged before me this 10th day of January, 2002, by BARBARA D. CROSSON and DAVID L. CROSSON.

Witness my hand and official seal.
My commission expires: 4-18-2003

[signature]
Notary Public

*If in Denver, insert "City and".

Name and Address of Person Creating Newly Created Legal Description (§ 38-35-106.5, C.R.S.)

No. 962. Rev. 4-94. QUITCLAIM DEED (to Joint Tenants)
Bradford Publishing, 1743 Wazee St., Denver, CO 80202 — (303) 292-2500 — www.bradfordpublishing.com — 6-01

517369 01/14/2002 04:33P 319
2 of 2 R 10.00 D 0.00 N 0.00 Gunnison County

EXHIBIT "A"

All water and water rights, ditches, and ditch rights used in connection with Section 3, Township 48 North, Range 3 East of the N.M.P.M. and Section 34, Township 49 North, Range 3 East of the N.M.P.M. for domestic and irrigation purposes and including, but not limited to, the following ditch and water rights:

An undivided ½ interest in the COATS BROS. DITCH, Ditch 18, together with an undivided ½ interest in Priority No. 18 for 1.3 c.f.s.;

An undivided ½ interest in the COATS BROS. DITCH, Ditch No. 47, together with an undivided ½ interest in Priority No. 40 for 5.0 c.f.s.;

The entire interest in THE COX IRRIGATING DITCH, Ditch No. 43, together with the entire interest in Priority No. 37 for 0.88 c.f.s.;

An undivided 188/1153 interest in the S. DAVIDSON & CO. FEEDER DITCH NO. 1, Ditch No. 303, together with an undivided 188/1153 interest in Priority No. 385 for 5.00 c.f.s.; an undivided 188/1153 interest in Priority No. 398 for 5.00 c.f.s.; and an undivided 188/1153 interest in Priority No. 417 for 5.00 c.f.s.;

An undivided 188/778 interest in the S. DAVIDSON & CO. FEEDER DITCH NO. 2, Ditch No. 304, together with an undivided 188/778 interest in Priority No. 386 for 10.00 c.f.s.; an undivided 188/778 interest in Priority No. 399 for 10.00 c.f.s.; and an undivided 188/778 interest in Priority No. 418 for 10.00 c.f.s.;

An undivided 188/558 interest in the S. DAVIDSON & CO. FEEDER DITCH NO. 3, Ditch No. 305, together with an undivided 188/558 interest in Priority No. 387 for 15.00 c.f.s.; an undivided 188/558 interest in Priority No. 400 for 15.00 c.f.s.; and an undivided 188/558 interest in Priority No. 419 for 15.00 c.f.s.;

All of grantors' interest in Pappa Spring representing .008 c.f.s. for stock water per ruling of the District Court, Water Division 4, Case No. 01CW12;

All of grantors' interest in House Spring representing .018 c.f.s. for stock water and domestic use per ruling of the District Court, Water Division 4, Case No. 01CW12;

40 shares in Hot Springs Reservoir Association,

all in Water District No. 28, now Water Division IV.

CASE 946

IN THE DISTRICT COURT OF THE SEVENTH JUDICIAL DISTRICT OF THE STATE OF COLORADO, sitting within and for the County of Gunnison, on this Tuesday morning, May 1st, A. D., 1894, Court opened at 9:30 o'clock pursuant to adjournment this being the 13th day of this regular April Term.

Present: Hon W. H. Gabbert, Judge
M. C. Deering, Esq., Sheriff
John H. McCormick, Clerk

****

That the several ditches drawing their supply of water from the Tomichi Creek and its tributaries in said Water District No. 28, be and the same are hereby numbered according to the date of their several and respective constructions and appropriations, and said dates are hereby determined and decreed as follows, towit:

Page			& Approp Date
4	Ditch No. 1,	Biebel Ditches Nos. 1 and 2	September 30, 1876
5	No. 2,	Cabin Creek Ditch	December 31, 1877
5	No. 3,	Kennedy Ditches Nos. 1 and 2	March 15, 1878
6	No. 4,	A. B. Coats Ditch	April 15, 1878
7	No. 5,	Pioneer Ditch	May 31, 1878
7	No. 6,	Razor Creek Ditch	May 25, 1879
8-A	No. 7,	Monson & McConnell Ditch	May 31, 1879
8	No. 8,	Hirdman Ditches Nos. 1, 2, & 3	May 31, 1879
8	No. 9,	Owen-Redden Ditch	November 30, 1879
9	No.10,	Hartman Ditches Nos. 1 and 2	December 31, 1879
10	No.11,	McCanne Ditches Nos. 1, 2, & 3	December 31, 1879
11	No.12,	Snyder Ditches Nos. 1 and 2	May 31, 1880
11	No.13,	Needle Creek Ditch	May 31, 1880
12	No. 14,	S. Davidson & Co. Ditch	June 1, 1880

Page			Const. date & Approp date
13	Ditch No. 15,	D. A. McConnell Ditch	June 1, 1880
13	No. 16,	Cox & McConnell Ditch	May 31, 1881
14	No. 17,	Goodrich Ditch	May 31, 1881
14	No. 18,	Coats Brothers Ditch	May 31, 1881
15	No. 19,	Gullett-Tomichi Irrigating Ditch	May 15, 1882
15	No. 20,	Owen No. 1 Ditch	December 31, 1883,
16	No. 21,	Owen Ditch No. 2, (Ditch)	May 31, 1885
17	No. 22,	Jennings-Elsen Ditch	December 31, 1885
17	No. 23,	Hellmuth Ditches Nos. 1 and 2	December 31, 1887
18	No. 24,	Arch Irrigating Ditch	December 31, 1887

And it is further ordered, adjudged and decreed that the amount of water adjudged to said several ditches on their respective priorities as aforesaid per second of time be and the same is hereby computed and declared to be as follows, towit:

Page		Cu. Ft.
4	No. 1, (Biebel Ditch No. 1, 350 acres of land 218 3/4 statutory inches	5.697 5.67
	(Biebel Ditch No. 2, 200 acres of land 125 statutory inches	3.255+ 3.25
5	No. 2, Cabin Creek Ditch, 40 acres of land, 25 statutory inches	.65
5	No. 3, (Kennedy Ditch No. 1, 120 acres of land, 75 statutory inches	1.953 1.90
	(Kennedy Ditch No. 2, 80 acres of land, 50 statutory inches	1.302 1.30
6	No. 4, A. B. Coats Ditch, 160 acres of land, 100 " "	2.604 2.60
7	No. 5, Pioneer Ditch, 640 acres of land, 400 " "	10.417 10.40
7	No. 6, Razor Creek Ditch 154 acres of land 96¼ " "	2.507
8-A	No. 7, Monson & McConnell Ditch, 200 acres of land, 125 statutory inches	3.255+ 3.25
8	No. 8, Hirdman Ditches, Nos. 1, 2, and 3, 160 acres of land, 100 statutory inches	2.604 2.60
8	No. 9, Owen-Redden Ditch, 560 acres of land, 350 statutory inches	9.115- 9.11
9	No.10, Hartman Ditches Nos. 1 and 2, 120 acres of land, 75 statutory inches	1.953 1.95

Page		Cu. Ft.
10	Priority No. 11, McCanne Ditches Nos. 1, 2, & 3, 520 acres of land, 325 stat. in.	8.464
11	No. 12, Snyder Ditches Nos. 1 and 2, 320 acres of land, 200 statutory in.	5.208
11	No. 13, Needle Creek Ditch, 320 acres of land, 200 statutory inches	5.208
12	No. 14, S. Davidson & Co. Ditch, 950 acres of land, 593 3/4 stat. in.	15.462
13	No. 15, D. A. McConnell Ditch, 40 acres of land, 25 statutory inches	.651
13	No. 16, Cox and McConnell Ditch, 60 acres of land, 37½ " "	.977 .97½
14	No. 17, Goodrich Ditch, 320 acres of land, 200 statutory inches	5.208
14	No. 18, Coats Bros. Ditch, 80 acres of land, 50 statutory inches	1.302
15	No. 19, Gullet-Tomichi Irrigating Ditch, 510 acres of land, 318 3/4 statutory inches	~~5.67~~ 8.301
15	No. 20, Owen No. 1 Ditch, 160 acres of land, 100 statutory inches	2.604
16	No. 21, Owen No. 2 Ditch, 40 acres of land, 25 " "	.651
17	No. 22, Jennings-Elsen Ditch, 190 acres of land, 118 3/4 statutory in.	3.092
17	No. 23, Hellmuth Ditches Nos. 1 and 2, 100 acres of land 62½ " "	1.62½ 1.628
18	No. 24, Arch Irrigating Ditch, 882 acres of land, 551¼ stat. inches	14.46 35 14.355

That the entire amount of water appropriated from the Tomichi Creek and the following named tributaries thereof, in said Water District No. 28, under the priorities above decreed is hereby adjudged and decreed respectively as follows:

Tomichi Creek,	5662	acres of land,	3538 3/4	statutory	inches	per	second	of	time		
Tie Creek ,	100	" " " ,	62 1/2	"	"	"	"	"	"		
Needle Creek,	360	" " " ,	225	"	"	"	"	"	"		
Razor Creek ,	994	" " " ,	621 1/4	"	"	"	"	"	"		
Cabin Creek,	40	" " " ,	25	"	"	"	"	"	"		
Stubb's Gulch,	120	" " " ,	75	"	"	"	"	"	"		
Totals	7276	" " "	4547 1/2	"	"	"	"	"	"		

And more particularly in regard to said Ditches and their appropriations of water respectively, as follows, towit:

Ditch No. 1, Priority No. 1

The Biebel Ditches Nos. 1 and 2

That said Ditches are entitled to Priority No. 1. They are claimed by Dora W. Biebel. The headgate of said Ditch No. 1 is located at a point on the North bank of Tomichi Creek from which the 1/4 corner between sections 3 and 4 Township 49 N. R. 1 E. N. M. M. bears N. 73° W. 930 feet. It is a Ditch used for the irrigation of lands, taking its supply of water from said Tomichi Creek, and that there are 350 acres of land lying under said Ditch which have been irrigated by its waters and it is hereby adjudged and decreed that there be allowed to flow into said Ditch No. 1 from said Tomichi Creek, for the uses and purposes aforesaid, and for the benefit of the parties lawfully entitled thereto, under and by virtue of said appropriation by original construction and actual appropriation, so much water as will flow through said ditch, as the same is at present constructed not to exceed 218.75 statutory inches per second of time.

The headgate of said Biebel Ditch No. 2 is located at a point on the north bank of Tomichi Creek from which the 1/4 Corner between Sections 3 and 4 in Township 49 N. R. 1 E. N. M. M. bears N. 73° W. 930 feet. It is a ditch used for the irrigation of land taking its supply of water from said Tomichi Creek, and that there are 200 acres of land lying under said Ditch which have been irrigated by its waters, and it is hereby adjudged and decreed that there be allowed to flow into said Biebel Ditch No. 2, from said Tomichi Creek for the uses and purposes aforesaid, and for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation, so much water as will flow through said Ditch as the same is at present constructed not to exceed 125 statutory inches per second of time, and that said Biebel Ditches Nos. 1 and 2, combined, constitute Priority No. 1, in said Water District No. 28.

Ditch No. 2, Priority No. 2

Cabin Creek Ditch

That said Ditch is entitled to Priority No. 2. It is claimed by I. W. Jennings. The headgate of said Ditch is located at a point from whence the S. E. Corner of the S. W. 1/4 of N. E. 1/4 Sec. 12, T. 49 N. R. 1 E. N. M. M. bears S. 34° 30' E. 2340 feet.

It is a Ditch used for the Irrigation of land, taking its supply of water from Cabin Creek, a tributary of Tomichi Creek, and that there is forty (40) acres of land lying under said ditch which have been irrigated by its waters.

And it is hereby adjudged and decreed that there be allowed to flow into said ditch from said Cabin Creek for the use aforesaid, for the benefit of the party lawfully entitled thereto, under and by virtue of said appropriation by original construction and actual appropriation. Priority No. 2 - so much water as will flow through said ditch as the same is at present constructed, not to exceed twenty-five (25) statutory inches per second of time.

Ditch No. 3, Priority No. 3

Kennedy Ditches Nos. 1 and 2

That said Ditches together are entitled to Priority No. 3.

They are claimed by James Kennedy and J. H. Kennedy.

The headgate of Ditch No. 1 is located at a point whence the S. E. Corner of Section 17, Township 48 N. R. 3, E. N. M. M. bears N. 81° 40' E. 2150 Feet. The headgate of Kennedy Ditch No. 2, is located at a point whence the S. E. Corner Section 17, T. 48 N. R., 3 E. N. M. M. bears S. 73° 40 E. 1890 feet. They are Ditches used for the irrigation of land taking their supply of water from Razor Creek, a tributary of the Tomichi Creek. That there is lying under said Kennedy Ditch No. 1 One hundred and twenty (120) acres of land which has been irrigated by its waters. And that there is lying under said Kennedy Ditch No. 2 eighty (80)

acres of land which has been irrigated by its waters.

And it is hereby adjudged and decreed that there be allowed to flow into said Kennedy Ditch No. 1 from said Razor Creek so much water as will flow through said ditch as the same is at present constructed not to exceed seventy-five (75) statutory inches per second of time.

And that there be allowed to flow into said Kennedy Ditch No. 2 from said Razor Creek so much water as will flow through said Ditch as the same is at present constructed not to exceed fifty (50) statutory inches per second of time, for the uses aforesaid for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation.

Ditch No. 4, Priority No. 4

A. B. Coats Ditch

That said Ditch is entitled to Priority No. 4.

It is claimed by A. B. Coats.

The headgate of said Ditch is located at a point whence the S. W. corner of Sec. 4, T. 48, N. R. 3, E. N. M. M. bears S. 70° 03' W. 3956 feet. It is a ditch used for the irrigation of land, taking its supply of water from Razor Creek, and there is lying under said Ditch (160) One Hundred and Sixty Acres of land which has been irrigated by its waters. And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Razor Creek for the use aforesaid and for the benefit of the party lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation Priority No. 4, so much water as will flow through said Ditch as the same is at present constructed not to exceed One Hundred (100) statutory inches per second of time.

Ditch No. 5, Priority No. 5

Pioneer Ditch

That said Ditch is entitled to Priority No. 5.

It is claimed by Alonzo Hartman, E. R. Hartman and Outcalt Brothers.

The headgate of said Ditch is located at a point from which the N. W. Corner of the S. W. 1/4 of S. E. 1/4 of Section 1, T. 49 N. R. 1 W. N. M. M. bears N. 73° 30' W. 1350 feet. It is a dtich used for the irrigation of land taking its supply of water from Tomichi Creek and there is lying under said Ditch Six Hundred and Forty (640) acres of land which has been irrigated by its waters. And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Tomichi Creek, for the uses aforesaid, and for the benefit of the parties lawfully entitled thereto, under and by virtue of said appropriation by original construction and actual appropriation, Priority No. 5, so much water as will flow through said Ditch as the same is at present constructed, not to exceed Four Hundred (400) statutory inches of water per second of time.

Ditch No. 6, Priority No. 6

Razor Creek Ditch

That said Ditch is entitled to Priority No. 6.

It is claimed by Samuel Parrott, et al.

The headgate of said Ditch is located at a point N. 31° 10' E. 990 feet from the S. W. Corner of Section 20, T. 48 N, R. 3 E. N. M. M.

It is a Ditch used for the irrigation of land, taking its supply of water from Razor Creek, a tributary of the Tomichi Creek, and there is lying under said Ditch One Hundred and Fifty-four (154) acres of land which has been irrigated by its waters. And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Razor Creek for the use aforesaid, and for the

parties lawfully entitled thereto, under and by virtue of said appropriation by original construction and actual appropriation, Priority No. 6, so much water as will flow through said Ditch as the same is at present constructed not to exceed Ninety-six and One-fourth (96¼) statutory inches of water per second of time.

(See Page 8-A for Ditch No. 7.)

Ditch No. 8, Priority No. 8 ✓

Hirdman Ditches Nos. 1, 2 and 3 ✓

That said Ditches are entitled to Priority No. 8. Said Ditches are claimed by H. B. Hirdman. The headgate of said Ditch No. 1 is located at a point 645 feet south 4° 30' E. from the south center corner of Sec. 17, T. 48 N. R. 3 E. N. M. M. The headgate of said Ditch No. 2 is located at a point 490 feet S. 41° 5' E. from the south center corner of said Section 17, and the headgate of said Ditch No. 3 is located at a point 700 feet N. 83° E. from the south center corner of said Section 17, T. 48 N. R. 3 E. N. M. M.

They are Ditches used for the irrigation of land taking their supply of water from Razor Creek, a tributary of Tomichi Creek and there is lying under said Ditches one Hundred and Sixty (160) acres of land which has been irrigated by the waters from said ditches. And it is hereby adjudged and decreed that there be allowed to flow into said Ditches Nos. 1, 2 and three, collectively, from said Razor Creek for the use aforesaid and for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation, Priority No. 8, so much water as will flow through said Ditches as they are at present constructed, not to exceed in all of said Ditches One Hundred (100) statutory inches of water per second of time.

Ditch No. 9, Priority No. 9

Owen-Redden Ditch

That said Ditch is entitled to Priority No. 9. ✓

It is claimed by William Snyder, T. B. Redden and H. A. Olmstead.

Cont. on p. 9

Name?

Owen-Redden contd from p. 8.

corrected to T48N see p57.

The headgate of said Ditch is located at a point from which the south center corner of Sec. 15, T. 46 N. R. 4 E. N. M. M. bears S. 78° W. 1060 feet.

It is a ditch used for the irrigation of land taking its supply of water from Tomichi Creek, and there is lying under said Ditch Five Hundred and Sixty (560) acres of land which has been irrigated by the waters from said Ditch. And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Tomichi Creek for the use aforesaid for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation, Priority No. 9, so much water as will flow through said Ditch as the same is at present constructed and to exceed Three Hundred and Fifty (350) statutory inches of water per second of time.

Ditch No. 10, Priority No. 10

Hartman Ditches Nos. 1 and 2

That said Ditches are entitled to Priority No. 10.

Said Ditches are claimed by Alonzo Hartman.

The headgate of Ditch No. 1 is located at a point from which the S. E. corner of the S. E. 1/4 of N. E. 1/4 of Sec. 14, T. 49 N. R. 1 E. N. M. M. bears S. 31° 30' W. 320 feet.

approx W.

The headgate of Ditch No. 2 is located at a point from which the S. E. corner of the S. E. 1/4 of N. E. 1/4 of Sec. 14, T. 49 N. R. 1 E. N. M. M. bears South 31° 30' West 320 feet.

see p. 527

They are ditches used for the irrigation of land taking their supply of water from Stubbs Gulch, a tributary of the Tomichi Creek, and there is lying under said Ditches Nos. 1 and 2, One Hundred and Twenty (120) acres of land which has been irrigated by the waters of said Ditches. And it is hereby adjudged and decreed that there be allowed to flow into said Hartman Ditches Nos. 1 and 2, collectively, from said Stubbs Gulch for the use aforesaid for the benefit of the

Ditch No. 7, Priority No. 7

Monson & McConnell Ditch

That said Ditch is entitled to Priority No. 7.

It is claimed by W. B. Monson and D. A. McConnell.

The headgate of said Ditch is located at a point on the East side of the Tomichi Creek in the N. E. 1/4 of Sec. 12, T. 48 N. R. 3 E. N. M. M. S. 21° 23' E. 1340 feet from the N. 1/4 corner in said Sec. 12.

It is a Ditch used for the irrigation of land taking its supply of water from the said Tomichi Creek, and there is lying under said Ditch two hundred (200) acres of land which has been irrigated by its waters.

And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Tomichi Creek for the use aforesaid for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 7 - so much water as will flow through said Ditch as the same is at present constructed not to exceed one hundred twenty-five (125) statutory inches of water per second of time.

parties lawfully entitled thereto, under and by virtue of said appropriation by original construction and actual appropriation, Priority No. 10, so much water as will flow through said Ditches as they are at present constructed not to exceed Seventy-five (75) statutory inches of water per second of time in all of said ditches.

Ditch No. 11, Priority No. 11

McCanne Ditches Nos. 1, 2, and 3 For No1 See also p. 51. Ditch No 53.

That said Ditches are entitled to Priority No. 11.

They are claimed by D. J. McCanne.

The headgate of Ditch No. 1 is located at a point from which the E. 1/4 corner of Sec. 12, T. 49 N. R. 1 E. N. M. M. bears N. 28° 50' W. 580 feet.

The headgate of Ditch No. 2 is located at a point from which the corner at the center of the S. W. 1/4 of Sec. 12, T. 49 N. R. 1 E. N. M. M. bears S. 30° 30' W. 1320 feet.

The headgate of Ditch No. 3 is located at a point from which the N. W. corner of Sec. 12, T. 49 N. R. 1 E. N. M. M. bears N. 34° E. 2260 feet.

They are ditches used for the irrigation of land taking their supply of water from Tomichi Creek and there is lying under said Ditches Nos. 1, 2 and 3, Five Hundred Twenty (520) acres of land which has been irrigated by the waters from said ditches.

And it is hereby adjudged and decreed that there be allowed to flow into said Ditches Nos. 1, 2, and 3, collectively, from said Tomichi Creek, for the use aforesaid for the benefit of the parties lawfully entitled thereto, under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 11 - so much water as will flow through said Ditches as they are at present constructed not to exceed in all of said Ditches Three Hundred and Twenty-five (325) statutory inches of water per second of time.

Ditches No. 12, Priority No. 12

Snyder Ditches Nos. 1 and 2

That said Ditches are entitled to Priority No. 12. They are claimed by William Snyder.

The headgate of Ditch No. 1 is located at a point S. 51° 10' E. 1000 feet from the S. W. corner of Sec. 20, T. 48 N. R. 3 E. N. M. M.

And the headgate of Ditch No. 2 is located at a point S. 51° 10' E. 1000 feet from the S. W. corner of Sec. 20, T. 48 N. R. 3 E. N. M. M.

They are Ditches used for the irrigation of land, taking their supply of water from Razor Creek, a tributary of the Tomichi Creek, and there is lying under said Ditches Three Hundred and Twenty (320) acres of land which has been irrigated by the waters from said Ditches. And it is hereby adjudged and decreed that there be allowed to flow into said Snyder Ditches Nos. 1 and 2, collectively, from the waters of said Razor Creek for the use aforesaid and for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 12 - so much water as will flow through said Ditches as they are at present constructed not to exceed in all of said Ditches two hundred (200) statutory inches of water per second of time.

Ditch No. 13, Priority No. 13

Needle Creek Ditch

That said Ditch is entitled to Priority No. 13.

It is claimed by J. A. Millspaugh and James Young.

The headgate is located at a point from whence the S. E. corner of Sec. 13, T. 48 N. R. 3 E. bears S. 26° 08' E. 950 feet.

It is a ditch used for the irrigation of land, taking its supply of water from the Needle Creek, a tributary of the Tomichi Creek, and there is lying

under said Ditch Three Hundred and Twenty (320) acres of land which has been irrigated by the waters from said Ditch.

And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Needle Creek for the use aforesaid, for the benefit of the parties lawfully entitled thereto, under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 13 - so much water as will flow through said Ditch as the same is at present constructed not to exceed Two Hundred (200) statutory inches of water per second of time.

Ditch No. 14, Priority No. 14

S. Davidson & Co. Ditch

That said Ditch is entitled to Priority No. 14.

It is claimed by M. C. Deering, Pat O'Fallon, A. B. McConnell, the heirs of S. Davidson, Deceased, and George Haseltine.

The headgate of said Ditch is located at a point at a dam S. 35° E. 800 feet from the N. E. corner of Sec. 17 T. 48 N. R. 4 E. N. M. M.

It is a ditch used for the irrigation of land, taking its supply of water from Tomichi Creek, and there is lying under said Ditch Nine Hundred Fifty (950) acres of land, which has been irrigated by the waters from said Ditch. And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Tomichi Creek, for the use aforesaid for the benefit of the parties lawfully entitled thereto, under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 14 - so much water as will flow through said Ditch as the same is at present constructed not to exceed five hundred and ninety three and three fourths (593 3/4) statutory inches of water per second of time.

Ditch No. 15, Priority No. 15

D. A. McConnell Ditch

That said Ditch is entitled to Priority No. 15.

It is claimed by D. A. McConnell.

The headgate of said Ditch is located at a point on the N. W. bank of a slough from Tomichi Creek in the S. W. 1/4 of N. E. 1/4 Sec. 12, T. 48 N. R. 3 E. N. M. M. N. 30° W. 700 feet from the S. E. corner of the N. E. corner of said Sec. 12.

It is a ditch used for the irrigation of land taking its supply of water from Tomichi Creek and there is lying under said Ditch forty (40) acres of land which has been irrigated by its waters.

And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Tomichi Creek, for the use aforesaid for the benefit of the party lawfully entitled thereto under and by virtue of said appropriation by original construction andactual appropriation - Priority No. 15 - so much water as will flow through said Ditch as the same is at present constructed not to exceed twenty-five (25) statutory inches of water per second of time.

Ditch No. 16 - Priority No. 16

Cox & McConnell Ditch

That said Ditch is entitled to Priority No. 16.

It is claimed by D. A. McConnell and _____Bush.

The headgate is located at a point S. 37° W. 1523 feet from the N. 1/4 corner in Sec. 7, T. 48 N. R. 4 E. N. M. M.

It is a ditch used for the irrigation of land taking its supply of water from Tomichi Creek and there is lying under said Ditch sixty (60) acres of land which has been irrigated by its waters.

And it is hereby adjudged and decreed that there be allowed to flow

into said Ditch from said Tomichi Creek for the use aforesaid and for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation - Priortiy No. 16 - so much water as will flow through said Ditch as the same is at present constructed not to exceed thirty-seven and one-half ($37\frac{1}{2}$) statutory inches of water per second of time.

Ditch No. 17, — Priority No. 17

Goodrich Ditch

That said Ditch is entitled to Priority No. 17.

It is claimed by John T. Parlin.

The headgate of said Ditch is located at a point from which the S. W. corner of Sec. 28, T. 49 N. R. 3 E. N. M. M. bears N. 51° 36' W. 5115 feet.

It is a ditch used for the irrigation of land taking its supply of water from Tomichi Creek and there is lying under said Ditch three hundred and twenty (320) acres of land which has been irrigated by its waters. And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Tomichi Creek for the use aforesaid and for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 17 - so much water as will flow through said Ditch as the same is at present constructed not to exceed two hundred (200) statutory inches of water per second of time.

Ditch No. 18, Priority No. 18

Coats Brothers Ditch

That said Ditch is entitled to Priority No. 18.

It is claimed by J. B. Coats and A. B. Coats.

The headgate of said Ditch is located at a point whence the S. E. corner of Sec. 3, T. 48 N. R. 3 E. N. M. M. bears S. 11° 49' E. 2400 feet.

It is a ditch used for the irrigation of land taking its supply of water

from Tomichi Creek and there is lying under said Ditch Eighty (80) acres of land which has been irrigated by its waters, and it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Tomichi Creek for the use aforesaid for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 18 - so much water as will flow through said Ditch as the same is at present constructed not to exceed Fifty (50) statutory inches of water per second of time.

Ditch No. 19, Priority No. 19

The Gullet-Tomichi Irrigating Ditch

That said Ditch is entitled to Priority No. 19.

It is claimed by Susannah Gullett, William H. Turner, and William N. Cromwell.

The headgate is located at a point from whence the N. E. corner of Section 5, T. 49 N. R. 1 E. N. M. M. bears N. 27° E. 1915 feet.

It is a Ditch used for the irrigation of land taking its supply of water from Tomichi Creek, and there is lying under said Ditch five hundred ten (510) acres of land which has been irrigated by its waters. And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Tomichi Creek for the use aforesaid for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 19 - so much water as will flow through said Ditch as the same is at present constructed not to exceed Three Hundred Eighteen and Three-fourths (318 3/4) statutory inches of water per second of time.

Ditch No. 20, Priority No. 20

Owen No. 1 Ditch

That said Ditch is entitled to Priority No. 20.

It is claimed by William Snyder.

The headgate is located at a point S. 7° 30' E. 446 feet from the south center corner of Sec. 15, T. 49 N. R. 4 E. N. M. M.

It is a Ditch used for the irrigation of land taking its supply of water from Tomichi Creek and there is lying under said Ditch One Hundred Sixty (160) acres of land which has been irrigated by its waters.

And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Tomichi Creek for the use aforesaid and for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 20 - so much water as will flow through said Ditch as the same is at present constructed not to exceed One Hundred (100) statutory inches of water per second of time.

Ditch No. 21, Priority No. 21

Owen Ditch No. 2

That said Ditch is entitled to Priority No. 21.

It is claimed by William Snyder.

The headgate is located at a point N. 83° W. 800 feet from the West center corner of Sec. 21, T. 49 N. R. 4 E. N. M. M.

It is a Ditch used for the irrigation of land taking its supply of water from Needle Creek, a tributary of the Tomichi Creek, and there is lying under said Ditch forty (40) acres of land which has been irrigated by its waters.

And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Needle Creek for the use aforesaid and for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 21 - so much water as will flow through said Ditch as the same is at present constructed not to exceed twenty-five (25) statutory inches of water per second of time.

Ditch No. 22, Priority No. 22

The Jennings-Elsen Ditch

That said Ditch is entitled to Priority No. 22.

It is claimed by I. W. Jennings and J. P. Elsen.

The headgate of said Ditch is located at a point from which the S. 1/4 corner of Sec. 8, T. 49 N. R. 2 E. N. M. M. bears S. 21° E. 100 feet.

It is a ditch used for irrigation of land taking its supply of water from Tomichi Creek and there is lying under said Ditch One Hundred and Ninety (190) acres of land which has been irrigated by its waters.

And it is hereby adjudged and decreed that there be allowed to flow into said Ditch for the use afore said for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 22 - so much water as will flow through said Ditch as the same is at present constructed not to exceed One Hundred and Eighteen and Three-fourths (118 3/4) statutory inches of water per second of time.

Ditch No. 23, Priority No. 23

Hellmuth Ditches Nos. 1 and 2

That said Ditches are entitled to Priority No. 23.

It is claimed by the heirs of Wendell Hellmuth, Deceased.

The headgate of Ditch No. 1 is located at a point from which the East center corner of Sec. 22, T. 48 N. R. 4 E. N. M. M. bears N. 28° 30' E. 2640 feet. And the headgate of said Ditch No. 2 is located at a point from which the East center corner of Sec. 22, T. 48 N. R. 4 E. N. M. M. bears N. 37° 30' E. 3465 feet.

They are Ditches used for the irrigation of land taking their supply of water from Tie Creek, a tributary of Tomichi Creek, and there is lying under said

Ditches One Hundred (100) acres of land which has been irrigated by the waters from said Ditches.

And it is hereby adjudged and decreed that there be allowed to flow into said Ditches Nos. 1 and 2, collectively, from said Tie Creek for the use aforesaid, and for the benefit of the parties lawfully entitled thereto, under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 213 - so much water as will flow through said Ditches as they are at present constructed not to exceed Sixty-two and One-half ($62\frac{1}{2}$) statutory inches of water per second of time to all of said ditches.

Ditch No. 24, Priority No. 24

The Arch Irrigating Ditch

That said Ditch is entitled to Priority No. 24.

It is claimed by Kate L. Arch.

The headgate of said Ditch is located at a point S. 55° E. 480 feet from the S. E. corner of Sec. 16, T. 48 N. R. 4 E. N. M. M.

It is a Ditch used for the irrigation of land, taking its supply of water from Tomichi Creek and there is lying under said Ditch Eight Hundred and Eighty-two (882) acres of land which has been irrigated by its waters.

And it is hereby adjudged and decreed that there be allowed to flow into said Ditch from said Tomichi Creek, for the use aforesaid for the benefit of the parties lawfully entitled thereto under and by virtue of said appropriation by original construction and actual appropriation - Priority No. 24 - so much water as will flow through said Ditch as the same is at present constructed not to exceed Five Hundred Fifty-one and One-quarter ($551\frac{1}{4}$) statutory inches of water per second of time.

As to the J. B. Coats Ditches Nos. 1 and 2, and the Bert McConnell Ditch, the Court finds that the evidence submitted is indefinite and insufficient upon which to base a finding and, therefore, the Court declines to award any priorities to said Ditches.

The claimants of the several Ditches awarded Priorities Nos. 4, 5, 8, 9, 10, 12, 17, 18, 20, 21, and 24 in this decree, by their Counsel T. C. Brown, Esq., except to the findings and decree of the Court and William Snyder as claimant of Snyder Ditches Nos. 1 and 2 awarded Priority No. 12 herein, by his Counsel T. C. Brown, except to the findings and decree of the Court herein, and on application he is allowed thirty days from and after this date in which to file Statement and Petition for an Appeal.

In the District Court of the Seventh Judicial District of the State of Colorado, sitting within and for the County of Gunnison, on this Friday morning, at 10:00 o'clock April 29th, A. D. 1904, Court opened pursuant to adjournment. This being the Twelfth day of this regular April 1904 Term.

Present and Presiding: Hon. Theron Stevens, Judge
Wm. Watson, Esq., Sheriff
Attest: - E. G. Palmer, Clerk.

BE IT REMEMBERED: That among the proceedings of said Court, had and entered of record on the day last aforesaid, in Journal H, pages 91 to 200 inclusive, of the records of said Court, appeared the following towit:

State of Colorado)
) In the District Court
County of Gunnison) ss.

In the Matter of the Adjudication)
)
of the Priorities of Water Rights) No. 1266.
)
in Water District No. 28.)

****

Subject to, and in accordance with the several last mentioned provisions, it is further as to the said several ditches, canals and reservoirs, and the several appropriations of water by means of them respectively claimed in this matter, ordered, adjudged and decreed, as follows, towit:

That said ditches be and the same are hereby numbered according to the date of their several and respective constructions, and said dates are hereby determined and decreed to be as follows; towit:

No. 25 - The Government Ditch	Dec.	22, 1874
26 - The Pole Road Ditch	Dec.	22, 1874

Cheeney Ditch
Cheeney

Const date

No. 27 -	The Cheney No. 1 Ditch	May 15, 1876
28 -	The Cheney No. 2 Ditch	May 15, 1876
29 -	The Parlin No. 2 Ditch	June 1, 1876
30 -	The Parlin No. 1 Ditch	June 1, 1876
31 -	The Pass Creek Ditch	July 14, 1876
32 -	The Richardson No. 1 Ditch	Aug. 31, 1876
33 -	The Head No. 1 Ditch	Apr. 15, 1876
34 -	The Head No. 2 Ditch	Apr. 15, 1877
35 -	The Head & Cortay Nos. 3 & 4 Ditches	Apr. 15, 1877
36 -	The Everly No. 1 Ditch	May 31, 1877
37 -	The Vader-Rausis Ditch	June 1, 1877
38 -	The Elsen-Vader Ditch	July 1, 1877
39 -	The Pearce Ditch	Mch. 15, 1878
40 -	The Stephenson Ditch	May 1, 1878
41 -	The John B. Coats No. 2 Ditch	May 1, 1878
42 -	The Kennedy No. 3 Ditch	May 1, 1878
43 -	The Cox Irrigating Ditch	May 30, 1878
44 -	The Harris Ditch	May 31, 1878
45 -	The Griffing No. 2 Ditch	June 1, 1878
46 -	The Griffing No. 1 Ditch	June 1, 1878
47 -	The Coats Bros. Ditch	May 1, 1879
48 -	The Munson - McConnell Ditch	May 31, 1879
49 -	The McDowell & Van Tuyl No. 1 Ditch	June 1, 1879
50 -	The Billy Sanderson Ditch	June 1, 1879
51 -	The Munson Creek Ditch	July 1, 1879
52 -	The Lockwood-Mundell Ditch	Nov. 15, 1879
53 -	The McCanne No. 1 Ditch	Dec. 31, 1879

54 -	The Kennedy No. 5 Ditch	May 1, 1880
55 -	The Hot Springs Nos. 1 & 2 Ditches	May 1, 1880
56 -	The Smith-Ford No. 2 Ditch	May 31, 1880
57 -	The Adams No. 1 Ditch	May 31, 1880
58 -	The Smith-Ford No. 1 Ditch	May 31, 1880
59 -	The Cain-Borsum Ditch	June 1, 1880
60 -	The Owen-Redden Ditch	Nov. 8, 1880
61 -	The Miller Ditch	Apr. 12, 1881
62 -	The McDowell-Van Tuyl No. 2 Ditch	May 15, 1881
63 -	The Woodbridge Irrigating Ditch	May 15, 1881
64 -	The Irwin Ditch	May 31, 1881
65 -	The Cox & McConnell Ditch	May 31, 1881
66 -	The Pisel Canals Nos. 1 and 2,	June 1, 1881
67 -	The Slough Ditch	June 1, 1881
68 -	The Bennett No. 2 Ditch	June 1, 1881
69 -	The Flick Ditch	June 15, 1881
70 -	The Hannah J. Winters No. 2 Ditch	July 1, 1881
71 -	The Wicks-Rowser Ditch	Oct. 10, 1881
72 -	The Cole Ditch	Dec. 31, 1881
73 -	The Strachan Ditch	Mch. 21, 1882
74 -	The Van Bibber Ditch	May 1, 1882
75 -	The McGowan Ditch	May 1, 1882
76 -	The Kennedy No. 4 Ditch	May 1, 1882
77 -	The Funk Ditch	May 1, 1882
78 -	The Funk Waste Water Ditch	May 1, 1882

79 -	The Spring Ditch	May 1, 1882
80 -	The Means Bros. No. 11 Ditch	May 31, 1882
81 -	The Home Ditch	May 31, 1882
82 -	The Perry Irrigating Ditch	May 31, 1882
83 -	The Trail Creek Ditch	June 1, 1882
84 -	The Sutton No. 4 (Amended) Ditch	June 1, 1882
85 -	The Owen No. 3 Ditch	June 1, 1882
86 -	The J. T. Horn Ditch	June 1 , 1882
87 -	The Means Bros. No. 10 Ditch	June 1, 1882
88 -	The Owen No. 2 Ditch	Dec. 31, 1882
89 -	The Means Bros. No. 12 Ditch	May 1, 1883
90 -	The Duber Ditch	May 1, 1883
91 -	The Gunther No. 1 Ditch	June 1, 1883
92 -	The Gutjo Ditch	July 1, 1883
93 -	The O'Fallon No. 3 Ditch	July 14, 1883
94 -	The Anna No. 1 Ditch	May 1, 1884
95 -	The Anna No. 2 Ditch	May 1, 1884
96 -	The Anna No. 3 Ditch	May 1, 1884
97 -	The John B. Coats No. 1 Ditch	May 1, 1884
98 -	The Everly No. 1 Ditch	May 6, 1884
99 -	The Stevens Ditch	May 31 , 1884
100 -	The Gee Canal	June 1, 1884
101 -	The Wood & Gee Ditch	June 1, 1884
102 -	The Lewis-Sturgis-Austin Ditch	June 1, 1884
103 -	The Arch Irrigating Ditch	Jan. 1, 1885
104 -	The Miller-Crary Ditch	May 31, 1885
105 -	The Means Bros. No. 8 Ditch	May 31, 1885

Munson

106 - The Munson Ditch — June 1, 1885

107 - The Extensions Nos. 1 & 2 Jennings Elsen/ Ditch — Apr. 1, 1886

108 - The Waste Water Ditch — Apr. 15, 1886

109 - The N. T. Crary No. 2 Ditch — May 1, 1886

110 - The L. L. Bush Nos. 1, 2, 3, 4, & 5 Ditches — May 1, 1886

111 - The Willow Creek Ditch — May 1, 1886

112 - The Adams No. 2 Ditch — May 31, 1886

113 - The Richardson No. 2 Ditch — June 1, 1886

114 - The Sutton No. 5 Ditch — June 1, 1886

115 - The Means Bros. No. 13 Ditch — June 1, 1886

116 - The John Myers No. 2 Ditch — Jan. 1, 1887

117 - The Kendall No. 2 Ditch — Apr. 15, 1887

118 - The Gilbertson No. 1 Ditch — Apr. 20, 1887

119 - The Gilbertson No. 2 Ditch — Apr. 20, 1887

120 - The Moran Ditch — May 1, 1887

121 - The W. L. Perry No. 2 Ditch — May 1, 1887

122 - The Bennett-Morton Ditch — May 25, 1887

123 - The W. L. Perry No. 3 Ditch — May 31, 1887

124 - The Elsen-Cochetopa Ditch — May 31, 1887

125 - The Duckett Ditch — June 1, 1887

126 - The McConnell Ditch — May 1, 1888

127 - The John Myers Ditch — May 6, 1888

128 - The W. L. Perry No. 6 Ditch — June 1, 1888

129 - The W. L. Perry No. 1 Ditch — June 1, 1888

130 - The Guenther No. 2 Ditch — June 1, 1888

131 - The Sutton No. 2 Ditch — June 1, 1888

132 - The Clark No. 1 Ditch — June 1, 1888

133 - The Clark No. 2 Ditch	June	1, 1888
134 - The Clark No. 3 Ditch	June	1, 1888
135 - The Means Bros. No. 1 Ditch	June	30, 1888
136 - The Means Bros. No. 2 Ditch	June	30, 1888
137 - The McDonough Ditch	Aug.	15, 1888
138 - The Kendall No. Ditch	Sept.	15, 1888
139 - The Crary Ditch	Oct.	13, 1888
140 - The Crary's Los Pinos Ditch	Oct.	13, 1888
141 - The Leahy Ditch	June	1, 1889
142 - The Cole Nos. 1, 2 & 3 Ditches	Oct.	28, 1889
143 - The Griffing Extension McCanne No. 3 and Lando No. 1 Ditches	May	1, 1890
144 - The Sutton No. 3 (Amended) Ditch	May	1, 1890
145 - The Sutton No. 1 (Amended) Ditch	June	1, 1890
146 - The Hawes, Bergen, Gilbertson Ditch	Aug.	22, 1890
147 - The Means Bros. No. 3 Ditch	May	1, 1891
148 - The Means Bros. No. 4 Ditch	May	1, 1891
149 - The Means Bros. No. 5 Ditch	May	1, 1891
150 - The Means Bros. No. 6 Ditch	May	1, 1891
151 - The Willard Ditch	June	1, 1891
152 - The Willard No. 2 Ditch	June	1, 1891
153 - The Henry Roberts No. 1 Ditch	May	1, 1892
154 - The Henry Roberts No. 2 Ditch	May	1, 1892
155 - The Davis (Amended) Ditch	May	1, 1892
156 - The Joe Cuenin Ditch	May	7, 1892
157 - The Louis Sarrasin Ditch	May	1, 1894
158 - The Kendall No. 3 Ditch	May	1, 1894
159 - The Dome Creek Ditch	May	1, 1894

159½- The Lockett Ditch	June 1, 1894
160 - The Lindsay-Guenther Ditch	June 1, 1894
161 - The Parlin Quartz Creek Ditch	May 1, 1895
162 - The Waste Water Ditch	May 1, 1895
163 - The Agate No. 1 Ditch	May 31, 1895
164 - The South Side Ditch	June 1, 1896
165 - The Rausis Ditch	May 1, 1897
166 - The Sutton Quartz Creek No. 2 Ditch	June 1, 1897
167 - The Sutton Quartz Creek No. 3 Ditch	June 1, 1897
168 - The O'Regan No. 2 Ditch	June 1, 1897
169 - The Lando No. 3 Ditch	June 1, 1898
170 - The Roberts Ditch	June 15, 1898
171 - The Kendall No. 4 Ditch	May 1, 1900
172 - The John Myers No. 3 Ditch	Nov. 17, 1900
173 - The O'Regan No. 1 Ditch	Apr. 23, 1901
174 - The McDonald-Berdel Extension Ditch	Mch. 15, 1902
175 - The Means Bros. No. 7 Ditch	June 12, 1902
176 - The Agate No. 2 Ditch	June 12, 1902
177 - The Kane Ditch	June 28, 1902
178 - The Kendall No. 5 Ditch	Oct. 28, 1902
179 - The Sutton Quartz Creek No. 1 Ditch	Apr. 30, 1903
180 - The D. W. Biebel Enlargement and Extension/ Ditch	Sept. 1, 1903

And the several appropriations of water for said ditches and their respective enlargements and extensions are hereby numbered and declared, with the dates of said appropriations, the amount of water in cubic feet per second of time adjudged to said ditches on their respective priorities as follows, towit:

Page	Ditch Number	Name of Ditch	Priority No.	Date of Appropriation	Cubic Feet of Water per second
31	25	Government Ditch	(25	Dec. 22, 1874	1.1
		" "	(29	Aug. 1, 1876	5.3
		" "	(62	June 1, 1882	1.1
		" "	(102	Oct. 24, 1888	1.7
32	26	Pole Road Ditch	(25	Dec. 22, 1874	0.4
		" "	(90	Apr. 21, 1887	0.8
32	27	Cheeney No. 1 Ditch	(26	May 15, 1876	0.4
		" " "	(77	Mch. 15, 1885	0.5
33	28	Cheeney No. 2 Ditch	(26	May 15, 1876	0.6
		" " "	(54	June 1, 1881	1.2
34	29	Parlin No. 2 Ditch	27	June 1, 1876	3.2
35	30	Parlin No. 1 Ditch	27	June 1, 1876	2.8
35	31	Pass Creek Ditch	28	July 14, 1876	1.6
36	32	Richardson No. 1 Ditch	30	Aug. 31, 1876	1.4
37	33	Head No. 1 Ditch	31	Apr. 15, 1877	0.3
37	34	Head No. 2 Ditch	31	Apr. 15, 1877	0.3
8	35	Head & Cortay Nos. 3 & 4 Ditches	(31	Apr. 15, 1877	1.12
		" " " " "	(78	Apr. 1, 1885	0.48
9	36	Everly No. 1 Ditch	32	May 31, 1877	1.8
10	37	Vader-Rausis Ditch	33	June 1, 1877	2.
10	38	Elsen-Vader Ditch	34	July 1, 1877	5.5
11	39	Pearce Ditch	35	Mar. 15, 1878	1.8
42	40	Stephenson Ditch	(36	May 1, 1878	1.
		" "	(63	June 20, 1882	3.
		" "	(115	May 8, 1895	1.6
43	41	John B. Coats No. 2 Ditch	36	May 1, 1878	1.6
43	42	Kennedy No. 3 Ditch	36	May 1, 1878	0.7
44	43	Cox Irrigating Ditch	37	May 30, 1878	0.88
44	44.	Harris Ditch	38	May 31, 1878	0.4
45	45	Griffing No. 2 Ditch	39	June 1, 1878	2.
	45	Griffing No. 2 Ditch	64	Aug. 1, 1882	0.5
46	46	Griffing No. 1 Ditch	(39	June 1, 1878	2.
		" " "	(44	Aug. 1, 1879	1.
47	47	Coats Bros. Ditch	40	May 1, 1879	5.
48	48	Munson & McConnell Ditch	41	May 31, 1879	1.1
48	49	McDowell & Van Tuyl No. 1 Ditch	42	June 1, 1879	3.
49	50	Billy Sanderson Ditch	42	June 1, 1879	0.76
50	51	Munson Creek Ditch	43	July 1, 1879	0.3
50	52	Lockwood-Mundell Ditch	45	Nov. 15, 1879	10.6
51	53	McCanne No. 1 Ditch	46	Dec. 31, 1879	1.
52	54	Kennedy No. 5 Ditch	47	May 1, 1880	1.9
52	55	Hot Spgs. Nos. 1 & 2 Ditches	(47	May 1, 1880	2.8
		" " " " "	(103	Nov. 30, 1888	2.2
53	56	Smith-Ford No. 2 Ditch	48	May 31, 1880	4.6
54	57	Adams No. 1 Ditch	(48	May 31, 1880	1.
		" " " "	(121	June 1, 1897	0.7
55	58	Smith-Ford No. 1 Ditch	(48	May 31, 1880	1.2
		" " " "	(54	June 1, ~~1887~~ 1881	1.
		" " " "	(94	June 1, 1887	0.7
56	59	Cain-Borsum Ditch	(49	June 1, 1880	2.44
		" " "	(94	June 1, 1887	1.2

1881 in published decretal order RJB

Page	Ditch Number	Name of Ditch	Priority No.	Date of Appropriation	Cubic Feet of Water per second
57	60	Owen-Redden Ditch	50	Nov. 8, 1880	2.4
58	61	Miller Ditch	51	Apr.12, 1881	2.
58	62	McDowell & Van Tuyl No. 2 Ditch	52	May 15, 1881	1.2
59	63	Woodbridge Irrigating Ditch	52	May 15, 1881	1.6
60	64	Irwin Ditch	(53	May 31, 1881	1.6
		" "	(122	June 1, 1898	1.6
61	65	Cox & McConnell	53	May 31, 1881	1.4
61	66	Pisel Canals Nos. 1 and 2 Ditches	54	June 1, 1881	2.8
		" " " "	66	Jan. 1, 1883	1.3
62	67	Slough Ditch	54	June 1, 1881	1.6
63	68	Bennett No. 2 Ditch	54	June 1, 1881	1.4
64	69	Flick Ditch	55	June15, 1881	1.6
65	70	Hannah J. Winters No. 2 Ditch	56	July 1, 1881	3.8
65	71	Wicks-Rowser Ditch	57	Oct.10, 1881	1.2
66	72	Cole Ditch	58	Dec. 31,1881	2.
67	73	Strachan Ditch	59	Mar.21, 1882	1.6
	73	" "	(71	Jan.21, 1884	0.7
		" "	(79	May 24, 1885	1.1
68	74	Van Bibber Ditch	60	May 1,1882	1.4
68	75	McGowan Ditch	60	May 1, 1882	2.2
69	76	Kennedy No. 4 Ditch	60	May 1, 1882	0.6
70	77	Funk Ditch	60	May 1, 1882	2.
70	78	Funk Waste Water Ditch	60	May 1, 1882	0.4
71	79	Spring Ditch	60	May 1, 1882	0.4
72	80	Means Bros. No. 11 Ditch	61	May 31, 1882	0.4
72	81	Home Ditch	61	May 31, 1882	2.4
73	82	Perry Irrigating Ditch	(61	May 31, 1882	3.
		" " "	(94	June 1, 1887	2.7
74	83	Trail Creek Ditch	(62	June 1, 1882	0.3
		" " "	(124	July17, 1898	0.4
75	84	Sutton No. 4 (Amended) Ditch	62	June 1, 1882	0.7
76	85	Owen No. 3 Ditch	62	June 1, 1882	1.2
76	86	J. T. Horn Ditch	62	June 1, 1882	2.4
77	87	Means Bros. No. 10 Ditch	62	June 1, 1882	1.8
78	88	Owen No. 2 Ditch	65	Dec.31, 1882	2.
78	89	Means Bros. No. 12 Ditch	67	May 1, 1883	0.4
79	90	Duber Ditch	67	May 1, 1883	1.
80	91	Guenther No. 1 Ditch	68	June 1, 1883	1.6
81	92	Cutjo Ditch	69	July 1, 1883	2.6
81	93	O'Fallon No. 3 Ditch	70	July14, 1883	2.8
82	94	Anna No. 1 Ditch	72	May 1, 1884	1.6
83	95	Anna No. 2 Ditch	72	May 1, 1884	0.8
83	96	Anna No. 3 Ditch	72	May 1, 1884	0.8
84	97	John B. Coats No. 1 Ditch	72	May 1, 1884	0.4
85	98	Everly No. 2 Ditch	73	May 6, 1884	2.4
85	99	Stevens Ditch	74	May 31, 1884	0.8
86	100	Gee Canal	75	June 1, 1884	1.6

	Ditch Number	Name of Ditch	Priority No.	Date of Appropriation	Cubic Feet of Water per second
87	101	Wood and Gee Ditch	75	June 1, 1884	5.4
87	102	Lewis-Sturgis-Austin Ditch	75	June 1, 1884	3.
88	103	Arch Irrigating Ditch	(76	Jan. 1, 1885	3.
		" " "	(95	May 1, 1888	4.4
		" " "	(135	June 1, 1903	3.6
89	104	Miller-Crary Ditch	80	May 31, 1885	3.3
90	105	Means Bros. No. 8 Ditch	80	May 31, 1885	3.6
90	106	Monson Ditch Ditch	81	June 1, 1885	0.3
91	107	Extension Nos. 1 & 2 Jennings-Elsen/	(82	Apr. 1, 1886	0.1
		" " " " "	(128	Mar. 1, 1902	0.9
92	108	Waste Water Ditch	83	Apr. 15, 1886	1.4
93	109	N. T. Crary No. 2 Ditch	84	May 1, 1886	1.
93	110	L. L. Bush Nos. 1, 2, 3, 4 & 5 Ditches	84	May 1, 1886	1.2
94	111	Willow Creek Ditch	84	May 1, 1886	1.4
95	112	Adams No. 2 Ditch	85	May 31, 1886	1.6
96	113	Richardson No. 2 Ditch	86	June 1, 1886	0.2
96	114	Sutton No. 5 Ditch	86	June 1, 1886	0.8
97	115	Means Bros. No. 13 Ditch	86	June 1, 1886	0.4
98	116	John Myers No. 2 Ditch	87	Jan. 1, 1887	0.6
98	117	Kendall No. 2 Ditch	88	Apr. 15, 1887	0.7
99	118	Gilbertson No. 1 Ditch	89	Apr. 20, 1887	2.7
100	119	Gilbertson No. 2 Ditch	89	Apr. 20, 1887	0.6
100	120	Moran Ditch	91	May 1, 1887	1.1
101	121	W. L. Perry No. 2 Ditch	91	May 1, 1887	0.8
102	122	Bennett-Morton Ditch	92	May 25 , 1887	0.6
102	123	W. L. Perry No. 3 Ditch	93	May 31, 1887	0.7
103	124	Elsen-Cochetopa Ditch	93	May 31, 1887	1.2
104	125	Duckett Ditch	94	June 1, 1887	4.
104	126	McConnell Ditch Irrigating	95	May 1, 1888	1.6
	126	McConnell Ditch	133	Mar. 1, 1903	1.2
105	127	John Myers Ditch	96	May 6, 1888	0.7
106	128	W. L. Perry No. 6 Ditch	97	June 1, 1888	3.4
107	129	W. L. Perry No. 1 Ditch	97	June 1, 1888	0.7
107	130	Guenther No. 2 Ditch	97	June 1, 1888	0.4
108	131	Sutton No. 2 Ditch (AMENDED)	97	June 1, 1888	0.4
109	132	Clark No. 1 Ditch	97	June 1, 1888	1.2
109	133	Clark No. 2 Ditch	97	June 1, 1888	1.4
110	134	Clark No. 3 Ditch	97 98?	June 1, 1888	2.5
111	135	Means Bros. No. 1 Ditch	98	June 30, 1888	0.4
111	136	Means Bros. No. 2 Ditch	98	June 30, 1888	1.5
112	137	McDonough Ditch	99	Aug. 15, 1888	3.72
113	138	Kendall No. 1 Ditch	100	Sept.15, 1888	1.1
113	139	Crary Ditch	101	Oct. 13, 1888	7.2
114	140	Crary's Los Pinos Ditch	101	Oct. 13, 1888	2.5
115	141	Leahy Ditch	104	June 1, 1889	1.6
115	142	Cole Nos. 1, 2 & 3 Ditches	105	Oct. 28, 1889	1.6
116	143	Griffing Extension ~~McConnell~~) of the McCanne No. 3 & Lando No. 1 Ditches)	106	May 1, 1890	0.8
117	144	Sutton No. 3 (Amended) Ditch	106	May 1, 1890	0.3
118	145	Sutton No. 1 (Amended) Ditch	107	June 1, 1890	0.4

Page	Ditch Number	Name of Ditch	Priority No.	Date of Appropriation	Cubic Feet of Water per second
118	146	Hawes-Bergen-Gilbertson Ditch	108	Aug. 22, 1890	3.1
119	147	Means Bros. No. 3 Ditch	109	May 1, 1891	0.6
120	148	Means Bros. No. 4 Ditch	109	May 1, 1891	1.4
120	149	Means Bros. No. 5 Ditch	109	May 1, 1891	1.4
120A	150	Means Bros. No. 6 Ditch	109	May 1, 1891	0.4
120B	151	Willard Ditch	110	June 1, 1891	1.4
120B	152	Willard No. 2 Ditch	110	June 1, 1891	0.2
120C	153	Henry Roberts No. 1 Ditch	111	May 1, 1892	1.
120D	154	Henry Roberts No. 2 Ditch	111	May 1, 1892	1.
120D	155	Davis (Amended) Ditch	111	May 1, 1892	0.8
120E	156	Joe Guenin Ditch	112	May 7, 1892	0.4
120F	157	Louis Sarrasgin Ditch	113	May 1, 1894	0.6
120F	158	Kendall No. 3 Ditch	113	May 1, 1894	0.4
120G	159	Dome Creek Ditch	113	May 1, 1894	0.2
120H	159½	Lockett Ditch	114	June 1, 1894	0.4
120H	160	Lindsay-Guenther Ditch	114	June 1, 1894	0.6
120I	161	Parlin Quartz Creek Ditch	116	May 1, 1895	2.4
120J	162	Waste Water Ditch	117	May 1, 1895	1.
120J	163	Agate No. 1 Ditch	118	May 31, 1895	0.2
120K	164	South Side Ditch	119	June 1, 1896	2.4
120L	165	Rausis Ditch	120	May 1, 1897	2.4
120L	166	Sutton Quartz Creek No. 2 Ditch	121	June 1, 1897	0.6
120M	167	Sutton Quartz Creek No. 3 Ditch	121	June 1, 1897	0.7
120N	168	O'Regan No. 2 Ditch	121	June 1, 1897	0.9
120N	169	Lando No. 3 (Extension of McCanne No. 2 Ditch)	122	June 1, 1898	1.
120O	170	Roberts Ditch	123	June 15, 1898	3.2
120P	171	Kendal No. 4 Ditch	125	May 1, 1900	0.7
120P	172	John Myers No. 3 Ditch	126	Nov. 17, 1900	0.08
120Q	173	O'Regan No. 1 Ditch	127	Apr. 23, 1901	0.8
120R	174	McDonald-Berdel Extension Ditch	129	Mar. 15, 1902	1.
120S	175	Means Bros. No. 7 Ditch	130	June 12, 1902	1.2
120S	176	Agate No. 2 Ditch	130	June 12, 1902	0.4
120T	177	Kane Ditch	131	June 28, 1902	0.7
120V	178	Kendall No. 5 Ditch	132	Oct. 28, 1902	0.8
120V	179	Sutton Quartz Creek No. 1 Ditch	134	Apr. 30, 1903	1.1
120V	180	D. W. Biebel Enlargement and Extension Ditch, being an Extension and Enlargement of McCanne No. 2 & Lando No. 3 Ditches	136	Sept. 1, 1903	2.4

And the entire amount of water appropriated from the said Tomichi Creek and all its tributaries in said Water District No. 28, under the priorities established by this decree, is computed at 284.68 cubic feet of water per second of time.

And, more particularly in regard to the said several Ditches, enlargements

and extensions thereof respectively, as follows, towit:

DITCH NO. 25 PRIORITY NOS. 25, 29, 62, and 102

THE GOVERNMENT DITCH

That said ditch is entitled to priority No. 25, 29, 62, and 102. It is claimed by John McDonough, of Cochetopa, Colo. The headgate of said Ditch is located on the North bank of Los Pinos Creek, a tributary of the Tomichi Creek, at a point whence the S. W. Cor. Sec. 35, T. 46 N. R. 1 E. N. M. M. bears S. 85° W. 1062 feet, and the general course of the ditch is Northeasterly from its headgate.

Length of Ditch 1.5 miles; width 5. feet; depth 2 feet; grade 14.5 feet per mile; carrying capacity 12.11 cubic feet per second.

It is a ditch used for the irrigation of land, taking its supply of water from Los Pinos Creek a tributary of Cochetopa Creek, which is a tributary of Tomichi Cree; and there are about 460 acres of land belonging to claimant and 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 Los Pinos Creek, for the use aforesaid, for the benefit of the party lawfully entitled thereto under and by virtue of said original construction and actual appropriation, Priority No. 25 not to exceed 1.1 cubic feet of water per second of time. And further, that there be allowed to flow into said Ditch from said Creek for the use aforesaid and benefit of claimant, Priority No. 29 5.3 cubic feet of water per second of time. And, further, that there be allowed to flow into said Ditch from said Creek for the use and benefit of the claimant Priority No. 62, - 1.1 cubic feet of water per second of time. And further, that there be allowed to flow into said ditch from said Creek, for the use and benefit of the claimant aforesaid, Priority No. 102, - 1.7 cubic feet of water per second of time, and the whole amount of water to which said ditch is at present entitled under the said several Priorities No.s 25, 29, 62, and 102, is 9.2 cubic feet per second of time.

feet of water per second of time.

And, further, that there be allowed to flow into said ditch from the waters of said Tomichi Creek, for the use and benefit of the claimants aforesaid, Priority No. 44 - 1 cubic foot of water per second of time.

The whole amount of water to which said ditch is at present entitled under said Priorities Nos. 39 and 44 is 3. cubic feet per second of time.

DITCH NO. 47 PRIORITY NO. 40

THE COATS BROS. DITCH

That said ditch is entitled to priority No. 40. It is claimed by John B. Coats. The headgate of said ditch is located on the south bank of Tomichi Creek, at a point whence the S. E. Cor. Sec. 3 T. 48 N. R. 3 E. N. M. M. bears S. 11° 49' E. 2400 feet; general course northwesterly; length of ditch 1.66 miles; width 5.5 feet; depth 2 feet; grade 52 feet per 100 feet; carrying capacity 10 cubic feet per second.

It is a ditch used for the irrigation of land, taking its supply of water from Tomichi Creek, and there are 250 acres of land belonging to claimant 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 Tomichi Creek, for the use aforesaid, for the benefit of the party lawfully entitled thereto under and by virtue of said original construction and actual appropriation, Priority No. 40, not to exceed 5. cubic feet of water per second of time.

Ditch No. 48. Priority No. 40

The Coats Bros Ditch.

THAT SAID DITCH IS ENTITLED TO PRIORITY NO. ~~48~~ 40.
IT IS CLAIMED BY John B. Coats
THE HEADGATE OF SAID DITCH IS LOCATED ON THE South
BANK OF Tomichi CREEK, ~~A TRIBUTARY OF THE TOMICHI CREEK.~~ AT A POINT WHENCE the S.E. Cor. Sec. 3, T. 48 N. R. 3 E. N. M. M. bears S. 11°49' E. 2400 feet.

GENERAL COURSE Northwesterly LENGTH OF DITCH 1.66 MILES;
WIDTH 5.5 FEET; DEPTH 2 FEET; GRADE .52 feet per 100 feet
~~FEET PER MILE~~; CARRYING CAPACITY 10 CUBIC FEET PER SECOND.

IT IS A DITCH USED FOR THE IRRIGATION OF LAND, TAKING ITS SUPPLY OF WATER FROM Tomichi Creek.

AND THERE ARE 250 ACRES OF LAND BELONGING TO CLAIMANT, ~~BEING A PORTION OF~~ 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 Tomichi CREEK, FOR THE USE AFORESAID, FOR THE BENEFIT OF THE PARTY LAWFULLY ENTITLED THERETO UNDER AND BY VIRTUE OF SAID ORIGINAL CONSTRUCTION AND ACTUAL APPROPRIATION, PRIORITY NO. 40 NOT TO EXCEED 5 CUBIC FEET OF WATER PER SECOND OF TIME.

G. D. No. 1266.

DISTRICT COURT,

Gunnison County, Colorado.

In the Matter of the Adjudication of the Priorities of Water Rights in Water District No. 28.

vs.

CIVIL ACTION.

~~ACTION.~~

Draft of Decree as prepared by Referee.

STATE OF COLORADO } ss.
County of Gunnison.

Filed in my office this 1st day of March A. D. 1904.

C. R. Pelton,
Clerk District Court

Defendant's Attorney.

C. F. HOECKEL BLANK BOOK COMPANY, DENVER.

Tyler Martineau
Water Resource Engineer

Water Supply Planning
Water Rights Engineering
Water Research for Real Estate Transactions
Project Permitting and Regulatory Compliance

M E M O R A N D U M

TO: Anne Janicki and Karen Wogsland, Colorado Water Trust

FROM: Tyler Martineau, P.E.

DATE: October 20, 2014

SUBJECT: Short-Term Lease of Water Decreed in the Coats Bros Ditch Water for Use as Instream Flows

Executive Summary

The Colorado Water Trust is proposing a short-term lease to the Colorado Water Conservation Board of water rights in the Coats Bros Ditch. The leased water will be used to benefit the CWCB's instream flow water right decreed in Tomichi Creek in Case No. 80CW132 (identified as Segment 2 in the decree). Tomichi Creek is located in southwestern Colorado near the City of Gunnison in Gunnison and Saguache Counties in Water Division 4, Water District 28. The portion of Tomichi Creek in which this segment of the instream flow is decreed is located between the confluence with Marshall Creek and the confluence with Quartz Creek. The following report provides a reasonable estimate of the historical consumptive use required pursuant to CRS 37-83-105(2) as a part of the approval process for the short-term lease.

Included in this report are estimates of the historic consumptive use and river depletions associated with the Coats Bros Ditch water rights. The Coats Bros Ditch water rights which are to be leased include 50% of the two most senior water rights in the ditch, Priority No. 18 and Priority No. 40. The amounts to be leased include 0.651 cfs decreed in Case No. CA0946 with an adjudication date of May 1, 1894 (Priority No. 18) and 2.50 cfs decreed in Case No. CA1266 with an adjudication date of April 29, 1904 (Priority No. 40). The water to be leased has historically irrigated 165 acres of land owned by Gregory Kruthaupt and Patricia Kruthaupt. The property is referred to in this report as the Kruthaupt Ranch.

A summary of average historical diversions, consumptive use and depletions at the river which have taken place on the Kruthaupt Ranch under irrigation by the Coats Bros Ditch considering a forty-four year period of record from 1970 – 2013 and can be made available for instream flow use is provided in Table 1. Three scenarios are presented in the table. Presented first are the results of an analysis of the depletions associated with the full irrigation season which runs from April – October. Shown are the depletions that would be made available for instream flow use if historical irrigation was discontinued for a full year. Second is an analysis of the depletions associated with diversions

TABLE 1
SUMMARY OF WATER AVAILABLE FOR INSTREAM FLOW USE
COATS BROS DITCH - KRUTHAUPT FIELDS
Averages for Years 1970-2013

	Units	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
Coats Bros Ditch Total														
Recorded Headgate Diversions	AF	43	423	812	550	76	95	102	-	-	-	-	-	2102
Recorded Headgate Diversions	CFS	0.72	6.88	13.65	8.95	1.24	1.60	1.66	-	-	-	-	-	
Kruthaupt Ranch - Priorities #18 and #40														
Amounts Available for April - October Instream Flow Use														
(With Historical Irrigation Discontinued for Full Year)														
Field Headgate Delivery[1]	AF	8.6	82.5	147.4	113.7	22.6	31.6	35.2	-	-	-	-	-	441.6
Field Headgate Delivery[1]	CFS	0.14	1.34	2.48	1.85	0.37	0.53	0.57	-	-	-	-	-	
Consumptive Irrig. Water Req.	AF	7.8	67.5	100.5	89.0	48.0	40.6	12.2	-	-	-	-	-	365.7
Historic Crop CU	AF	3.4	45.4	79.9	59.3	11.2	12.9	5.9	-	-	-	-	-	218.0
Historic Crop CU	CFS	0.06	0.74	1.34	0.96	0.18	0.22	0.10	-	-	-	-	-	
Net Historic River Depletion[2]	AF	5.30	52.21	87.36	56.55	-2.50	12.40	15.77	-5.89	-2.03	-0.72	-0.25	-0.08	218.1
Net Historic River Depletion[2]	CFS	0.09	0.85	1.47	0.92	-0.04	0.21	0.26	-0.10	-0.03	-0.01	0.00	0.00	
Amounts Available for July - October Instream Flow Use														
(With Historical Irrigation Continued April through June)														
Field Headgate Delivery[1]	AF	-	-	-	113.7	22.6	31.6	35.2	-	-	-	-	-	203.2
Field Headgate Delivery[1]	CFS	-	-	-	1.85	0.37	0.53	0.57	-	-	-	-	-	
Consumptive Irrig. Water Req.	AF	-	-	-	89.0	48.0	40.6	12.2	-	-	-	-	-	189.9
Historic Crop CU	AF	-	-	-	59.3	11.2	12.9	5.9	-	-	-	-	-	89.3
Historic Crop CU	CFS	-	-	-	0.96	0.18	0.22	0.10	-	-	-	-	-	
Net Historic River Depletion[2]	AF	-0.03	-0.01	0.00	74.07	3.49	14.54	16.53	-5.62	-1.94	-0.69	-0.25	-0.08	100.0
Net Historic River Depletion[2]	CFS	0.00	0.00	0.00	1.20	0.06	0.24	0.27	-0.09	-0.03	-0.01	0.00	0.00	
Amounts Available for August - October Instream Flow Use														
(With Historical Irrigation Continued April through July)														
Field Headgate Delivery[1]	AF	-	-	-	-	22.6	31.6	35.2	-	-	-	-	-	89.5
Field Headgate Delivery[1]	CFS	-	-	-	-	0.37	0.53	0.57	-	-	-	-	-	
Consumptive Irrig. Water Req.	AF	-	-	-	-	48.0	40.6	12.2	-	-	-	-	-	100.8
Historic Crop CU	AF	-	-	-	-	11.2	12.9	5.9	-	-	-	-	-	30.0
Historic Crop CU	CFS	-	-	-	-	0.18	0.22	0.10	-	-	-	-	-	
Net Historic River Depletion[2]	AF	-0.03	-0.01	0.00	0.00	14.75	18.35	17.89	-5.14	-1.76	-0.63	-0.22	-0.08	43.1
Net Historic River Depletion[2]	CFS	0.00	0.00	0.00	0.00	0.24	0.31	0.29	-0.09	-0.03	-0.01	0.00	0.00	

[1]Amount available for instream flow use immediately below the headgate of the Coats Bros Ditch (Reach 1).

[2]Amount available for instream flow use below the point of return flows (Reach 2).

that occurred in July - October. These depletions would be made available for instream flow use if historical irrigation took place from April through June and was discontinued thereafter for the remainder of the year. Third is an analysis of the depletions associated with diversions that occurred in August - October. These depletions would be made available for instream flow use if historical irrigation took place from April through July and was discontinued thereafter for the remainder of the year. These latter two analyses provide an indication of the extent to which flows in Tomichi Creek could be benefitted if the Kruthaupt Ranch water rights were operated under a split season irrigation plan, with historical irrigation taking place from April through June or July but then being shut-off for the remainder of the year at the beginning of July or August.

Summaries of historical diversions, consumptive use and depletions at the river that would be made available for instream flow use in a dry year such as 2002 are provided in Table 2.

The water available immediately below the point of diversion for the Coats Bros Ditch (Reach 1) for temporary instream use under a Kruthaupt Ranch short-term lease program is the "Field Headgate Delivery" as shown in Tables 1 and 2. The water available below the point of return flows from the Kruthaupt irrigated property (Reach 2) for temporary instream use is the Net Historic River Depletion as shown in Tables 1 and 2.

Results of the historic consumptive use and depletion analysis for individual years from 1970-2013 are provided in Appendix A. The assumptions and methodology employed in the analysis are also described in the appendix.

Description of Water Rights for Lease

The Colorado Water Trust is proposing a short-term lease to the Colorado Water Conservation Board of water rights decreed in the Coats Bros Ditch. The leased water will be used to benefit the CWCB's instream flow water right in Tomichi Creek. The Coats Bros Ditch diverts from Tomichi Creek, and is located in Water Division 4, Water District 28. The headgate for the ditch is located in Gunnison County in the NE1/4 NE1/4SE1/4 of Section 3, Township 48N, Range 3E, NMPM. The location of the Coats Bros ditch in relation to the segment of Tomichi Creek in which the instream flow is decreed is shown in Figure 1. The portion of the stream segment which would benefit from the short-term lease of Coats Bros Ditch water is shown in Figure 2. An aerial image of the Coats Bros Ditch headgate and the fields irrigated by the Coats Bros Ditch which are under Kruthaupt Ranch ownership is provided in Figure 3. The water rights decreed in the ditch are shown in Table 3. The water rights are decreed solely for irrigation.

The Colorado Water Trust is proposing including 50% of the two most senior water rights, Priority No. 18 and Priority No. 40 in the Coats Bros Ditch in the short-term water lease program. During the months of July – October, the principal period being considered for the short-term lease, the diversion record indicates that diversions have been made under all three priorities in the ditch. The following study evaluates the historic consumptive use associated with the two senior priorities only. This was accomplished by excluding diversions in excess of 6.302 cfs from the analysis.

TABLE 2
SUMMARY OF WATER AVAILABLE FOR INSTREAM FLOW USE
COATS BROS DITCH - KRUTHAUPT FIELDS
Results for the Year 2002

	Units	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
Coats Bros Ditch Total														
Recorded Headgate Diversions	AF	0	85	223	177	5	53	48	-	-	-	-	-	591
Recorded Headgate Diversions	CFS	0.00	1.38	3.75	2.88	0.08	0.89	0.78	-	-	-	-	-	
Kruthaupt Ranch - Priorities #18 and #40														
Amounts Available for April - October Instream Flow Use														
(With Historical Irrigation Discontinued for Full Year)														
Field Headgate Delivery[1]	AF	0.0	36.1	94.8	75.2	2.1	22.6	20.3	-	-	-	-	-	251.2
Field Headgate Delivery[1]	CFS	0.00	0.59	1.59	1.22	0.03	0.38	0.33	-	-	-	-	-	
Consumptive Irrig. Water Req.	AF	15.7	77.0	114.3	104.5	52.8	33.0	10.3	-	-	-	-	-	407.6
Historic Crop CU	AF	0.0	18.1	47.4	37.6	1.1	11.3	10.2	-	-	-	-	-	125.6
Historic Crop CU	CFS	0.00	0.29	0.80	0.61	0.02	0.19	0.17	-	-	-	-	-	
Net Historic River Depletion[2]	AF	0.00	23.54	58.15	38.36	-9.67	10.69	9.57	-3.28	-1.13	-0.40	-0.14	-0.04	125.7
Net Historic River Depletion[2]	CFS	0.00	0.38	0.98	0.62	-0.16	0.18	0.16	-0.06	-0.02	-0.01	0.00	0.00	
Amounts Available for July - October Instream Flow Use														
(With Historical Irrigation Continued April through June)														
Field Headgate Delivery[1]	AF	-	-	-	75.2	2.1	22.6	20.3	-	-	-	-	-	120.2
Field Headgate Delivery[1]	CFS	-	-	-	1.22	0.03	0.38	0.33	-	-	-	-	-	
Consumptive Irrig. Water Req.	AF	-	-	-	104.5	52.8	33.0	10.3	-	-	-	-	-	200.6
Historic Crop CU	AF	-	-	-	37.6	1.1	11.3	10.2	-	-	-	-	-	60.1
Historic Crop CU	CFS	-	-	-	0.61	0.02	0.19	0.17	-	-	-	-	-	
Net Historic River Depletion[2]	AF	0.00	0.00	0.00	48.96	-6.06	11.98	10.03	-3.11	-1.07	-0.38	-0.14	-0.04	60.2
Net Historic River Depletion[2]	CFS	0.00	0.00	0.00	0.80	-0.10	0.20	0.16	-0.05	-0.02	-0.01	0.00	0.00	
Amounts Available for August - October Instream Flow Use														
(With Historical Irrigation Continued April through July)														
Field Headgate Delivery[1]	AF	-	-	-	-	2.1	22.6	20.3	-	-	-	-	-	45.0
Field Headgate Delivery[1]	CFS	-	-	-	-	0.03	0.38	0.33	-	-	-	-	-	
Consumptive Irrig. Water Req.	AF	-	-	-	-	52.8	33.0	10.3	-	-	-	-	-	96.1
Historic Crop CU	AF	-	-	-	-	1.1	11.3	10.2	-	-	-	-	-	22.5
Historic Crop CU	CFS	-	-	-	-	0.02	0.19	0.17	-	-	-	-	-	
Net Historic River Depletion[2]	AF	0.00	0.00	0.00	0.00	1.38	14.50	10.93	-2.80	-0.96	-0.34	-0.12	-0.04	22.6
Net Historic River Depletion[2]	CFS	0.00	0.00	0.00	0.00	0.02	0.24	0.18	-0.05	-0.02	-0.01	0.00	0.00	

[1]Amount available for instream flow use immediately below the headgate of the Coats Bros Ditch (Reach 1).

[2]Amount available for instream flow use below the point of return flows (Reach 2).

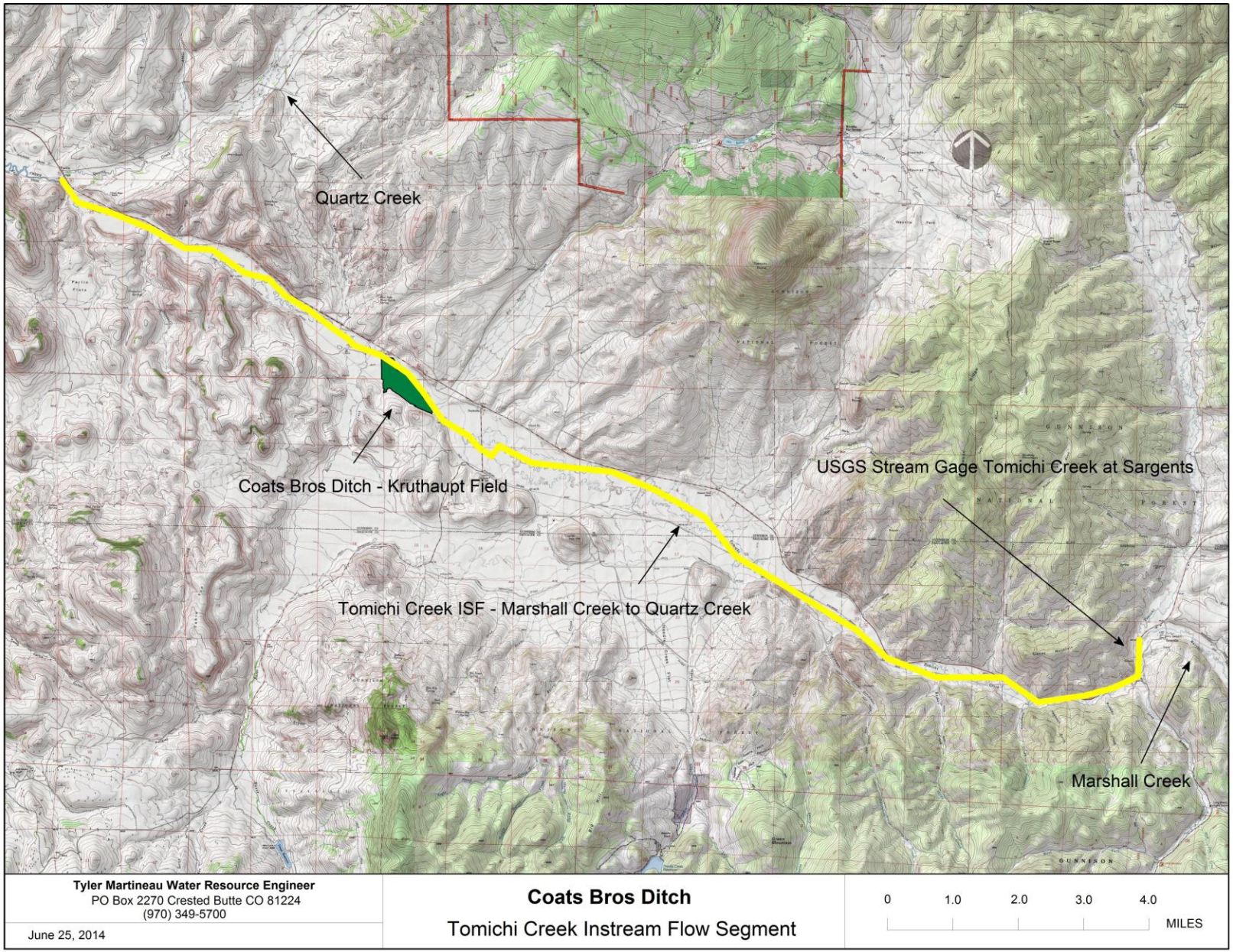
Quartz Creek
Coats Bros Ditch - Kruthaupt Field
Tomichi Creek ISF - Marshall Creek to Quartz Creek
USGS Stream Gage Tomichi Creek at Sargents
Marshall Creek
Tyler Martineau Water Resource Engineer
PO Box 2270 Crested Butte CO 81224
(970) 349-5700
June 25, 2014
Coats Bros Ditch
Tomichi Creek Instream Flow Segment
0 1.0 2.0 3.0 4.0
MILES

FIGURE 1

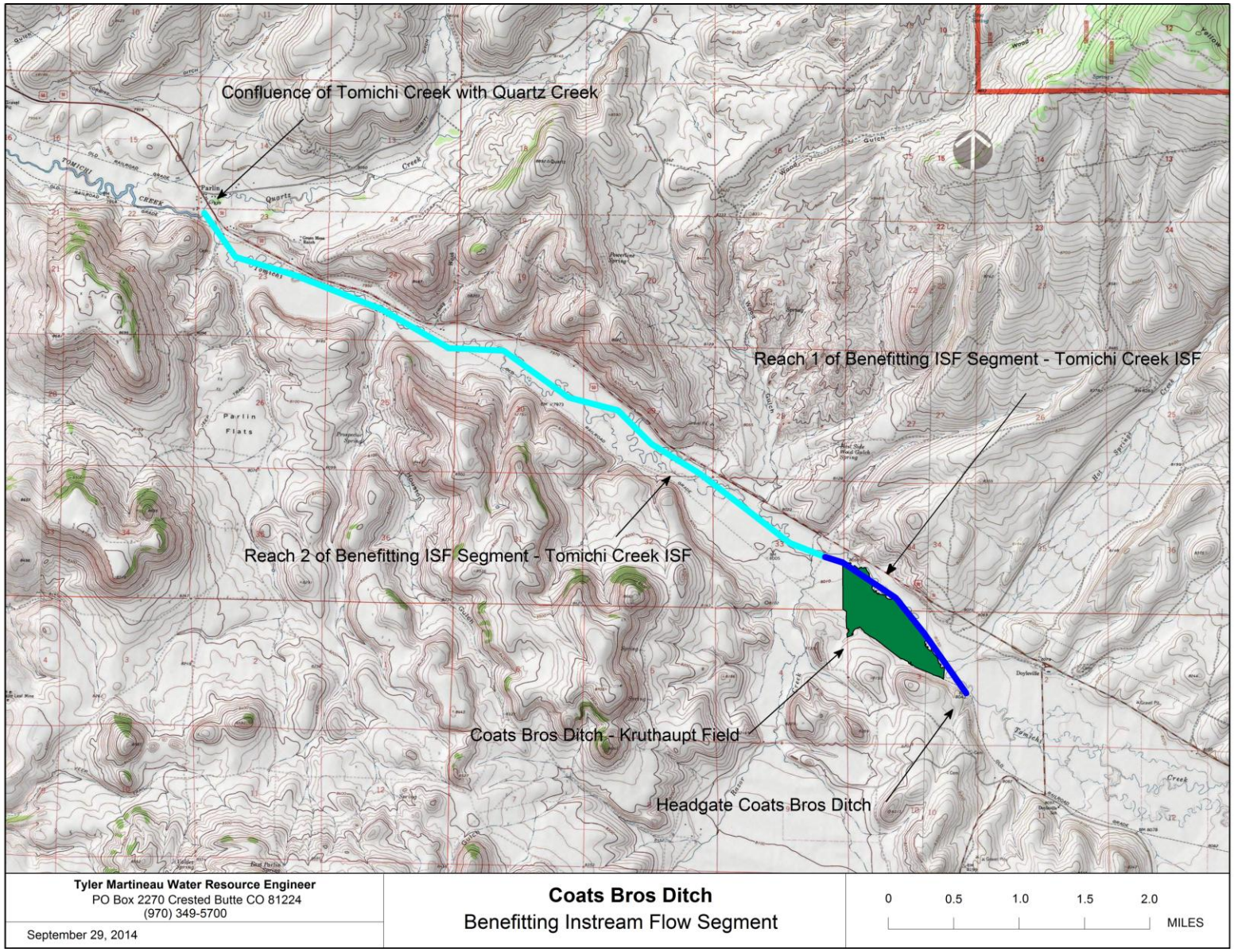
Confluence of Tomichi Creek with Quartz Creek
Reach 1 of Benefitting ISF Segment - Tomichi Creek ISF
Reach 2 of Benefitting ISF Segment - Tomichi Creek ISF
Coats Bros Ditch - Kruthaupt Field
Headgate Coats Bros Ditch
Parlin Flats
Tyler Martineau Water Resource Engineer
PO Box 2270 Crested Butte CO 81224
(970) 349-5700
September 29, 2014
Coats Bros Ditch
Benefitting Instream Flow Segment
0 0.5 1.0 1.5 2.0
MILES

FIGURE 2

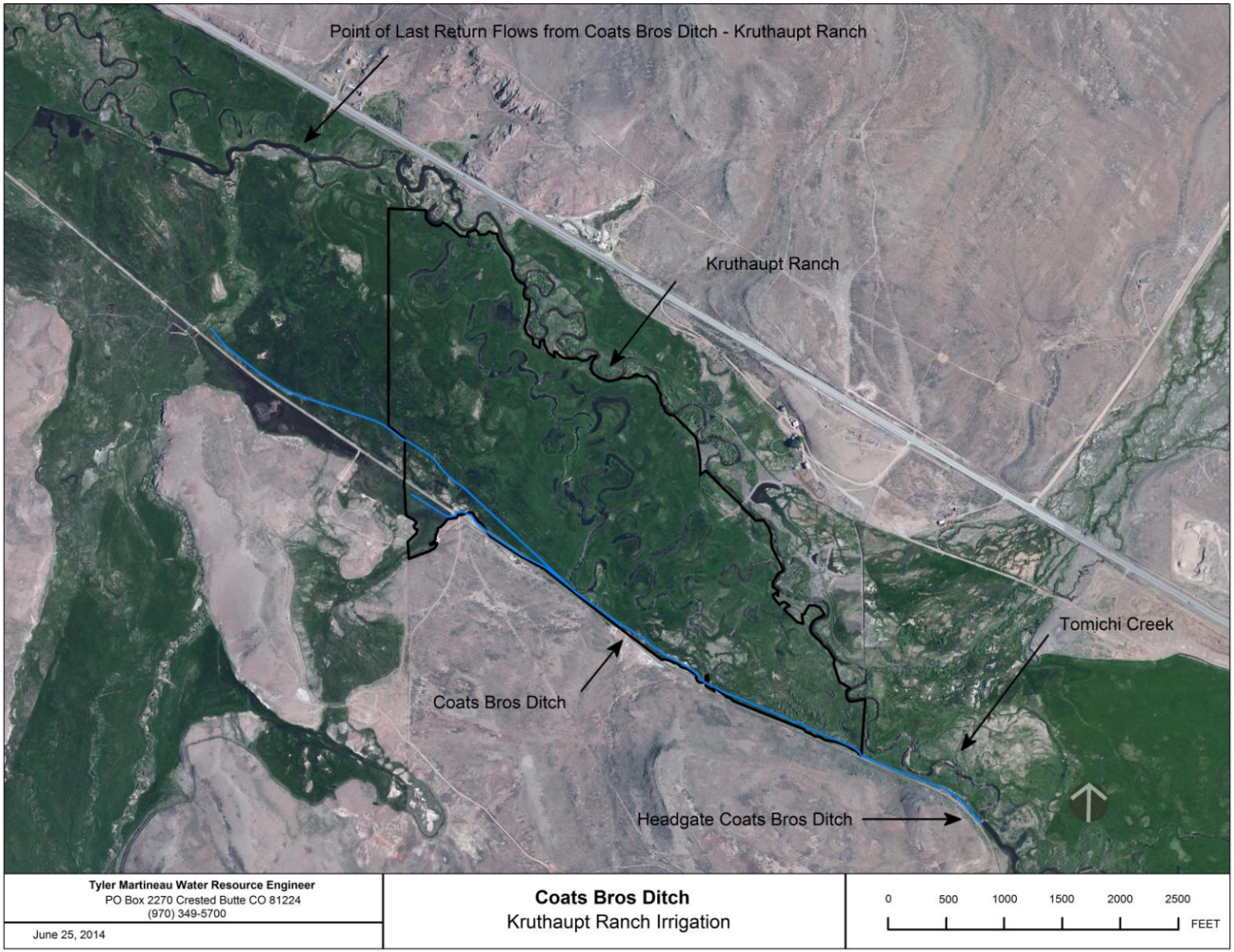
Point of Last Return Flows from Coats Bros Ditch - Kruthaupt Ranch
Kruthaupt Ranch
Tomichi Creek
Coats Bros Ditch
Headgate Coats Bros Ditch
Tyler Martineau Water Resource Engineer
PO Box 2270 Crested Butte CO 81224
(970) 349-5700
June 25, 2014
Coats Bros Ditch
Kruthaupt Ranch Irrigation
0 500 1000 1500 2000 2500
FEET

FIGURE 3

TABLE 3 COATS BROS DITCH WATER RIGHTS							
NAME	SOURCE	PRIORITY/ Admin #	AMOUNT (CFS)		ADJUD DATE	APPROP DATE	DECREE
			Total Decreed	Kruthaupt Ownership			
Coats Bros Ditch	Tomichi Creek	#18/ 11474.00000	1.3020 cfs	0.651 cfs	1894-05-01	1881-05-31	CA0946
Coats Bros Ditch	Tomichi Creek	#40/ 16192.10713	5.0 cfs	2.5 cfs	1904-04-29	1879-05-01	CA1266
Coats Bros Ditch	Tomichi Creek	#250/ 28311.13635	12.85 cfs	Not available	1943-04-19	1887-05-01	CA2079
Total			19.152 cfs	3.151 cfs			

Description of Historically Irrigated Property

The land that is the subject of this short-term lease and is irrigated under the Coats Bros Ditch is referred to in this report as the Kruthaupt Ranch and is owned by Gregory and Patricia Kruthaupt. The Kruthaupt Ranch is located on Tomichi Creek approximately 19 miles east of the City of Gunnison, in Gunnison County, Colorado. The Kruthaupt Ranch fields irrigated under the Coats Bros Ditch are located in Section 34, Township 49N, Range 3E, NMPM and Section 3, Township 48N, Range 3E, NMPM.

The irrigation season on the ranch extends from April through October and takes place principally during two periods of time. The first period starts in the spring and ends within a few weeks before or after August 1st prior to the single annual cutting of hay. The second period occurs after the cutting of hay and lasts into the fall for the purpose of regrowing hay for use as pasture in the fall and winter. During the time that the single cutting of hay is occurring diversions are shut down and the fields are dried out for a period of 2 to 4 weeks. According to the attached diversion record for the Coats Bros Ditch, diversions were not turned back on after haying in some years.

The amount of land located within the perimeter boundary of the Kruthaupt irrigated area under the Coats Bros Ditch totals 179.5 acres. Within that area there are approximately 11.9 acres of old stream meanders and dry areas that do not receive irrigation,. Therefore the net amount of irrigated acreage is 167.6 acres. The Kruthaupt Ranch owns 50% of the water in the two senior priorities in the Coats Bros Ditch. These two priorities were decreed for a total of 330 acres. Fifty percent of this acreage totals 165 acres. Due to the acreage amount specified in the water decrees, the amounts of consumptive use and river depletions estimated in this report are the amounts associated with 165 acres of historic irrigation.

Historical Use Analysis

This report presents information on a monthly basis concerning historical diversions, consumptive use, field depletions and depletions at Tomichi Creek for a 44-year time span.

Historical Diversions

Historical diversions are presented as downloaded from the Colorado Division of Water Resources on-line HydroBase database.

Historic Consumptive Use

Historic consumptive use for any given month has been estimated in this study by taking the lesser of the consumptive irrigation water requirement (the demand of the crop under a full water supply) or the amount of water historically available to the crop. Water available to the crop has been included from two sources: field headgate deliveries and water carried over in the root zone of the soil from previous months. Precipitation has also been taken into account, but has been done in a manner which reduces the consumptive irrigation water requirement as explained below.

The consumptive irrigation water requirement for the Kruthaupt property was estimated using the StateCU consumptive use model developed as part of the Colorado Decision Support System by the State of Colorado. The model was operated on a monthly time step using the Original Blaney-Criddle method. The model provides a standard option for estimating irrigation water requirements for grass pasture above 6500 feet in elevation throughout the State using high altitude consumptive use coefficients recommended by Walter *et al.* (1990) for use by the Denver Water Board in South Park, Colorado. These are identified in the model as the Denver Water High Altitude Calibration Coefficients. These coefficients are very similar to coefficients developed for the Upper Gunnison Basin during local lysimeter studies carried out between 1999 and 2003 (Smith, Brummer and Temple, 2006 and Smith, 2008) and are, therefore, used in this evaluation.

The StateCU model calculates the crop potential evapotranspiration and then subtracts effective precipitation using historical precipitation records in order to estimate the consumptive irrigation water requirement. The method used by StateCU for estimating effective precipitation was the SCS TR-21 Method.

Historic Depletions at the Field

In any given month, water supplied to a field is depleted for two purposes. First, water is used to meet as much as possible of the consumptive irrigation water requirement. Second, if any water is left over, it is used to fill the soil moisture reservoir in the crop root zone for use in a subsequent month. These field depletions reduce the amount of water that can return to the river.

Soil Moisture Accounting

An evaluation of soil moisture storage is necessary because diversions into the soil moisture reservoir act as a depletion of the water supply delivered to the crop root zone and ultimately cause a depletion of water at the river. It is also important because subsequent withdrawals from the soil moisture reservoir provide a portion of the water supply needed to satisfy the consumptive irrigation water requirement of the crop.

If the amount of diversions delivered to the root zone exceeds the amount going directly to crop consumptive use, the excess is treated as a diversion into the soil moisture reservoir for use in a later month (to the extent that unused capacity is available in the soil moisture reservoir). If the amount of diversions delivered to the root zone is less than the consumptive irrigation water requirement, the shortfall is made up from the soil moisture reservoir to the extent that water is available in the soil moisture reservoir from a prior month.

The capacity of the soil moisture reservoir was estimated based upon the number of irrigated acres on the field and upon data obtained from the Natural Resources Conservation Service including the average depth of the root zone and the soil moisture capacity of the soil.

Historic Depletions at the River

Diversions of water by the Coats Bros Ditch have historically caused a depletion of the flow in Tomichi Creek downstream of the point of diversion. In the stretch of river immediately below the point of diversion, the historic river depletion is equal to the amount of water historically diverted. This portion of the river is identified in Figure 2 as Reach 1.

Under the short-term lease program, a portion of historic diversions will temporarily be discontinued. The full amount of historic diversions will not be discontinued because fields on the Coats Bros Ditch which are not included in the short-term lease will continue to be irrigated, and because diversions in an amount sufficient to cover all historic ditch losses for the ditch will continue to be made to avoid injury to other water users. Accordingly the amount of historic depletion to be made available for instream use (which is presented in Tables 1 and 2 and in the appendix to this report) is less than the total historic depletion for the ditch. It is less because it does not include depletions associated with irrigated land not included in the short-term lease or depletions associated with historic ditch losses.

When water is diverted for irrigation, not all of the water is consumed. If the field is near the river, some water returns to the river as surface flow and some as subsurface flow. Therefore, below the point where returns come back to the river, the net river depletion is less than right below the point of diversion, and is equal to the amount diverted from the river at the point of diversion less the surface and subsurface returns that flow back to the river. This portion of the river is identified in Figure 2 as Reach 2.

The irrigated fields are situated on an alluvial aquifer which is hydraulically connected to Tomichi Creek. Return flows from irrigation are estimated to return to Tomichi Creek as

approximately 50% surface flow and 50% subsurface flow. Surface returns are assumed to return to Tomichi Creek in the same month in which the water was diverted. A portion of subsurface returns is delayed for a period of weeks or months due to the time it takes for water to flow through the aquifer underlying the field to reach the river. The length of this delay depends on the distance of the field from the river and the characteristics of the aquifer through which the water is flowing.

The delayed return flows have been estimated using the Integrated Decision Support Group's Alluvial Water Accounting System Model in modified mode. The modified mode of IDS AWAS incorporates the Analytical Stream Depletion Model developed by Dewayne R. Schroeder in 1987, which in turn implemented the modeling methodology commonly referred to as a "Glover" analysis. Model inputs are as follows: Distance from the centroid of the field to the river, X = 950 ft. Alluvial aquifer width, W = 1800 ft. Transmissivity = 50,000 gpd/ft. Specific yield = 0.15. No data as to site-specific transmissivity and specific yield is available for the Kruthaupt Ranch. Therefore, basin-wide figures developed for use in the Upper Gunnison River Water Conservancy District's Aspinall Plan for Augmentation, which were approved in Case No. 03CW49 have been used.

The lagged return flow factors obtained from the Glover Analysis for the field are as shown in Table 4.

TABLE 4
LAGGED RETURN FLOW FACTORS – COATS BROS DITCH KRUTHAUPT RANCH

MONTH	1	2	3	4	5	6	7	8	9
RETURN FLOW FACTOR	0.395	0.396	0.134	0.048	0.017	0.006	0.002	0.001	0.000

These results indicate that if one acre-foot of water enters the aquifer in month one, 0.395 acre-feet of water will return to the river in that same month, 0.396 acre-feet will return to the river in month two, 0.134 acre feet will return in month three, and so on. This is indicative of a relatively short lag time and a relatively rapid return of water to the stream.

Net river depletions below the point of return flow are equal to the diversion at the headgate less the surface returns and subsurface returns (some of which may be delayed). In a month in which diversions at the headgate are zero or near zero, it is possible that significant subsurface returns may come back to the river from a prior month's irrigation. In this case, the net depletion to the river is negative, which is to say that the flow in the river is higher downstream of the point of return than it is above the point of diversion. If downstream water users are dependent on this increased flow, then any change in water right which would cause an historical increase in river flows to cease could cause injury to downstream water rights. In order to prevent injury to downstream rights, where the net depletion to the river has historically been negative, the delayed return flows may need to be replaced from some other water source.

Description of Proposed Instream Flow Use and Operation

Description of ISF Water Rights

The water leased in the Coats Bros Ditch is proposed to be used to benefit the CWCB's instream flow right decreed in Segment 2 in Tomichi Creek in Case No. 80CW132. Information concerning the water right is provided in Table 5. The location of the instream flow segment is shown in Figure 1.

A USGS Stream gaging site Tomichi Creek at Sargents, CO (09115500) is located within the instream flow segment. The gaging site is located on Tomichi Creek 0.5 miles downstream of the confluence with Marshall Creek.

TABLE 5
TOMICHI CREEK INSTREAM FLOW SEGMENT – MARSHALL CREEK TO QUARTZ CREEK

CASE NO.	STREAM	SEGMENT	APPROP DATE	SEGMENT LENGTH	AMOUNT
80CW132	Tomichi Creek	Segment 2 - Marshall Creek to Quartz Creek	3-17-1980	25.2	18 CFS (1/1 – 12/31)

Length of benefitting ISF segment

The length of the benefitting ISF segment is 12.3 river miles or 7.1 highway miles. The benefitting ISF segment is divided into two reaches: Reach 1 which begins immediately below the point of diversion for the Coats Bros Ditch and Reach 2 which begins below the point at which return flows from the Kruthaupt irrigated property reach Tomichi Creek. Reach 1 is 2.6 river miles in length and Reach 2 is 9.7 river miles in length. The location of the benefitting segment and Reaches 1 and 2 are shown in Figure 2.

Proposed Amount of Water Claimed for Instream Use

The amount of water that would be made available immediately below the point of diversion for the Coats Bros Ditch for temporary instream use under the Kruthaupt Ranch short-term lease program would be as shown in Table 6 for July 1 – October 31 short-term leasing program and in Table 7 for August 1 – October 31 short-term leasing program. These amounts are the same as shown for the field headgate delivery presented in Tables 1 and 2.

TABLE 6
WATER AVAILABLE FOR USE IN REACH 1
JULY 1 – OCTOBER 31 INSTREAM FLOW USE

MONTH	UNITS	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
AVERAGE 1970-2013	CFS	0	0	0	1.85	0.37	0.53	0.57	0	0	0	0	0
2002	CFS	0	0	0	1.22	0.03	0.38	0.33	0	0	0	0	0

TABLE 7
WATER AVAILABLE FOR USE IN REACH 1
AUGUST 1 – OCTOBER 31 INSTREAM FLOW USE

MONTH	UNITS	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
AVERAGE 1970-2013	CFS	0	0	0	0	0.37	0.53	0.57	0	0	0	0	0
2002	CFS	0	0	0	0	0.03	0.38	0.33	0	0	0	0	0

The amount of water that would be made available below the point of last return flows from the Kruthaupt irrigated property for temporary instream use would be as shown in Table 8 for July 1 – October 31 short-term lease and in Table 9 for August 1– October 31 short-term lease. These amounts are the same as shown for the Net Historic River Depletion as shown in Tables 1 and 2.

TABLE 8
WATER AVAILABLE FOR USE IN REACH 2
JULY 1 – OCTOBER 31 INSTREAM FLOW USE

MONTH	UNITS	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
AVERAGE 1970-2013	CFS	0.00	0.00	0.00	1.20	0.06	0.24	0.27	-0.09	-0.03	-0.01	0.00	0.00
2002	CFS	0.00	0.00	0.00	0.80	-0.10	0.20	0.16	-0.05	-0.02	-0.01	0.00	0.00

Proposed Duration and/or Season of Use

The duration of the short-term lease would run from July 1 to October 31 or from August 1 to October 31. Estimates of the amounts of water that may be claimed for instream use for each of those proposed lease durations are provided in Tables 6 - 9.

TABLE 9 WATER AVAILABLE FOR USE IN REACH 2 AUGUST 1 – OCTOBER 31 INSTREAM FLOW USE													
MONTH	**UNITS**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**
AVERAGE 1970-2013	CFS	0.00	0.00	0.00	0.00	0.24	0.31	0.29	-0.09	-0.03	-0.01	0.00	0.00
2002	CFS	0.00	0.00	0.00	0.00	0.02	0.24	0.18	-0.05	-0.02	-0.01	0.00	0.00

Replacement of Historical Return Flows

Implementation of the short-term lease will reduce historical return flows to Tomichi Creek from the Kruthaupt Ranch. Return flows will be reduced during the irrigation season when the lease is in effect, and until as long as May of the following year. The reduction in return flows will be more than offset, however, by the increase in river flows resulting from reduced diversions at the headgate of the Coats Bros Ditch in months during the irrigation season when the short-term lease is operating. The net effect on Tomichi Creek streamflows of the reduction in Coats Bros Ditch diversions and return flows is presented in Tables 8 and 9. A positive number indicates a month in which streamflows below the point of return flows from the Coat Bros Ditch will be increased as a result of the lease. A negative number indicates a month in which streamflows will be reduced below the point of returns as a result of the lease.

In months where a downstream water right holder would experience a water shortage as a result of a reduction in historical return flows, replacement of the historical return flow amounts will required. The months in which replacement of historical return flows may be required are listed in Table 10.

TABLE 10 MONTHS IN WHICH REPLACEMENT OF RETURN FLOWS MAY BE REQUIRED		
	AVERAGE WATER CONDITIONS (From Table 1)	**2002 WATER CONDITIONS (From Table 2)**
JUL – OCT ISF USE	November through May	August, November through March
AUG – OCT ISF USE	November through May	November through March

Mainstem Gunnison River

Water rights on the Gunnison River downstream of the Aspinall Unit have the potential to be affected by the proposed short-term lease. Calls from the Gunnison Tunnel and South Canal (Admin. No. 20393.18779) are possible between April 1 and October 31. In 2002, a call from the Gunnison Tunnel was active from April 18 through October 1 (but not administered continuously), and in 2003 from July 10 through September 8. Calls from the Redlands Power Canal (Admin. No. 22283.20300) are possible any time of year. In 2002, the Redlands Power Canal called from April 22 through June 1.
Replacement for shortages to these water rights could be provided locally in the Tomichi Creek drainage or could be obtained by leasing water in Blue Mesa Reservoir on the Gunnison River.

Tomichi Creek Downstream of the Coats Bros Ditch

Water rights downstream of the Coats Bros Ditch on Tomichi Creek have the potential to be affected by the proposed short-term lease in August under a dry-year July – October lease. Local calls from irrigation water rights on Tomichi Creek downstream of the Coats Bros Ditch are possible during the irrigation season from May 1 – October 31. In 2002, The Biebel Ditches Nos. 1 & 2 called between June 5 and August 25, and the McCann No. 1, No. 2 and No. 3 Ditches called between June 21 and September 25. In 2012, the Goodrich Ditch called between June 23 and August 12. Replacement to these water rights under this limited scenario would need to be provided locally.

Tomichi Creek Instream Flow Water Right

The Colorado Water Conservation Board's instream flow water right in Tomichi Creek would be affected by the short-term lease. During the non-irrigation season, a depletion to the ISF water right would occur. The maximum depletion to the ISF is estimated to be 0.09 cfs in the month of October, and the average depletion throughout the non-irrigation season is estimated to be 0.024 cfs. These amounts are 0.50% and 0.13% of the 18 cfs ISF right, respectively. During the month of August under a dry-year July – October lease, the maximum depletion to the ISF is estimated to be 0.10 cfs. This amount is 0.55% of the 18 cfs ISF right. During the remaining months of the year, the ISF would be a direct beneficiary of the short-term lease.

During the non-irrigation season, no shortages are expected to occur to water rights on Tomichi Creek other than to the ISF.

Annual River Depletions

Implementation of the short-term lease of Coats Bros Ditch water will not result in any increase in total annual river depletions by the Coats Bros Ditch. Under the short-term lease, annual depletions to Tomichi Creek and the Gunnison River by the Coats Bros Ditch will be reduced, which will provide a benefit to the Tomichi Creek ISF as well as to users downstream of the ISF segment. The amounts of reductions in annual depletions for average-year and dry-year

conditions under the proposed short-term leases are equal to the annual totals for Net Historic River Depletion (AF) shown in Tables 1 and 2.

Proposed Terms and Conditions

The following terms and conditions for a short-term lease of Coat Bros Ditch water rights for instream flow purposes are recommended to ensure that injury does not occur to other water rights.

1. The water rights in the Coats Bros Ditch to be leased for instream flow purposes shall be limited to 0.651 cfs decreed in Case No. CA0946 with an adjudication date of May 1, 1894 (Priority No. 18) and 2.50 cfs decreed in Case No. CA1266 with an adjudication date of April 29, 1904 (Priority No. 40). Use of the leased water rights shall be limited to periods when the Coats Bros Ditch water rights are in priority and water is physically available at the headgate.

2. The use of the leased water rights shall be limited to instream flow purposes within the CWCB ISF segment decreed on Tomichi Creek in Case No. 80CW132 (identified as Segment 2 in the decree).

3. The amount of diversions of the leased water rights used for instream flow purposes shall be limited to the historical average-year or dry-year diversions as shown in Tables 1 and 2 depending on the water supply conditions prior to the upcoming lease term. An average-year scenario shall be used where November through April SWSI values are greater than the 2002 value. A dry-year scenario shall be used where November through April SWSI values are equal or less than the 2002 value, or as otherwise determined by the Division Engineer.

4. When the short-term lease is in effect, the full amount of the historical ditch loss for the Coats Bros Ditch shall continue to be diverted at the headgate of the ditch to prevent injury to other water rights.

5. In order to prevent injury to water rights downstream of the Aspinall Unit such as the Gunnison Tunnel and South Canal, and the Redlands Power Canal, any reductions in historic return flows shall be replaced to a calling right as necessary with water leased in Blue Mesa Reservoir or from another approved augmentation source.

6. In order to prevent injury to downstream water rights on Tomichi Creek, in the event that a dry-year July – October lease is implemented, historical return flow obligations shall be replaced as necessary to a downstream calling right on Tomichi Creek from an approved augmentation source.

7. Instream flows shall be measured in a manner acceptable to the Division Engineer. Measuring devices shall be installed and maintained as required by the Division Engineer for the operation of the short-term lease.

8. The dry up of all lands used to generate credits under the short-term lease shall be verified. An affidavit and map identifying the dried-up land shall be provided to the Division Engineer and Water Commissioner in the first year that water is used for instream flow purposes. In each subsequent year that water is used for instream flow purposes, a written notification shall be provided to the Division Engineer and Water Commissioner identifying the lands to be dried up.

Non-Injury

If the terms and conditions and other operational items discussed above are adhered to, it is my opinion that there will be no injury to other water rights resulting from the proposed short-term lease of Coats Bros Ditch water rights for instream flow purposes.

The opinions presented in this report regarding the short-term lease of Coats Bros Ditch water rights are preliminary opinions, and may be supplemented as more information becomes available.

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APPENDIX A

Historic Consumptive Use and River Depletions
Associated with the Coats Bros Ditch

October 20, 2014

Tyler Martineau, P.E. 427 Belleview Ave., Suite 206 Crested Butte, CO 81224 (970)349-5700

TABLE A-1
RECORDED HEADGATE DIVERSIONS
COATS BROS DITCH
Monthly Diversions in Acre-Feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
1970	1080	1116	1080	540	0	0	0	3816
1971	0	1113	1077	1113	0	0	0	3303
1972	0	1107	1077	786	61	0	0	3032
1973	0	607	1293	694	0	0	0	2594
1974	0	583	1270	1269	156	184	0	3464
1975	0	371	1038	1162	75	0	0	2646
1976	0	665	863	684	89	0	0	2302
1977	330	787	533	0	0	0	0	1650
1978	0	590	1062	908	726	395	194	3875
1979	0	174	453	434	7	138	131	1337
1980	0	248	728	711	38	427	485	2637
1981	126	445	254	97	83	76	87	1168
1982	0	76	268	259	0	0	167	770
1983	0	77	837	665	77	0	0	1657
1984	0	347	417	305	0	0	0	1069
1985	0	0	602	476	0	428	492	1998
1986	0	259	663	472	0	0	0	1394
1987	0	190	286	244	0	200	77	999
1988	0	97	228	92	0	41	51	509
1989	0	861	619	40	0	198	238	1956
1990	99	369	357	286	0	198	238	1547
1991	0	87	405	476	0	0	0	968
1992	232	735	714	333	321	0	0	2336
1993	0	793	1178	682	0	0	0	2654
1994	13	356	415	155	0	0	0	940
1995	0	568	1163	793	0	0	0	2525
1996	0	796	1102	440	0	0	0	2338
1997	0	607	1186	799	0	0	0	2592
1998	0	0	486	862	0	0	0	1347
1999	0	641	1212	960	27	0	0	2840
2000	0	74	912	1121	73	47	44	2271
2001	0	289	1128	713	414	0	0	2544
2002	0	85	223	177	5	53	48	591
2003	0	421	1162	708	298	193	524	3304
2004	0	205	602	421	174	0	163	1565
2005	0	0	1152	318	16	0	131	1617
2006	0	397	796	500	16	52	192	1953
2007	0	622	684	241	0	56	224	1827
2008	0	442	1720	1077	0	389	0	3628
2009	0	397	1166	272	0	446	286	2566
2010	0	637	1204	536	0	531	413	3321
2011	0	278	1297	1098	353	0	101	3128
2012	0	104	257	294	190	122	198	1165
2013	0	0	574	0	154	0	0	729
Average 1970-2013	**42.7**	**423.1**	**812.4**	**550.4**	**76.3**	**94.9**	**101.9**	**2101.6**

Source: Diversion records from DWR HydroBase on-line database.

TABLE A-2
RECORDED HEADGATE DIVERSIONS
COATS BROS DITCH
Monthly Diversions in CFS

Year	Apr	May	Jun	Jul	Aug	Sep	Oct
1970	18.15	18.15	18.15	8.78	0.00	0.00	0.00
1971	0.00	18.10	18.10	18.10	0.00	0.00	0.00
1972	0.00	18.00	18.10	12.79	1.00	0.00	0.00
1973	0.00	9.87	21.73	11.29	0.00	0.00	0.00
1974	0.00	9.48	21.35	20.65	2.54	3.10	0.00
1975	0.00	6.03	17.44	18.90	1.22	0.00	0.00
1976	0.00	10.82	14.50	11.13	1.45	0.00	0.00
1977	5.55	12.80	8.96	0.00	0.00	0.00	0.00
1978	0.00	9.60	17.85	14.76	11.80	6.64	3.15
1979	0.00	2.82	7.62	7.06	0.12	2.32	2.12
1980	0.00	4.03	12.24	11.57	0.62	7.17	7.89
1981	2.11	7.24	4.27	1.58	1.35	1.28	1.41
1982	0.00	1.24	4.50	4.21	0.00	0.00	2.71
1983	0.00	1.26	14.07	10.82	1.26	0.00	0.00
1984	0.00	5.65	7.00	4.97	0.00	0.00	0.00
1985	0.00	0.00	10.12	7.74	0.00	7.20	8.00
1986	0.00	4.21	11.15	7.68	0.00	0.00	0.00
1987	0.00	3.10	4.81	3.98	0.00	3.37	1.26
1988	0.00	1.58	3.83	1.49	0.00	0.68	0.84
1989	0.00	14.00	10.40	0.65	0.00	3.33	3.87
1990	1.67	6.00	6.00	4.65	0.00	3.33	3.87
1991	0.00	1.42	6.80	7.74	0.00	0.00	0.00
1992	3.90	11.96	12.00	5.42	5.23	0.00	0.00
1993	0.00	12.90	19.80	11.10	0.00	0.00	0.00
1994	0.23	5.79	6.97	2.52	0.00	0.00	0.00
1995	0.00	9.24	19.55	12.90	0.00	0.00	0.00
1996	0.00	12.94	18.52	7.16	0.00	0.00	0.00
1997	0.00	9.87	19.93	13.00	0.00	0.00	0.00
1998	0.00	0.00	8.16	14.01	0.00	0.00	0.00
1999	0.00	10.43	20.37	15.61	0.45	0.00	0.00
2000	0.00	1.20	15.33	18.23	1.19	0.78	0.71
2001	0.00	4.70	18.96	11.60	6.74	0.00	0.00
2002	0.00	1.38	3.75	2.88	0.08	0.89	0.78
2003	0.00	6.84	19.52	11.51	4.84	3.24	8.52
2004	0.00	3.33	10.12	6.84	2.84	0.00	2.65
2005	0.00	0.00	19.36	5.18	0.26	0.00	2.12
2006	0.00	6.46	13.37	8.14	0.26	0.88	3.12
2007	0.00	10.11	11.50	3.92	0.00	0.94	3.64
2008	0.00	7.18	28.90	17.52	0.00	6.54	0.00
2009	0.00	6.46	19.59	4.42	0.00	7.50	4.65
2010	0.00	10.35	20.23	8.72	0.00	8.93	6.71
2011	0.00	4.52	21.80	17.86	5.75	0.00	1.65
2013	0.00	1.69	4.31	4.79	3.09	2.06	3.22
2013	0.00	0.00	9.65	0.00	2.51	0.00	0.00
Average 1970-2013	**0.72 All years**	**6.88**	**13.65**	**8.95**	**1.24**	**1.60**	**1.66**

Source: Recorded diversions in acre-feet per month converted to an average flow rate in cubic feet per second for the month.

TABLE A-3
NUMBER OF DAYS WITH DIVERSIONS
COATS BROS DITCH

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
1970	30	31	30	15	0	0	0	106
1971	0	31	30	31	0	0	0	92
1972	0	31	30	31	31	0	0	123
1973	0	24	30	23	0	0	0	77
1974	0	12	30	31	24	30	0	127
1975	0	11	30	31	2	0	0	74
1976	0	27	30	31	5	0	0	93
1977	13	31	21	0	0	0	0	65
1978	0	17	30	31	31	30	31	170
1979	0	25	30	19	1	30	31	136
1980	0	13	30	27	7	30	31	138
1981	9	31	28	21	31	30	26	176
1982	0	14	30	29	0	0	28	101
1983	0	26	30	31	4	0	0	91
1984	0	25	30	22	0	0	0	77
1985	0	0	25	16	0	27	31	99
1986	0	24	30	17	0	0	0	71
1987	0	24	30	29	0	28	12	123
1988	0	16	30	14	0	19	24	103
1989	0	31	30	4	0	25	30	120
1990	15	31	30	24	0	25	30	155
1991	0	11	30	20	0	0	0	61
1992	10	31	30	14	27	0	0	112
1993	0	20	30	20	0	0	0	70
1994	2	31	30	14	0	0	0	77
1995	0	15	30	20	0	0	0	65
1996	0	21	30	12	0	0	0	63
1997	0	17	30	21	0	0	0	68
1998	0	0	12	30	0	0	0	42
1999	0	14	30	31	1	0	0	76
2000	0	2	30	31	2	17	16	98
2001	0	7	30	31	18	0	0	86
2002	0	8	30	31	9	10	9	97
2003	0	10	30	31	16	7	19	113
2004	0	11	30	31	15	0	15	102
2005	0	0	30	31	12	0	15	88
2006	0	13	30	31	1	6	22	103
2007	0	17	30	19	0	4	16	86
2008	0	7	30	24	0	13	0	74
2009	0	13	30	13	0	23	14	93
2010	0	12	30	19	0	23	19	103
2011	0	8	30	31	11	0	5	85
2012	0	10	30	31	16	13	21	121
2013	0	0	23	0	13	0	0	36
Average 1970-2013	**1.8 All years**	**17.1**	**29.1**	**23.0**	**6.3**	**8.9**	**10.1**	**96.3**

Source: Diversion records from DWR HydroBase on-line database.

TABLE A-4
DIVERSIONS UNDER PRIORITIES 18 & 40
COATS BROS DITCH
Monthly Diversions in Acre-Feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
1970	375	388	375	188	0	0	0	1325
1971	0	388	375	388	0	0	0	1150
1972	0	388	375	388	61	0	0	1211
1973	0	300	375	288	0	0	0	963
1974	0	150	375	388	156	184	0	1253
1975	0	138	375	388	25	0	0	925
1976	0	338	375	388	63	0	0	1163
1977	163	388	263	0	0	0	0	813
1978	0	213	375	388	388	375	194	1931
1979	0	174	375	238	7	138	131	1062
1980	0	163	375	338	38	375	388	1676
1981	113	388	254	97	83	76	87	1096
1982	0	76	268	259	0	0	167	770
1983	0	77	375	388	50	0	0	890
1984	0	313	375	275	0	0	0	963
1985	0	0	313	200	0	338	388	1238
1986	0	259	375	213	0	0	0	846
1987	0	190	286	244	0	200	77	999
1988	0	97	228	92	0	41	51	509
1989	0	388	375	40	0	198	238	1239
1990	99	369	357	286	0	198	238	1547
1991	0	87	375	250	0	0	0	712
1992	125	388	375	175	321	0	0	1384
1993	0	250	375	250	0	0	0	875
1994	13	356	375	155	0	0	0	900
1995	0	188	375	250	0	0	0	813
1996	0	263	375	150	0	0	0	788
1997	0	213	375	263	0	0	0	850
1998	0	0	150	375	0	0	0	525
1999	0	175	375	388	13	0	0	950
2000	0	25	375	388	25	47	44	903
2001	0	88	375	388	225	0	0	1075
2002	0	85	223	177	5	53	48	591
2003	0	125	375	388	200	88	238	1413
2004	0	138	375	388	174	0	163	1237
2005	0	0	375	318	16	0	131	840
2006	0	163	375	388	13	52	192	1181
2007	0	213	375	238	0	50	200	1075
2008	0	88	375	300	0	163	0	925
2009	0	163	375	163	0	288	175	1163
2010	0	150	375	238	0	288	238	1288
2011	0	100	375	388	138	0	63	1063
2012	0	104	257	294	190	122	198	1165
2013	0	0	288	0	154	0	0	442
Average 1970-2013	**20.2**	**194.0**	**346.8**	**267.6**	**53.3**	**74.4**	**82.8**	**1039.1**

Source: Lesser of 12.50 acre-feet/day (6.302 cfs for one day) times the number of days that diversions occurred or the recorded diversion from the DWR HydroBase on-line database.

TABLE A-5
FIELD HEADGATE DELIVERY
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Diversions in Acre-Feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
1970	159	165	159	80	0	0	0	563
1971	0	165	159	165	0	0	0	489
1972	0	165	159	165	26	0	0	515
1973	0	128	159	122	0	0	0	409
1974	0	64	159	165	66	78	0	533
1975	0	58	159	165	11	0	0	393
1976	0	143	159	165	27	0	0	494
1977	69	165	112	0	0	0	0	345
1978	0	90	159	165	165	159	82	821
1979	0	74	159	101	3	59	56	451
1980	0	69	159	143	16	159	165	712
1981	48	165	108	41	35	32	37	466
1982	0	32	114	110	0	0	71	327
1983	0	33	159	165	21	0	0	378
1984	0	133	159	117	0	0	0	409
1985	0	0	133	85	0	143	165	526
1986	0	110	159	90	0	0	0	360
1987	0	81	122	104	0	85	33	424
1988	0	41	97	39	0	17	22	216
1989	0	165	159	17	0	84	101	526
1990	42	157	152	121	0	84	101	658
1991	0	37	159	106	0	0	0	303
1992	53	165	159	74	137	0	0	588
1993	0	106	159	106	0	0	0	372
1994	6	151	159	66	0	0	0	382
1995	0	80	159	106	0	0	0	345
1996	0	112	159	64	0	0	0	335
1997	0	90	159	112	0	0	0	361
1998	0	0	64	159	0	0	0	223
1999	0	74	159	165	5	0	0	404
2000	0	11	159	165	11	20	19	384
2001	0	37	159	165	96	0	0	457
2002	0	36	95	75	2	23	20	251
2003	0	53	159	165	85	37	101	600
2004	0	58	159	165	74	0	69	526
2005	0	0	159	135	7	0	56	357
2006	0	69	159	165	5	22	81	502
2007	0	90	159	101	0	21	85	457
2008	0	37	159	128	0	69	0	393
2009	0	69	159	69	0	122	74	494
2010	0	64	159	101	0	122	101	547
2011	0	43	159	165	58	0	27	452
2012	0	44	109	125	81	52	84	495
2013	0	0	122	0	66	0	0	188
Average 1970-2013	**9**	**82**	**147**	**114**	**23**	**32**	**35**	**442**

Source: Diversions under priorities #18 and #40 x % ownership of ditch x conveyance efficiency.

TABLE A-6
FIELD HEADGATE DELIVERY
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in CFS

Year	Apr	May	Jun	Jul	Aug	Sep	Oct
1970	2.7	2.7	2.7	1.3	0.0	0.0	0.0
1971	0.0	2.7	2.7	2.7	0.0	0.0	0.0
1972	0.0	2.7	2.7	2.7	0.4	0.0	0.0
1973	0.0	2.1	2.7	2.0	0.0	0.0	0.0
1974	0.0	1.0	2.7	2.7	1.1	1.3	0.0
1975	0.0	1.0	2.7	2.7	0.2	0.0	0.0
1976	0.0	2.3	2.7	2.7	0.4	0.0	0.0
1977	1.2	2.7	1.9	0.0	0.0	0.0	0.0
1978	0.0	1.5	2.7	2.7	2.7	2.7	1.3
1979	0.0	1.2	2.7	1.6	0.0	1.0	0.9
1980	0.0	1.1	2.7	2.3	0.3	2.7	2.7
1981	0.8	2.7	1.8	0.7	0.6	0.5	0.6
1982	0.0	0.5	1.9	1.8	0.0	0.0	1.2
1983	0.0	0.5	2.7	2.7	0.3	0.0	0.0
1984	0.0	2.2	2.7	1.9	0.0	0.0	0.0
1985	0.0	0.0	2.2	1.4	0.0	2.4	2.7
1986	0.0	1.8	2.7	1.5	0.0	0.0	0.0
1987	0.0	1.3	2.0	1.7	0.0	1.4	0.5
1988	0.0	0.7	1.6	0.6	0.0	0.3	0.4
1989	0.0	2.7	2.7	0.3	0.0	1.4	1.6
1990	0.7	2.6	2.6	2.0	0.0	1.4	1.6
1991	0.0	0.6	2.7	1.7	0.0	0.0	0.0
1992	0.9	2.7	2.7	1.2	2.2	0.0	0.0
1993	0.0	1.7	2.7	1.7	0.0	0.0	0.0
1994	0.1	2.5	2.7	1.1	0.0	0.0	0.0
1995	0.0	1.3	2.7	1.7	0.0	0.0	0.0
1996	0.0	1.8	2.7	1.0	0.0	0.0	0.0
1997	0.0	1.5	2.7	1.8	0.0	0.0	0.0
1998	0.0	0.0	1.1	2.6	0.0	0.0	0.0
1999	0.0	1.2	2.7	2.7	0.1	0.0	0.0
2000	0.0	0.2	2.7	2.7	0.2	0.3	0.3
2001	0.0	0.6	2.7	2.7	1.6	0.0	0.0
2002	0.0	0.6	1.6	1.2	0.0	0.4	0.3
2003	0.0	0.9	2.7	2.7	1.4	0.6	1.6
2004	0.0	1.0	2.7	2.7	1.2	0.0	1.1
2005	0.0	0.0	2.7	2.2	0.1	0.0	0.9
2006	0.0	1.1	2.7	2.7	0.1	0.4	1.3
2007	0.0	1.5	2.7	1.6	0.0	0.4	1.4
2008	0.0	0.6	2.7	2.1	0.0	1.2	0.0
2009	0.0	1.1	2.7	1.1	0.0	2.1	1.2
2010	0.0	1.0	2.7	1.6	0.0	2.1	1.6
2011	0.0	0.7	2.7	2.7	1.0	0.0	0.4
2012	0.0	0.7	1.8	2.0	1.3	0.9	1.4
2013	0.0	0.0	2.1	0.0	1.1	0.0	0.0
Average 1970-2013	**0.1**	**1.3**	**2.5**	**1.8**	**0.4**	**0.5**	**0.6**

Source: Field Headgate Delivery in acre-feet per month converted to an average flow rate in cubic feet per second for the month.

TABLE A-7
ROOT ZONE DELIVERY
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Diversions in Acre-Feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
1970	79.7	82.3	79.7	39.8	0.0	0.0	0.0	281.6
1971	0.0	82.3	79.7	82.3	0.0	0.0	0.0	244.4
1972	0.0	82.3	79.7	82.3	13.1	0.0	0.0	257.4
1973	0.0	63.8	79.7	61.1	0.0	0.0	0.0	204.5
1974	0.0	31.9	79.7	82.3	33.2	39.2	0.0	266.3
1975	0.0	29.2	79.7	82.3	5.3	0.0	0.0	196.6
1976	0.0	71.7	79.7	82.3	13.3	0.0	0.0	247.0
1977	34.5	82.3	55.8	0.0	0.0	0.0	0.0	172.7
1978	0.0	45.2	79.7	82.3	82.3	79.7	41.2	410.4
1979	0.0	36.9	79.7	50.5	1.5	29.4	27.8	225.7
1980	0.0	34.5	79.7	71.7	8.1	79.7	82.3	356.1
1981	23.9	82.3	53.9	20.7	17.6	16.2	18.4	233.0
1982	0.0	16.2	56.9	55.0	0.0	0.0	35.4	163.5
1983	0.0	16.4	79.7	82.3	10.6	0.0	0.0	189.1
1984	0.0	66.4	79.7	58.4	0.0	0.0	0.0	204.5
1985	0.0	0.0	66.4	42.5	0.0	71.7	82.3	263.0
1986	0.0	55.0	79.7	45.2	0.0	0.0	0.0	179.8
1987	0.0	40.5	60.8	51.9	0.0	42.6	16.4	212.2
1988	0.0	20.7	48.5	19.5	0.0	8.6	10.9	108.2
1989	0.0	82.3	79.7	8.4	0.0	42.1	50.6	263.2
1990	21.1	78.4	75.9	60.7	0.0	42.1	50.6	328.8
1991	0.0	18.5	79.7	53.1	0.0	0.0	0.0	151.4
1992	26.6	82.3	79.7	37.2	68.3	0.0	0.0	294.1
1993	0.0	53.1	79.7	53.1	0.0	0.0	0.0	185.9
1994	2.9	75.7	79.7	33.0	0.0	0.0	0.0	191.2
1995	0.0	39.8	79.7	53.1	0.0	0.0	0.0	172.7
1996	0.0	55.8	79.7	31.9	0.0	0.0	0.0	167.3
1997	0.0	45.2	79.7	55.8	0.0	0.0	0.0	180.6
1998	0.0	0.0	31.9	79.7	0.0	0.0	0.0	111.6
1999	0.0	37.2	79.7	82.3	2.7	0.0	0.0	201.9
2000	0.0	5.3	79.7	82.3	5.3	9.9	9.3	191.9
2001	0.0	18.6	79.7	82.3	47.8	0.0	0.0	228.4
2002	0.0	18.1	47.4	37.6	1.1	11.3	10.2	125.6
2003	0.0	26.6	79.7	82.3	42.5	18.6	50.5	300.2
2004	0.0	29.2	79.7	82.3	37.0	0.0	34.6	262.9
2005	0.0	0.0	79.7	67.7	3.3	0.0	27.8	178.5
2006	0.0	34.5	79.7	82.3	2.7	11.1	40.7	251.0
2007	0.0	45.2	79.7	50.5	0.0	10.6	42.5	228.4
2008	0.0	18.6	79.7	63.8	0.0	34.5	0.0	196.6
2009	0.0	34.5	79.7	34.5	0.0	61.1	37.2	247.0
2010	0.0	31.9	79.7	50.5	0.0	61.1	50.5	273.6
2011	0.0	21.3	79.7	82.3	29.2	0.0	13.3	225.8
2012	0.0	22.0	54.6	62.5	40.4	26.0	42.0	247.6
2013	0.0	0.0	61.1	0.0	32.8	0.0	0.0	93.9
Average 1970-2013	**4.3**	**41.2**	**73.7**	**56.9**	**11.3**	**15.8**	**17.6**	**220.8**

Source: Field headgate delivery x irrigation application efficiency
Root Zone delivery is the water available to the crop and the soil moisture reservoir.

TABLE A-8
CONSUMPTIVE IRRIGATION WATER REQUIREMENT
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly CU in Acre Feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
1970	0.0	68.1	92.8	87.1	45.3	19.2	3.1	315.6
1971	0.0	64.2	107.5	78.4	29.8	37.1	12.9	330.0
1972	8.3	75.3	105.3	99.1	58.9	35.9	12.1	394.9
1973	0.0	62.2	101.2	82.0	50.8	42.6	14.7	353.4
1974	4.9	79.3	99.1	84.2	42.5	45.6	15.7	371.3
1975	0.0	53.7	97.2	88.1	47.3	46.2	3.3	335.8
1976	7.8	60.0	96.5	86.5	39.3	37.8	4.5	332.5
1977	10.7	72.5	106.2	80.9	45.8	47.8	15.0	378.9
1978	14.1	64.3	104.2	92.8	55.6	51.6	14.8	397.3
1979	5.6	63.9	95.3	102.1	50.2	52.9	19.1	389.0
1980	0.0	59.9	108.8	98.7	54.3	46.2	11.9	379.7
1981	16.0	60.6	102.4	70.5	42.5	41.3	12.8	346.0
1982	8.7	62.5	91.4	91.6	32.7	30.9	10.6	328.5
1983	0.0	58.5	97.6	95.0	51.7	51.1	22.1	376.1
1984	0.0	76.2	90.7	89.5	47.0	43.3	4.3	351.0
1985	14.3	74.6	109.9	93.2	62.9	32.4	19.6	406.9
1986	17.0	74.9	102.3	78.8	38.6	37.8	12.4	361.8
1987	14.5	68.4	100.2	88.7	47.7	40.3	12.3	372.0
1988	7.7	68.4	100.2	88.7	47.7	45.7	22.6	380.9
1989	15.6	76.9	100.1	104.3	46.8	44.2	12.9	400.7
1990	8.0	68.3	113.0	82.1	47.2	32.6	10.9	362.1
1991	7.7	68.4	99.0	81.1	41.9	37.8	17.4	353.2
1992	14.5	64.6	103.0	82.0	47.7	51.5	22.0	385.3
1993	7.7	68.4	100.2	88.7	47.7	40.3	12.3	365.2
1994	13.1	70.1	100.9	92.6	38.5	35.3	12.3	362.8
1995	0.0	55.5	85.1	89.6	55.2	41.6	10.5	337.6
1996	7.1	67.5	103.7	103.0	57.3	33.5	9.3	381.4
1997	7.8	66.6	92.7	94.7	44.5	37.5	7.7	351.4
1998	1.7	77.0	102.6	89.8	50.4	50.6	8.3	380.4
1999	0.0	51.4	93.7	83.1	33.3	37.3	8.0	306.8
2000	15.2	68.0	108.7	83.0	50.1	40.1	15.9	381.1
2001	14.5	71.6	87.6	92.9	47.1	48.1	12.8	374.7
2002	15.7	77.0	114.3	104.5	52.8	33.0	10.3	407.6
2003	11.2	74.1	94.5	99.2	43.1	25.8	20.2	368.1
2004	8.1	78.1	95.4	67.2	55.2	44.0	12.7	360.8
2005	10.2	73.2	95.1	97.4	42.5	32.7	12.6	363.6
2006	15.5	70.1	101.4	72.7	44.1	34.3	3.2	341.3
2007	11.1	69.2	103.1	93.3	54.5	38.9	11.0	381.1
2008	0.0	43.6	96.5	82.6	60.6	40.3	10.0	333.6
2009	5.9	66.8	91.9	93.3	54.6	46.9	2.8	362.1
2010	1.8	64.5	100.2	90.4	47.3	40.4	16.4	360.9
2011	0.0	68.0	106.0	91.2	59.3	47.1	11.2	382.9
2012	16.1	77.1	112.9	91.5	52.9	41.5	14.1	406.0
2013	6.8	68.4	111.1	91.9	48.2	43.1	9.9	379.3
Average 1970-2013	**7.8**	**67.5**	**100.5**	**89.0**	**48.0**	**40.6**	**12.2**	**365.7**

Source: (DWR StateCU historic consumptive use model output) X (number of irrigated field acres for Kruthaupt Ranch).

TABLE A-9
DIVERSIONS DIRECT TO CROP CONSUMPTIVE USE
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly CU in Acre-Feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
1970	0.0	68.1	79.7	39.8	0.0	0.0	0.0	188
1971	0.0	64.2	79.7	78.4	0.0	0.0	0.0	222
1972	0.0	75.3	79.7	82.3	13.1	0.0	0.0	250
1973	0.0	62.2	79.7	61.1	0.0	0.0	0.0	203
1974	0.0	31.9	79.7	82.3	33.2	39.2	0.0	266
1975	0.0	29.2	79.7	82.3	5.3	0.0	0.0	197
1976	0.0	60.0	79.7	82.3	13.3	0.0	0.0	235
1977	10.7	72.5	55.8	0.0	0.0	0.0	0.0	139
1978	0.0	45.2	79.7	82.3	55.6	51.6	14.8	329
1979	0.0	36.9	79.7	50.5	1.5	29.4	19.1	217
1980	0.0	34.5	79.7	71.7	8.1	46.2	11.9	252
1981	16.0	60.6	53.9	20.7	17.6	16.2	12.8	198
1982	0.0	16.2	56.9	55.0	0.0	0.0	10.6	139
1983	0.0	16.4	79.7	82.3	10.6	0.0	0.0	189
1984	0.0	66.4	79.7	58.4	0.0	0.0	0.0	205
1985	0.0	0.0	66.4	42.5	0.0	32.4	19.6	161
1986	0.0	55.0	79.7	45.2	0.0	0.0	0.0	180
1987	0.0	40.5	60.8	51.9	0.0	40.3	12.3	206
1988	0.0	20.7	48.5	19.5	0.0	8.6	10.9	108
1989	0.0	76.9	79.7	8.4	0.0	42.1	12.9	220
1990	8.0	68.3	75.9	60.7	0.0	32.6	10.9	256
1991	0.0	18.5	79.7	53.1	0.0	0.0	0.0	151
1992	14.5	64.6	79.7	37.2	47.7	0.0	0.0	244
1993	0.0	53.1	79.7	53.1	0.0	0.0	0.0	186
1994	2.9	70.1	79.7	33.0	0.0	0.0	0.0	186
1995	0.0	39.8	79.7	53.1	0.0	0.0	0.0	173
1996	0.0	55.8	79.7	31.9	0.0	0.0	0.0	167
1997	0.0	45.2	79.7	55.8	0.0	0.0	0.0	181
1998	0.0	0.0	31.9	79.7	0.0	0.0	0.0	112
1999	0.0	37.2	79.7	82.3	2.7	0.0	0.0	202
2000	0.0	5.3	79.7	82.3	5.3	9.9	9.3	192
2001	0.0	18.6	79.7	82.3	47.1	0.0	0.0	228
2002	0.0	18.1	47.4	37.6	1.1	11.3	10.2	126
2003	0.0	26.6	79.7	82.3	42.5	18.6	20.2	270
2004	0.0	29.2	79.7	67.2	37.0	0.0	12.7	226
2005	0.0	0.0	79.7	67.7	3.3	0.0	12.6	163
2006	0.0	34.5	79.7	72.7	2.7	11.1	3.2	204
2007	0.0	45.2	79.7	50.5	0.0	10.6	11.0	197
2008	0.0	18.6	79.7	63.8	0.0	34.5	0.0	197
2009	0.0	34.5	79.7	34.5	0.0	46.9	2.8	198
2010	0.0	31.9	79.7	50.5	0.0	40.4	16.4	219
2011	0.0	21.3	79.7	82.3	29.2	0.0	11.2	224
2012	0.0	22.0	54.6	62.5	40.4	26.0	14.1	220
2013	0.0	0.0	61.1	0.0	32.8	0.0	0.0	94
Average 1970-2013	**1.2**	**38.4**	**73.7**	**56.2**	**10.2**	**12.5**	**5.9**	**198.1**

Source: Lesser of consumptive irrigation water requirement or root zone delivery.

TABLE A-10
DIVERSIONS TO SOIL MOISTURE RESERVOIR
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-Feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct
1970	71.7	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	18.1	0.0	3.9	0.0	0.0	0.0
1972	0.0	7.1	0.0	0.0	0.0	0.0	0.0
1973	0.0	1.6	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	11.8	0.0	0.0	0.0	0.0	0.0
1977	23.8	9.9	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	26.8	28.1	16.8
1979	0.0	0.0	0.0	0.0	0.0	0.0	8.7
1980	0.0	0.0	0.0	0.0	0.0	33.5	38.2
1981	0.0	0.0	0.0	0.0	0.0	0.0	5.6
1982	0.0	0.0	0.0	0.0	0.0	0.0	24.8
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	39.3	32.4
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	2.3	4.2
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	5.5	0.0	0.0	0.0	0.0	37.7
1990	13.1	10.1	0.0	0.0	0.0	9.5	39.7
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	12.0	17.7	0.0	0.0	20.6	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994	0.0	5.5	0.0	0.0	0.0	0.0	0.0
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.7	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	30.3
2004	0.0	0.0	0.0	15.2	0.0	0.0	21.9
2005	0.0	0.0	0.0	0.0	0.0	0.0	15.2
2006	0.0	0.0	0.0	9.6	0.0	0.0	37.5
2007	0.0	0.0	0.0	0.0	0.0	0.0	31.5
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	14.2	34.4
2010	0.0	0.0	0.0	0.0	0.0	20.7	34.1
2011	0.0	0.0	0.0	0.0	0.0	0.0	2.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	27.9
2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average 1970-2013	**2.7**	**2.0**	**0.0**	**0.7**	**1.1**	**3.4**	**10.1**

Source: Root zone delivery less diversions direct to crop consumptive use up to a limit of the prior month's end of month unfilled soil moisture reservoir capacity. Occurs only if root zone delivery > diversions to crop consumptive use.

TABLE A-11
WITHDRAWALS FROM SOIL MOISTURE RESERVOIR
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-Feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct
1970	0.0	0.0	13.1	47.2	11.4	0.0	0.0
1971	0.0	0.0	18.1	0.0	3.9	0.0	0.0
1972	0.0	0.0	7.1	0.0	0.0	0.0	0.0
1973	0.0	0.0	1.6	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	11.8	0.0	0.0	0.0	0.0
1977	0.0	0.0	33.7	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	5.6	27.0	15.6	23.5	0.0	0.0	0.0
1980	0.0	8.7	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	48.5	23.2	0.0	0.0	0.0
1982	5.6	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	24.8	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	17.0	19.9	22.7	12.1	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	6.5	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	5.5	0.0	0.0	0.0	0.0
1990	0.0	0.0	37.1	21.4	2.4	0.0	0.0
1991	7.7	41.6	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	23.3	6.4	0.0	20.6	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994	0.0	0.0	5.5	0.0	0.0	0.0	0.0
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.7	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	8.1	22.2	0.0	0.0	15.2	0.0	0.0
2005	10.2	11.7	0.0	0.0	0.0	0.0	0.0
2006	15.2	0.0	0.0	0.0	9.6	0.0	0.0
2007	11.1	24.0	2.3	0.0	0.0	0.0	0.0
2008	0.0	25.0	6.5	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	1.8	32.7	14.2	0.0	0.0	0.0	0.0
2011	0.0	46.8	8.0	0.0	0.0	0.0	0.0
2012	2.0	0.0	0.0	0.0	0.0	0.0	0.0
2013	6.8	21.1	0.0	0.0	0.0	0.0	0.0
Average 1970-2013	**2.2**	**6.9**	**6.2**	**3.0**	**1.0**	**0.5**	**0.0**

Source: Consumptive irrigation water requirement less diversions direct to crop CU up to a limit of the prior month's end of month storage in the soil moisture reservoir. Occurs only if root zone delivery is less than consumptive irrigation water requirement.

TABLE A-12
END OF MONTH SOIL MOISTURE STORAGE
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-Feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct
1970	71.7	71.7	58.6	11.4	0.0	0.0	0.0
1971	0.0	18.1	0.0	3.9	0.0	0.0	0.0
1972	0.0	7.1	0.0	0.0	0.0	0.0	0.0
1973	0.0	1.6	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	11.8	0.0	0.0	0.0	0.0	0.0
1977	23.8	33.7	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	26.8	54.9	71.7
1979	66.1	39.1	23.5	0.0	0.0	0.0	8.7
1980	8.7	0.0	0.0	0.0	0.0	33.5	71.7
1981	71.7	71.7	23.2	0.0	0.0	0.0	5.6
1982	0.0	0.0	0.0	0.0	0.0	0.0	24.8
1983	24.8	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	39.3	71.7
1986	54.7	34.8	12.1	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	2.3	6.5
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	5.5	0.0	0.0	0.0	0.0	37.7
1990	50.7	60.9	23.8	2.4	0.0	9.5	49.2
1991	41.6	0.0	0.0	0.0	0.0	0.0	0.0
1992	12.0	29.7	6.4	0.0	20.6	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994	0.0	5.5	0.0	0.0	0.0	0.0	0.0
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.7	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	30.3
2004	22.2	0.0	0.0	15.2	0.0	0.0	21.9
2005	11.7	0.0	0.0	0.0	0.0	0.0	15.2
2006	0.0	0.0	0.0	9.6	0.0	0.0	37.5
2007	26.3	2.3	0.0	0.0	0.0	0.0	31.5
2008	31.5	6.5	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	14.2	48.6
2010	46.8	14.2	0.0	0.0	0.0	20.7	54.8
2011	54.8	8.0	0.0	0.0	0.0	0.0	2.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	27.9
2013	21.1	0.0	0.0	0.0	0.0	0.0	0.0
Average 1970-2013	**14.6**	**9.6**	**3.4**	**1.0**	**1.1**	**4.0**	**14.0**

Source: Prior month EOM soil moisture storage + current month diversions to soil moisture storage - current month withdrawals from soil moisture storage.

TABLE A-13
HISTORIC CROP CONSUMPTIVE USE
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly HCU in Acre-Feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
1970	0.0	68.1	92.8	87.1	11.4	0.0	0.0	259
1971	0.0	64.2	97.8	78.4	3.9	0.0	0.0	244
1972	0.0	75.3	86.8	82.3	13.1	0.0	0.0	257
1973	0.0	62.2	81.2	61.1	0.0	0.0	0.0	205
1974	0.0	31.9	79.7	82.3	33.2	39.2	0.0	266
1975	0.0	29.2	79.7	82.3	5.3	0.0	0.0	197
1976	0.0	60.0	91.5	82.3	13.3	0.0	0.0	247
1977	10.7	72.5	89.5	0.0	0.0	0.0	0.0	173
1978	0.0	45.2	79.7	82.3	55.6	51.6	14.8	329
1979	5.6	63.9	95.3	74.0	1.5	29.4	19.1	289
1980	0.0	43.2	79.7	71.7	8.1	46.2	11.9	261
1981	16.0	60.6	102.4	43.9	17.6	16.2	12.8	269
1982	5.6	16.2	56.9	55.0	0.0	0.0	10.6	144
1983	0.0	41.3	79.7	82.3	10.6	0.0	0.0	214
1984	0.0	66.4	79.7	58.4	0.0	0.0	0.0	205
1985	0.0	0.0	66.4	42.5	0.0	32.4	19.6	161
1986	17.0	74.9	102.3	57.3	0.0	0.0	0.0	252
1987	0.0	40.5	60.8	51.9	0.0	40.3	12.3	206
1988	6.5	20.7	48.5	19.5	0.0	8.6	10.9	115
1989	0.0	76.9	85.2	8.4	0.0	42.1	12.9	226
1990	8.0	68.3	113.0	82.1	2.4	32.6	10.9	317
1991	7.7	60.1	79.7	53.1	0.0	0.0	0.0	201
1992	14.5	64.6	103.0	43.6	47.7	20.6	0.0	294
1993	0.0	53.1	79.7	53.1	0.0	0.0	0.0	186
1994	2.9	70.1	85.2	33.0	0.0	0.0	0.0	191
1995	0.0	39.8	79.7	53.1	0.0	0.0	0.0	173
1996	0.0	55.8	79.7	31.9	0.0	0.0	0.0	167
1997	0.0	45.2	79.7	55.8	0.0	0.0	0.0	181
1998	0.0	0.0	31.9	79.7	0.0	0.0	0.0	112
1999	0.0	37.2	79.7	82.3	2.7	0.0	0.0	202
2000	0.0	5.3	79.7	82.3	5.3	9.9	9.3	192
2001	0.0	18.6	79.7	82.3	47.1	0.7	0.0	228
2002	0.0	18.1	47.4	37.6	1.1	11.3	10.2	126
2003	0.0	26.6	79.7	82.3	42.5	18.6	20.2	270
2004	8.1	51.4	79.7	67.2	52.2	0.0	12.7	271
2005	10.2	11.7	79.7	67.7	3.3	0.0	12.6	185
2006	15.2	34.5	79.7	72.7	12.3	11.1	3.2	229
2007	11.1	69.2	82.0	50.5	0.0	10.6	11.0	234
2008	0.0	43.6	86.2	63.8	0.0	34.5	0.0	228
2009	0.0	34.5	79.7	34.5	0.0	46.9	2.8	198
2010	1.8	64.5	93.8	50.5	0.0	40.4	16.4	267
2011	0.0	68.0	87.7	82.3	29.2	0.0	11.2	279
2012	2.0	22.0	54.6	62.5	40.4	26.0	14.1	222
2013	6.8	21.1	61.1	0.0	32.8	0.0	0.0	122
Average 1970-2013	**3.4**	**45.4**	**79.9**	**59.3**	**11.2**	**12.9**	**5.9**	**218.0**

Source: Diversions direct to crop consumptive use plus withdrawals from soil moisture reservoir.

TABLE A-14
FIELD DEPLETION
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
1970	71.7	68.1	79.7	39.8	0.0	0.0	0.0	259
1971	0.0	82.3	79.7	82.3	0.0	0.0	0.0	244
1972	0.0	82.3	79.7	82.3	13.1	0.0	0.0	257
1973	0.0	63.8	79.7	61.1	0.0	0.0	0.0	205
1974	0.0	31.9	79.7	82.3	33.2	39.2	0.0	266
1975	0.0	29.2	79.7	82.3	5.3	0.0	0.0	197
1976	0.0	71.7	79.7	82.3	13.3	0.0	0.0	247
1977	34.5	82.3	55.8	0.0	0.0	0.0	0.0	173
1978	0.0	45.2	79.7	82.3	82.3	79.7	31.6	401
1979	0.0	36.9	79.7	50.5	1.5	29.4	27.8	226
1980	0.0	34.5	79.7	71.7	8.1	79.7	50.1	324
1981	16.0	60.6	53.9	20.7	17.6	16.2	18.4	203
1982	0.0	16.2	56.9	55.0	0.0	0.0	35.4	164
1983	0.0	16.4	79.7	82.3	10.6	0.0	0.0	189
1984	0.0	66.4	79.7	58.4	0.0	0.0	0.0	205
1985	0.0	0.0	66.4	42.5	0.0	71.7	52.0	233
1986	0.0	55.0	79.7	45.2	0.0	0.0	0.0	180
1987	0.0	40.5	60.8	51.9	0.0	42.6	16.4	212
1988	0.0	20.7	48.5	19.5	0.0	8.6	10.9	108
1989	0.0	82.3	79.7	8.4	0.0	42.1	50.6	263
1990	21.1	78.4	75.9	60.7	0.0	42.1	50.6	329
1991	0.0	18.5	79.7	53.1	0.0	0.0	0.0	151
1992	26.6	82.3	79.7	37.2	68.3	0.0	0.0	294
1993	0.0	53.1	79.7	53.1	0.0	0.0	0.0	186
1994	2.9	75.7	79.7	33.0	0.0	0.0	0.0	191
1995	0.0	39.8	79.7	53.1	0.0	0.0	0.0	173
1996	0.0	55.8	79.7	31.9	0.0	0.0	0.0	167
1997	0.0	45.2	79.7	55.8	0.0	0.0	0.0	181
1998	0.0	0.0	31.9	79.7	0.0	0.0	0.0	112
1999	0.0	37.2	79.7	82.3	2.7	0.0	0.0	202
2000	0.0	5.3	79.7	82.3	5.3	9.9	9.3	192
2001	0.0	18.6	79.7	82.3	47.8	0.0	0.0	228
2002	0.0	18.1	47.4	37.6	1.1	11.3	10.2	126
2003	0.0	26.6	79.7	82.3	42.5	18.6	50.5	300
2004	0.0	29.2	79.7	82.3	37.0	0.0	34.6	263
2005	0.0	0.0	79.7	67.7	3.3	0.0	27.8	178
2006	0.0	34.5	79.7	82.3	2.7	11.1	40.7	251
2007	0.0	45.2	79.7	50.5	0.0	10.6	42.5	228
2008	0.0	18.6	79.7	63.8	0.0	34.5	0.0	197
2009	0.0	34.5	79.7	34.5	0.0	61.1	37.2	247
2010	0.0	31.9	79.7	50.5	0.0	61.1	50.5	274
2011	0.0	21.3	79.7	82.3	29.2	0.0	13.3	226
2012	0.0	22.0	54.6	62.5	40.4	26.0	42.0	248
2013	0.0	0.0	61.1	0.0	32.8	0.0	0.0	94
Average 1970-2013	**3.9**	**40.4**	**73.7**	**56.9**	**11.3**	**15.8**	**16.0**	**218.0**

Source: Diversions direct to crop consumptive use plus diversions to soil moisture reservoir.

TABLE A-15
RETURNS FROM THE FIELD
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct
1970	87.7	96.5	79.7	39.8	0.0	0.0	0.0
1971	0.0	82.3	79.7	82.3	0.0	0.0	0.0
1972	0.0	82.3	79.7	82.3	13.1	0.0	0.0
1973	0.0	63.8	79.7	61.1	0.0	0.0	0.0
1974	0.0	31.9	79.7	82.3	33.2	39.2	0.0
1975	0.0	29.2	79.7	82.3	5.3	0.0	0.0
1976	0.0	71.7	79.7	82.3	13.3	0.0	0.0
1977	34.5	82.3	55.8	0.0	0.0	0.0	0.0
1978	0.0	45.2	79.7	82.3	82.3	79.7	50.8
1979	0.0	36.9	79.7	50.5	1.5	29.4	27.8
1980	0.0	34.5	79.7	71.7	8.1	79.7	114.6
1981	31.8	104.1	53.9	20.7	17.6	16.2	18.4
1982	0.0	16.2	56.9	55.0	0.0	0.0	35.4
1983	0.0	16.4	79.7	82.3	10.6	0.0	0.0
1984	0.0	66.4	79.7	58.4	0.0	0.0	0.0
1985	0.0	0.0	66.4	42.5	0.0	71.7	112.7
1986	0.0	55.0	79.7	45.2	0.0	0.0	0.0
1987	0.0	40.5	60.8	51.9	0.0	42.6	16.4
1988	0.0	20.7	48.5	19.5	0.0	8.6	10.9
1989	0.0	82.3	79.7	8.4	0.0	42.1	50.6
1990	21.1	78.4	75.9	60.7	0.0	42.1	50.6
1991	0.0	18.5	79.7	53.1	0.0	0.0	0.0
1992	26.6	82.3	79.7	37.2	68.3	0.0	0.0
1993	0.0	53.1	79.7	53.1	0.0	0.0	0.0
1994	2.9	75.7	79.7	33.0	0.0	0.0	0.0
1995	0.0	39.8	79.7	53.1	0.0	0.0	0.0
1996	0.0	55.8	79.7	31.9	0.0	0.0	0.0
1997	0.0	45.2	79.7	55.8	0.0	0.0	0.0
1998	0.0	0.0	31.9	79.7	0.0	0.0	0.0
1999	0.0	37.2	79.7	82.3	2.7	0.0	0.0
2000	0.0	5.3	79.7	82.3	5.3	9.9	9.3
2001	0.0	18.6	79.7	82.3	47.8	0.0	0.0
2002	0.0	18.1	47.4	37.6	1.1	11.3	10.2
2003	0.0	26.6	79.7	82.3	42.5	18.6	50.5
2004	0.0	29.2	79.7	82.3	37.0	0.0	34.6
2005	0.0	0.0	79.7	67.7	3.3	0.0	27.8
2006	0.0	34.5	79.7	82.3	2.7	11.1	40.7
2007	0.0	45.2	79.7	50.5	0.0	10.6	42.5
2008	0.0	18.6	79.7	63.8	0.0	34.5	0.0
2009	0.0	34.5	79.7	34.5	0.0	61.1	37.2
2010	0.0	31.9	79.7	50.5	0.0	61.1	50.5
2011	0.0	21.3	79.7	82.3	29.2	0.0	13.3
2012	0.0	22.0	54.6	62.5	40.4	26.0	42.0
2013	0.0	0.0	61.1	0.0	32.8	0.0	0.0
Average 1970-2013	**4.6**	**42.0**	**73.7**	**56.9**	**11.3**	**15.8**	**19.2**

Source: Field headgate delivery - Field depletion

TABLE A-16
SURFACE RETURNS TO RIVER
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct
1970	43.8	48.3	39.8	19.9	0.0	0.0	0.0
1971	0.0	41.2	39.8	41.2	0.0	0.0	0.0
1972	0.0	41.2	39.8	41.2	6.5	0.0	0.0
1973	0.0	31.9	39.8	30.5	0.0	0.0	0.0
1974	0.0	15.9	39.8	41.2	16.6	19.6	0.0
1975	0.0	14.6	39.8	41.2	2.7	0.0	0.0
1976	0.0	35.9	39.8	41.2	6.6	0.0	0.0
1977	17.3	41.2	27.9	0.0	0.0	0.0	0.0
1978	0.0	22.6	39.8	41.2	41.2	39.8	25.4
1979	0.0	18.4	39.8	25.2	0.8	14.7	13.9
1980	0.0	17.3	39.8	35.9	4.1	39.8	57.3
1981	15.9	52.1	27.0	10.3	8.8	8.1	9.2
1982	0.0	8.1	28.5	27.5	0.0	0.0	17.7
1983	0.0	8.2	39.8	41.2	5.3	0.0	0.0
1984	0.0	33.2	39.8	29.2	0.0	0.0	0.0
1985	0.0	0.0	33.2	21.3	0.0	35.9	56.3
1986	0.0	27.5	39.8	22.6	0.0	0.0	0.0
1987	0.0	20.2	30.4	26.0	0.0	21.3	8.2
1988	0.0	10.3	24.2	9.7	0.0	4.3	5.5
1989	0.0	41.2	39.8	4.2	0.0	21.1	25.3
1990	10.5	39.2	37.9	30.3	0.0	21.1	25.3
1991	0.0	9.3	39.8	26.6	0.0	0.0	0.0
1992	13.3	41.2	39.8	18.6	34.1	0.0	0.0
1993	0.0	26.6	39.8	26.6	0.0	0.0	0.0
1994	1.4	37.8	39.8	16.5	0.0	0.0	0.0
1995	0.0	19.9	39.8	26.6	0.0	0.0	0.0
1996	0.0	27.9	39.8	15.9	0.0	0.0	0.0
1997	0.0	22.6	39.8	27.9	0.0	0.0	0.0
1998	0.0	0.0	15.9	39.8	0.0	0.0	0.0
1999	0.0	18.6	39.8	41.2	1.3	0.0	0.0
2000	0.0	2.7	39.8	41.2	2.7	4.9	4.7
2001	0.0	9.3	39.8	41.2	23.9	0.0	0.0
2002	0.0	9.0	23.7	18.8	0.5	5.6	5.1
2003	0.0	13.3	39.8	41.2	21.3	9.3	25.2
2004	0.0	14.6	39.8	41.2	18.5	0.0	17.3
2005	0.0	0.0	39.8	33.8	1.7	0.0	13.9
2006	0.0	17.3	39.8	41.2	1.3	5.6	20.4
2007	0.0	22.6	39.8	25.2	0.0	5.3	21.3
2008	0.0	9.3	39.8	31.9	0.0	17.3	0.0
2009	0.0	17.3	39.8	17.3	0.0	30.5	18.6
2010	0.0	15.9	39.8	25.2	0.0	30.5	25.2
2011	0.0	10.6	39.8	41.2	14.6	0.0	6.6
2012	0.0	11.0	27.3	31.3	20.2	13.0	21.0
2013	0.0	0.0	30.5	0.0	16.4	0.0	0.0
Average 1970-2013	**2.3**	**21.0**	**36.8**	**28.4**	**5.7**	**7.9**	**9.6**

Source: % surface flow x return from field.

TABLE A-17
LAGGED SUBSURFACE RETURNS TO RIVER (APRIL - OCTOBER INSTREAM FLOW USE)
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1970	17.3	36.4	40.7	32.2	16.3	5.7	2.0	0.7	0.2	0.1	0.0	0.0	152
1971	0.0	16.3	32.0	37.6	23.6	8.1	2.9	1.0	0.4	0.1	0.0	0.0	122
1972	0.0	16.3	32.0	37.6	26.2	10.7	3.8	1.3	0.5	0.2	0.1	0.0	129
1973	0.0	12.6	28.4	32.1	19.0	6.5	2.3	0.8	0.3	0.1	0.0	0.0	102
1974	0.0	6.3	22.0	34.2	29.0	22.0	12.7	4.4	1.6	0.6	0.2	0.1	133
1975	0.0	5.8	21.5	34.0	23.4	8.7	3.1	1.1	0.4	0.1	0.0	0.0	98
1976	0.0	14.2	29.9	36.8	26.0	10.7	3.8	1.3	0.5	0.2	0.1	0.0	123
1977	6.8	23.1	29.6	17.4	6.0	2.1	0.8	0.3	0.1	0.0	0.0	0.0	86
1978	0.0	8.9	24.7	35.1	39.0	39.9	34.1	18.4	6.4	2.3	0.8	0.3	210
1979	0.1	7.3	23.0	28.2	16.5	11.7	13.4	8.2	2.8	1.0	0.4	0.1	113
1980	0.0	6.8	22.6	32.3	22.0	24.4	41.4	29.1	10.0	3.6	1.3	0.4	194
1981	6.4	26.9	33.4	22.5	13.9	10.3	9.3	5.6	1.9	0.7	0.2	0.1	131
1982	0.0	3.2	14.5	23.2	15.1	5.2	8.8	7.7	2.6	0.9	0.3	0.1	82
1983	0.0	3.2	19.0	33.1	24.1	9.7	3.4	1.2	0.4	0.2	0.1	0.0	94
1984	0.0	13.1	28.9	31.8	18.5	6.4	2.3	0.8	0.3	0.1	0.0	0.0	102
1985	0.0	0.0	13.1	21.5	12.9	18.6	38.0	27.7	9.5	3.4	1.2	0.4	146
1986	0.1	10.9	26.6	28.4	15.6	5.4	1.9	0.7	0.2	0.1	0.0	0.0	90
1987	0.0	8.0	20.0	25.0	15.3	13.7	13.6	6.8	2.4	0.8	0.3	0.1	106
1988	0.0	4.1	13.7	14.8	7.6	4.4	4.8	3.1	1.1	0.4	0.1	0.0	54
1989	0.0	16.3	32.0	23.0	9.0	11.5	19.5	13.2	4.5	1.6	0.6	0.2	131
1990	4.2	19.7	31.9	32.8	19.2	14.9	20.7	13.7	4.7	1.7	0.6	0.2	164
1991	0.1	3.7	19.4	27.5	16.3	5.6	2.0	0.7	0.2	0.1	0.0	0.0	76
1992	5.2	21.5	33.8	29.3	28.4	18.7	6.4	2.3	0.8	0.3	0.1	0.0	147
1993	0.0	10.5	26.3	29.8	17.1	5.9	2.1	0.7	0.3	0.1	0.0	0.0	93
1994	0.6	15.5	30.9	27.4	13.7	4.8	1.7	0.6	0.2	0.1	0.0	0.0	95
1995	0.0	7.9	23.6	28.9	16.8	5.8	2.1	0.7	0.3	0.1	0.0	0.0	86
1996	0.0	11.0	26.8	25.8	13.0	4.5	1.6	0.6	0.2	0.1	0.0	0.0	84
1997	0.0	8.9	24.7	29.8	17.5	6.0	2.2	0.8	0.3	0.1	0.0	0.0	90
1998	0.0	0.0	6.3	22.0	17.9	6.1	2.2	0.8	0.3	0.1	0.0	0.0	56
1999	0.0	7.3	23.1	34.5	23.1	8.3	2.9	1.0	0.4	0.1	0.0	0.0	101
2000	0.0	1.0	16.8	32.4	22.8	10.5	6.8	3.6	1.2	0.4	0.2	0.0	96
2001	0.0	3.7	19.4	33.3	31.5	17.1	5.9	2.1	0.7	0.3	0.1	0.0	114
2002	0.0	3.6	12.9	18.0	11.3	6.3	5.7	3.3	1.1	0.4	0.1	0.0	63
2003	0.0	5.2	21.0	33.8	30.7	19.7	19.2	13.2	4.5	1.6	0.6	0.2	150
2004	0.1	5.8	21.5	34.0	29.7	15.0	12.1	8.7	3.0	1.1	0.4	0.1	131
2005	0.0	0.0	15.7	29.1	19.4	7.1	8.0	6.4	2.2	0.8	0.3	0.1	89
2006	0.0	6.8	22.6	34.4	23.0	10.4	13.2	9.8	3.4	1.2	0.4	0.1	125
2007	0.0	8.9	24.7	28.8	16.4	7.8	12.5	9.8	3.4	1.2	0.4	0.1	114
2008	0.0	3.7	19.4	29.6	18.4	13.2	9.1	3.1	1.1	0.4	0.1	0.0	98
2009	0.0	6.8	22.6	24.9	13.0	16.6	21.1	12.0	4.2	1.5	0.5	0.2	123
2010	0.1	6.3	22.0	27.9	16.1	17.6	24.0	14.8	5.1	1.8	0.6	0.2	137
2011	0.1	4.2	19.9	33.5	27.9	13.4	7.3	4.3	1.5	0.5	0.2	0.1	113
2012	0.0	4.4	15.1	24.6	24.5	18.8	18.2	11.8	4.0	1.4	0.5	0.2	124
2013	0.1	0.0	12.1	12.1	10.6	8.0	2.7	1.0	0.3	0.1	0.0	0.0	47
Average 1970-2013	**0.9**	**9.2**	**23.2**	**28.8**	**19.5**	**11.3**	**9.8**	**5.9**	**2.0**	**0.7**	**0.3**	**0.1**	112

Source: % subsurface flow x return from field x lagged return flow factors.

TABLE A-18
NET HISTORIC RIVER DEPLETION (APRIL - OCTOBER INSTREAM FLOW USE)
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
1970	98.2	80.0	78.8	27.5	-16.3	-5.7	-2.0	-0.7	-0.2	-0.1	0.0	0.0	260
1971	0.0	107.3	87.5	86.0	-23.6	-8.1	-2.9	-1.0	-0.4	-0.1	0.0	0.0	244
1972	0.0	107.3	87.5	86.0	-6.6	-10.7	-3.8	-1.3	-0.5	-0.2	-0.1	0.0	258
1973	0.0	83.0	91.2	59.5	-19.0	-6.5	-2.3	-0.8	-0.3	-0.1	0.0	0.0	205
1974	0.0	41.5	97.5	89.3	20.8	36.8	-12.7	-4.4	-1.6	-0.6	-0.2	-0.1	266
1975	0.0	38.1	98.0	89.5	-15.4	-8.7	-3.1	-1.1	-0.4	-0.1	0.0	0.0	197
1976	0.0	93.4	89.6	86.7	-6.1	-10.7	-3.8	-1.3	-0.5	-0.2	-0.1	0.0	247
1977	45.0	100.4	54.0	-17.4	-6.0	-2.1	-0.8	-0.3	-0.1	0.0	0.0	0.0	173
1978	0.0	58.8	94.9	88.4	84.5	79.7	22.9	-18.4	-6.4	-2.3	-0.8	-0.3	401
1979	-0.1	48.0	96.5	47.5	-14.2	32.4	28.2	-8.2	-2.8	-1.0	-0.4	-0.1	226
1980	0.0	45.0	97.0	75.3	-9.8	95.2	66.0	-29.1	-10.0	-3.6	-1.3	-0.4	324
1981	25.5	85.8	47.5	8.5	12.4	13.9	18.3	-5.6	-1.9	-0.7	-0.2	-0.1	203
1982	0.0	21.1	70.9	59.3	-15.1	-5.2	44.3	-7.7	-2.6	-0.9	-0.3	-0.1	164
1983	0.0	21.4	100.5	90.4	-8.2	-9.7	-3.4	-1.2	-0.4	-0.2	-0.1	0.0	189
1984	0.0	86.5	90.6	55.9	-18.5	-6.4	-2.3	-0.8	-0.3	-0.1	0.0	0.0	205
1985	0.0	0.0	86.5	42.2	-12.9	89.0	70.3	-27.7	-9.5	-3.4	-1.2	-0.4	233
1986	-0.1	71.6	92.9	39.4	-15.6	-5.4	-1.9	-0.7	-0.2	-0.1	0.0	0.0	180
1987	0.0	52.7	71.2	52.9	-15.3	50.2	11.1	-6.8	-2.4	-0.8	-0.3	-0.1	212
1988	0.0	26.9	59.0	14.4	-7.6	8.6	11.6	-3.1	-1.1	-0.4	-0.1	0.0	108
1989	0.0	107.3	87.5	-10.3	-9.0	51.7	56.4	-13.2	-4.5	-1.6	-0.6	-0.2	263
1990	27.4	97.9	81.9	58.3	-19.2	48.3	55.2	-13.7	-4.7	-1.7	-0.6	-0.2	329
1991	-0.1	24.2	100.1	52.2	-16.3	-5.6	-2.0	-0.7	-0.2	-0.1	0.0	0.0	151
1992	34.6	102.0	85.7	26.5	74.0	-18.7	-6.4	-2.3	-0.8	-0.3	-0.1	0.0	294
1993	0.0	69.2	93.3	49.9	-17.1	-5.9	-2.1	-0.7	-0.3	-0.1	0.0	0.0	186
1994	3.7	98.0	88.6	22.0	-13.7	-4.8	-1.7	-0.6	-0.2	-0.1	0.0	0.0	191
1995	0.0	51.9	95.9	50.7	-16.8	-5.8	-2.1	-0.7	-0.3	-0.1	0.0	0.0	173
1996	0.0	72.7	92.7	22.0	-13.0	-4.5	-1.6	-0.6	-0.2	-0.1	0.0	0.0	167
1997	0.0	58.8	94.9	53.9	-17.5	-6.0	-2.2	-0.8	-0.3	-0.1	0.0	0.0	181
1998	0.0	0.0	41.5	97.5	-17.9	-6.1	-2.2	-0.8	-0.3	-0.1	0.0	0.0	112
1999	0.0	48.4	96.4	89.0	-19.1	-8.3	-2.9	-1.0	-0.4	-0.1	0.0	0.0	202
2000	0.0	6.9	102.7	91.1	-14.9	4.4	7.1	-3.6	-1.2	-0.4	-0.2	0.0	192
2001	0.0	24.2	100.1	90.2	40.2	-17.1	-5.9	-2.1	-0.7	-0.3	-0.1	0.0	229
2002	0.0	23.5	58.2	38.4	-9.7	10.7	9.6	-3.3	-1.1	-0.4	-0.1	0.0	126
2003	0.0	34.6	98.5	89.7	33.1	8.1	56.5	-13.2	-4.5	-1.6	-0.6	-0.2	300
2004	-0.1	38.1	98.0	89.5	25.9	-15.0	39.9	-8.7	-3.0	-1.1	-0.4	-0.1	263
2005	0.0	0.0	103.8	72.4	-14.4	-7.1	33.6	-6.4	-2.2	-0.8	-0.3	-0.1	179
2006	0.0	45.0	97.0	89.2	-19.0	6.2	47.9	-9.8	-3.4	-1.2	-0.4	-0.1	251
2007	0.0	58.8	94.9	46.9	-16.4	8.2	51.2	-9.8	-3.4	-1.2	-0.4	-0.1	229
2008	0.0	24.2	100.1	66.0	-18.4	38.6	-9.1	-3.1	-1.1	-0.4	-0.1	0.0	197
2009	0.0	45.0	97.0	26.9	-13.0	75.1	34.7	-12.0	-4.2	-1.5	-0.5	-0.2	247
2010	-0.1	41.5	97.5	47.8	-16.1	74.0	51.7	-14.8	-5.1	-1.8	-0.6	-0.2	274
2011	-0.1	27.7	99.6	90.1	15.9	-13.4	12.6	-4.3	-1.5	-0.5	-0.2	-0.1	226
2012	0.0	28.7	66.7	69.2	36.0	20.2	44.9	-11.8	-4.0	-1.4	-0.5	-0.2	248
2013	-0.1	0.0	79.6	-12.1	38.7	-8.0	-2.7	-1.0	-0.3	-0.1	0.0	0.0	94
Average 1970-2013	**5.3**	**52.2**	**87.4**	**56.5**	**-2.5**	**12.4**	**15.8**	**-5.9**	**-2.0**	**-0.7**	**-0.3**	**-0.1**	**218.1**

Source: Field headgate delivery - (surface returns + lagged subsurface returns).

TABLE A-19
NET HISTORIC RIVER DEPLETION (APRIL - OCTOBER INSTREAM FLOW USE)
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in CFS

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1970	1.65	1.30	1.32	0.45	-0.26	-0.10	-0.03	-0.01	0.00	0.00	0.00	0.00
1971	0.00	1.74	1.47	1.40	-0.38	-0.14	-0.05	-0.02	-0.01	0.00	0.00	0.00
1972	0.00	1.74	1.47	1.40	-0.11	-0.18	-0.06	-0.02	-0.01	0.00	0.00	0.00
1973	0.00	1.35	1.53	0.97	-0.31	-0.11	-0.04	-0.01	0.00	0.00	0.00	0.00
1974	0.00	0.68	1.64	1.45	0.34	0.62	-0.21	-0.07	-0.03	-0.01	0.00	0.00
1975	0.00	0.62	1.65	1.46	-0.25	-0.15	-0.05	-0.02	-0.01	0.00	0.00	0.00
1976	0.00	1.52	1.51	1.41	-0.10	-0.18	-0.06	-0.02	-0.01	0.00	0.00	0.00
1977	0.76	1.63	0.91	-0.28	-0.10	-0.04	-0.01	0.00	0.00	0.00	0.00	0.00
1978	0.00	0.96	1.59	1.44	1.37	1.34	0.37	-0.31	-0.10	-0.04	-0.01	0.00
1979	0.00	0.78	1.62	0.77	-0.23	0.54	0.46	-0.14	-0.05	-0.02	-0.01	0.00
1980	0.00	0.73	1.63	1.22	-0.16	1.60	1.07	-0.49	-0.16	-0.06	-0.02	-0.01
1981	0.43	1.39	0.80	0.14	0.20	0.23	0.30	-0.09	-0.03	-0.01	0.00	0.00
1982	0.00	0.34	1.19	0.96	-0.25	-0.09	0.72	-0.13	-0.04	-0.02	-0.01	0.00
1983	0.00	0.35	1.69	1.47	-0.13	-0.16	-0.06	-0.02	-0.01	0.00	0.00	0.00
1984	0.00	1.41	1.52	0.91	-0.30	-0.11	-0.04	-0.01	0.00	0.00	0.00	0.00
1985	0.00	0.00	1.45	0.69	-0.21	1.50	1.14	-0.47	-0.15	-0.06	-0.02	-0.01
1986	0.00	1.17	1.56	0.64	-0.25	-0.09	-0.03	-0.01	0.00	0.00	0.00	0.00
1987	0.00	0.86	1.20	0.86	-0.25	0.84	0.18	-0.11	-0.04	-0.01	-0.01	0.00
1988	0.00	0.44	0.99	0.23	-0.12	0.14	0.19	-0.05	-0.02	-0.01	0.00	0.00
1989	0.00	1.74	1.47	-0.17	-0.15	0.87	0.92	-0.22	-0.07	-0.03	-0.01	0.00
1990	0.46	1.59	1.38	0.95	-0.31	0.81	0.90	-0.23	-0.08	-0.03	-0.01	0.00
1991	0.00	0.39	1.68	0.85	-0.27	-0.09	-0.03	-0.01	0.00	0.00	0.00	0.00
1992	0.58	1.66	1.44	0.43	1.20	-0.31	-0.10	-0.04	-0.01	0.00	0.00	0.00
1993	0.00	1.13	1.57	0.81	-0.28	-0.10	-0.03	-0.01	0.00	0.00	0.00	0.00
1994	0.06	1.59	1.49	0.36	-0.22	-0.08	-0.03	-0.01	0.00	0.00	0.00	0.00
1995	0.00	0.84	1.61	0.83	-0.27	-0.10	-0.03	-0.01	0.00	0.00	0.00	0.00
1996	0.00	1.18	1.56	0.36	-0.21	-0.08	-0.03	-0.01	0.00	0.00	0.00	0.00
1997	0.00	0.96	1.59	0.88	-0.28	-0.10	-0.03	-0.01	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.70	1.59	-0.29	-0.10	-0.04	-0.01	0.00	0.00	0.00	0.00
1999	0.00	0.79	1.62	1.45	-0.31	-0.14	-0.05	-0.02	-0.01	0.00	0.00	0.00
2000	0.00	0.11	1.73	1.48	-0.24	0.07	0.12	-0.06	-0.02	-0.01	0.00	0.00
2001	0.00	0.39	1.68	1.47	0.65	-0.29	-0.10	-0.04	-0.01	0.00	0.00	0.00
2002	0.00	0.38	0.98	0.62	-0.16	0.18	0.16	-0.06	-0.02	-0.01	0.00	0.00
2003	0.00	0.56	1.66	1.46	0.54	0.14	0.92	-0.22	-0.07	-0.03	-0.01	0.00
2004	0.00	0.62	1.65	1.46	0.42	-0.25	0.65	-0.15	-0.05	-0.02	-0.01	0.00
2005	0.00	0.00	1.74	1.18	-0.23	-0.12	0.55	-0.11	-0.04	-0.01	0.00	0.00
2006	0.00	0.73	1.63	1.45	-0.31	0.10	0.78	-0.17	-0.05	-0.02	-0.01	0.00
2007	0.00	0.96	1.59	0.76	-0.27	0.14	0.83	-0.17	-0.05	-0.02	-0.01	0.00
2008	0.00	0.39	1.68	1.07	-0.30	0.65	-0.15	-0.05	-0.02	-0.01	0.00	0.00
2009	0.00	0.73	1.63	0.44	-0.21	1.26	0.56	-0.20	-0.07	-0.02	-0.01	0.00
2010	0.00	0.68	1.64	0.78	-0.26	1.24	0.84	-0.25	-0.08	-0.03	-0.01	0.00
2011	0.00	0.45	1.67	1.46	0.26	-0.23	0.21	-0.07	-0.02	-0.01	0.00	0.00
2012	0.00	0.47	1.12	1.13	0.59	0.34	0.73	-0.20	-0.07	-0.02	-0.01	0.00
2013	0.00	0.00	1.34	-0.20	0.63	-0.13	-0.04	-0.02	-0.01	0.00	0.00	0.00
Average 1970-2013	**0.09**	**0.85**	**1.47**	**0.92**	**-0.04**	**0.21**	**0.26**	**-0.10**	**-0.03**	**-0.01**	**0.00**	**0.00**

Source: Net Historic River Depletion in acre-feet per month converted to an average flow rate in cubic feet per second for the month.

TABLE A-20
LAGGED SUBSURFACE RETURNS TO RIVER (JULY - OCTOBER INSTREAM FLOW USE)
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1970	0.0	0.0	0.0	7.9	7.9	2.7	1.0	0.3	0.1	0.0	0.0	0.0	20
1971	0.0	0.0	0.0	16.3	16.3	5.5	2.0	0.7	0.2	0.1	0.0	0.0	41
1972	0.0	0.0	0.0	16.3	18.9	8.1	2.9	1.0	0.4	0.1	0.1	0.0	48
1973	0.0	0.0	0.0	12.1	12.1	4.1	1.5	0.5	0.2	0.1	0.0	0.0	31
1974	0.0	0.0	0.0	16.3	22.9	19.8	12.0	4.1	1.5	0.5	0.2	0.1	77
1975	0.0	0.0	0.0	16.3	17.4	6.6	2.3	0.8	0.3	0.1	0.0	0.0	44
1976	0.0	0.0	0.0	16.3	18.9	8.1	2.9	1.0	0.4	0.1	0.1	0.0	48
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1978	0.0	0.0	0.0	16.3	32.6	37.6	33.3	18.1	6.3	2.2	0.8	0.3	147
1979	0.1	0.0	0.0	10.0	10.3	9.5	12.6	7.9	2.7	1.0	0.4	0.1	55
1980	0.0	0.0	0.0	14.2	15.8	22.1	40.7	28.8	9.9	3.5	1.3	0.4	137
1981	0.2	0.1	0.0	4.1	7.6	8.1	8.5	5.3	1.8	0.7	0.2	0.1	37
1982	0.0	0.0	0.0	10.9	10.9	3.7	8.3	7.5	2.5	0.9	0.3	0.1	45
1983	0.0	0.0	0.0	16.3	18.4	7.6	2.7	1.0	0.3	0.1	0.1	0.0	46
1984	0.0	0.0	0.0	11.5	11.6	3.9	1.4	0.5	0.2	0.1	0.0	0.0	29
1985	0.0	0.0	0.0	8.4	8.4	17.0	37.5	27.5	9.4	3.4	1.2	0.4	113
1986	0.1	0.1	0.0	8.9	8.9	3.0	1.1	0.4	0.1	0.0	0.0	0.0	23
1987	0.0	0.0	0.0	10.3	10.3	11.9	12.9	6.5	2.3	0.8	0.3	0.1	55
1988	0.0	0.0	0.0	3.8	3.9	3.0	4.3	2.9	1.0	0.4	0.1	0.0	20
1989	0.0	0.0	0.0	1.7	1.7	8.9	18.5	12.9	4.4	1.6	0.6	0.2	50
1990	0.1	0.0	0.0	12.0	12.0	12.4	19.8	13.4	4.6	1.6	0.6	0.2	77
1991	0.1	0.0	0.0	10.5	10.5	3.6	1.3	0.5	0.2	0.1	0.0	0.0	27
1992	0.0	0.0	0.0	7.3	20.8	16.0	5.5	2.0	0.7	0.2	0.1	0.0	53
1993	0.0	0.0	0.0	10.5	10.5	3.6	1.3	0.5	0.2	0.1	0.0	0.0	27
1994	0.0	0.0	0.0	6.5	6.5	2.2	0.8	0.3	0.1	0.0	0.0	0.0	16
1995	0.0	0.0	0.0	10.5	10.5	3.6	1.3	0.5	0.2	0.1	0.0	0.0	27
1996	0.0	0.0	0.0	6.3	6.3	2.1	0.8	0.3	0.1	0.0	0.0	0.0	16
1997	0.0	0.0	0.0	11.0	11.0	3.7	1.3	0.5	0.2	0.1	0.0	0.0	28
1998	0.0	0.0	0.0	15.7	15.8	5.3	1.9	0.7	0.2	0.1	0.0	0.0	40
1999	0.0	0.0	0.0	16.3	16.8	6.0	2.2	0.8	0.3	0.1	0.0	0.0	42
2000	0.0	0.0	0.0	16.3	17.4	8.5	6.1	3.3	1.2	0.4	0.2	0.0	53
2001	0.0	0.0	0.0	16.3	25.7	15.0	5.2	1.8	0.7	0.2	0.1	0.0	65
2002	0.0	0.0	0.0	7.4	7.7	5.0	5.2	3.1	1.1	0.4	0.1	0.0	30
2003	0.0	0.0	0.0	16.3	24.7	17.6	18.5	13.0	4.4	1.6	0.6	0.2	97
2004	0.1	0.0	0.0	16.3	23.6	12.9	11.3	8.4	2.9	1.0	0.4	0.1	77
2005	0.0	0.0	0.0	13.4	14.1	5.2	7.3	6.2	2.1	0.7	0.3	0.1	49
2006	0.0	0.0	0.0	16.3	16.8	8.2	12.4	9.6	3.3	1.2	0.4	0.1	68
2007	0.0	0.0	0.0	10.0	10.0	5.5	11.7	9.6	3.3	1.2	0.4	0.1	52
2008	0.0	0.0	0.0	12.6	12.6	11.1	8.4	2.9	1.0	0.4	0.1	0.0	49
2009	0.0	0.0	0.0	6.8	6.8	14.4	20.3	11.7	4.1	1.4	0.5	0.2	66
2010	0.1	0.0	0.0	10.0	10.0	15.4	23.3	14.5	5.0	1.8	0.6	0.2	81
2011	0.1	0.0	0.0	16.3	22.1	11.3	6.6	4.0	1.4	0.5	0.2	0.1	62
2012	0.0	0.0	0.0	12.4	20.4	17.3	17.7	11.6	4.0	1.4	0.5	0.2	85
2013	0.1	0.0	0.0	0.0	6.5	6.5	2.2	0.8	0.3	0.1	0.0	0.0	16
Average 1970-2013	**0.0**	**0.0**	**0.0**	**11.2**	**13.5**	**9.2**	**9.1**	**5.6**	**1.9**	**0.7**	**0.3**	**0.1**	**51.6**

Source: % subsurface flow x return from field x lagged return flow factors.

TABLE A-21
NET HISTORIC RIVER DEPLETION (JULY - OCTOBER INSTREAM FLOW USE)
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
1970	0.0	0.0	0.0	51.9	-7.9	-2.7	-1.0	-0.3	-0.1	0.0	0.0	0.0	40
1971	0.0	0.0	0.0	107.3	-16.3	-5.5	-2.0	-0.7	-0.2	-0.1	0.0	0.0	82
1972	0.0	0.0	0.0	107.3	0.7	-8.1	-2.9	-1.0	-0.4	-0.1	-0.1	0.0	95
1973	0.0	0.0	0.0	79.6	-12.1	-4.1	-1.5	-0.5	-0.2	-0.1	0.0	0.0	61
1974	0.0	0.0	0.0	107.3	26.9	39.0	-12.0	-4.1	-1.5	-0.5	-0.2	-0.1	155
1975	0.0	0.0	0.0	107.3	-9.4	-6.6	-2.3	-0.8	-0.3	-0.1	0.0	0.0	88
1976	0.0	0.0	0.0	107.3	1.0	-8.1	-2.9	-1.0	-0.4	-0.1	-0.1	0.0	96
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1978	0.0	0.0	0.0	107.3	90.9	82.0	23.7	-18.1	-6.3	-2.2	-0.8	-0.3	276
1979	-0.1	0.0	0.0	65.7	-8.0	34.6	29.0	-7.9	-2.7	-1.0	-0.4	-0.1	109
1980	0.0	0.0	0.0	93.4	-3.6	97.4	66.7	-28.8	-9.9	-3.5	-1.3	-0.4	210
1981	-0.2	-0.1	0.0	26.9	18.8	16.2	19.1	-5.3	-1.8	-0.7	-0.2	-0.1	73
1982	0.0	0.0	0.0	71.6	-10.9	-3.7	44.8	-7.5	-2.5	-0.9	-0.3	-0.1	90
1983	0.0	0.0	0.0	107.3	-2.5	-7.6	-2.7	-1.0	-0.3	-0.1	-0.1	0.0	93
1984	0.0	0.0	0.0	76.1	-11.6	-3.9	-1.4	-0.5	-0.2	-0.1	0.0	0.0	58
1985	0.0	0.0	0.0	55.4	-8.4	90.6	70.9	-27.5	-9.4	-3.4	-1.2	-0.4	167
1986	-0.1	-0.1	0.0	58.8	-8.9	-3.0	-1.1	-0.4	-0.1	0.0	0.0	0.0	45
1987	0.0	0.0	0.0	67.7	-10.3	52.0	11.7	-6.5	-2.3	-0.8	-0.3	-0.1	111
1988	0.0	0.0	0.0	25.4	-3.9	10.0	12.1	-2.9	-1.0	-0.4	-0.1	0.0	39
1989	0.0	0.0	0.0	11.0	-1.7	54.3	57.3	-12.9	-4.4	-1.6	-0.6	-0.2	101
1990	-0.1	0.0	0.0	79.1	-12.0	50.8	56.1	-13.4	-4.6	-1.6	-0.6	-0.2	154
1991	-0.1	0.0	0.0	69.2	-10.5	-3.6	-1.3	-0.5	-0.2	-0.1	0.0	0.0	53
1992	0.0	0.0	0.0	48.4	81.6	-16.0	-5.5	-2.0	-0.7	-0.2	-0.1	0.0	106
1993	0.0	0.0	0.0	69.2	-10.5	-3.6	-1.3	-0.5	-0.2	-0.1	0.0	0.0	53
1994	0.0	0.0	0.0	42.9	-6.5	-2.2	-0.8	-0.3	-0.1	0.0	0.0	0.0	33
1995	0.0	0.0	0.0	69.2	-10.5	-3.6	-1.3	-0.5	-0.2	-0.1	0.0	0.0	53
1996	0.0	0.0	0.0	41.5	-6.3	-2.1	-0.8	-0.3	-0.1	0.0	0.0	0.0	32
1997	0.0	0.0	0.0	72.7	-11.0	-3.7	-1.3	-0.5	-0.2	-0.1	0.0	0.0	56
1998	0.0	0.0	0.0	103.8	-15.8	-5.3	-1.9	-0.7	-0.2	-0.1	0.0	0.0	80
1999	0.0	0.0	0.0	107.3	-12.8	-6.0	-2.2	-0.8	-0.3	-0.1	0.0	0.0	85
2000	0.0	0.0	0.0	107.3	-9.4	6.3	7.8	-3.3	-1.2	-0.4	-0.2	0.0	107
2001	0.0	0.0	0.0	107.3	46.0	-15.0	-5.2	-1.8	-0.7	-0.2	-0.1	0.0	130
2002	0.0	0.0	0.0	49.0	-6.1	12.0	10.0	-3.1	-1.1	-0.4	-0.1	0.0	60
2003	0.0	0.0	0.0	107.3	39.1	10.3	57.2	-13.0	-4.4	-1.6	-0.6	-0.2	194
2004	-0.1	0.0	0.0	107.3	32.0	-12.9	40.7	-8.4	-2.9	-1.0	-0.4	-0.1	154
2005	0.0	0.0	0.0	88.1	-9.1	-5.2	34.3	-6.2	-2.1	-0.7	-0.3	-0.1	99
2006	0.0	0.0	0.0	107.3	-12.8	8.4	48.7	-9.6	-3.3	-1.2	-0.4	-0.1	137
2007	0.0	0.0	0.0	65.7	-10.0	10.5	52.0	-9.6	-3.3	-1.2	-0.4	-0.1	104
2008	0.0	0.0	0.0	83.0	-12.6	40.7	-8.4	-2.9	-1.0	-0.4	-0.1	0.0	98
2009	0.0	0.0	0.0	45.0	-6.8	77.3	35.5	-11.7	-4.1	-1.4	-0.5	-0.2	133
2010	-0.1	0.0	0.0	65.7	-10.0	76.2	52.4	-14.5	-5.0	-1.8	-0.6	-0.2	162
2011	-0.1	0.0	0.0	107.3	21.8	-11.3	13.4	-4.0	-1.4	-0.5	-0.2	-0.1	125
2012	0.0	0.0	0.0	81.5	40.2	21.7	45.4	-11.6	-4.0	-1.4	-0.5	-0.2	171
2013	-0.1	0.0	0.0	0.0	42.8	-6.5	-2.2	-0.8	-0.3	-0.1	0.0	0.0	33
Average 1970-2013	**0.0**	**0.0**	**0.0**	**74.1**	**3.5**	**14.5**	**16.5**	**-5.6**	**-1.9**	**-0.7**	**-0.3**	**-0.1**	**100.0**

Source: Field headgate delivery - (surface returns + lagged subsurface returns).

TABLE A-22
NET HISTORIC RIVER DEPLETION (JULY - OCTOBER INSTREAM FLOW USE)
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in CFS

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1970	0.00	0.00	0.00	0.84	-0.13	-0.04	-0.02	-0.01	0.00	0.00	0.00	0.00
1971	0.00	0.00	0.00	1.74	-0.27	-0.09	-0.03	-0.01	0.00	0.00	0.00	0.00
1972	0.00	0.00	0.00	1.74	0.01	-0.14	-0.05	-0.02	-0.01	0.00	0.00	0.00
1973	0.00	0.00	0.00	1.29	-0.20	-0.07	-0.02	-0.01	0.00	0.00	0.00	0.00
1974	0.00	0.00	0.00	1.74	0.44	0.65	-0.19	-0.07	-0.02	-0.01	0.00	0.00
1975	0.00	0.00	0.00	1.74	-0.15	-0.11	-0.04	-0.01	0.00	0.00	0.00	0.00
1976	0.00	0.00	0.00	1.74	0.02	-0.14	-0.05	-0.02	-0.01	0.00	0.00	0.00
1977	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1978	0.00	0.00	0.00	1.74	1.48	1.38	0.39	-0.30	-0.10	-0.04	-0.01	0.00
1979	0.00	0.00	0.00	1.07	-0.13	0.58	0.47	-0.13	-0.04	-0.02	-0.01	0.00
1980	0.00	0.00	0.00	1.52	-0.06	1.64	1.09	-0.48	-0.16	-0.06	-0.02	-0.01
1981	0.00	0.00	0.00	0.44	0.31	0.27	0.31	-0.09	-0.03	-0.01	0.00	0.00
1982	0.00	0.00	0.00	1.17	-0.18	-0.06	0.73	-0.13	-0.04	-0.01	-0.01	0.00
1983	0.00	0.00	0.00	1.74	-0.04	-0.13	-0.04	-0.02	-0.01	0.00	0.00	0.00
1984	0.00	0.00	0.00	1.24	-0.19	-0.07	-0.02	-0.01	0.00	0.00	0.00	0.00
1985	0.00	0.00	0.00	0.90	-0.14	1.52	1.15	-0.46	-0.15	-0.05	-0.02	-0.01
1986	0.00	0.00	0.00	0.96	-0.15	-0.05	-0.02	-0.01	0.00	0.00	0.00	0.00
1987	0.00	0.00	0.00	1.10	-0.17	0.87	0.19	-0.11	-0.04	-0.01	-0.01	0.00
1988	0.00	0.00	0.00	0.41	-0.06	0.17	0.20	-0.05	-0.02	-0.01	0.00	0.00
1989	0.00	0.00	0.00	0.18	-0.03	0.91	0.93	-0.22	-0.07	-0.03	-0.01	0.00
1990	0.00	0.00	0.00	1.29	-0.20	0.85	0.91	-0.22	-0.07	-0.03	-0.01	0.00
1991	0.00	0.00	0.00	1.13	-0.17	-0.06	-0.02	-0.01	0.00	0.00	0.00	0.00
1992	0.00	0.00	0.00	0.79	1.33	-0.27	-0.09	-0.03	-0.01	0.00	0.00	0.00
1993	0.00	0.00	0.00	1.13	-0.17	-0.06	-0.02	-0.01	0.00	0.00	0.00	0.00
1994	0.00	0.00	0.00	0.70	-0.11	-0.04	-0.01	0.00	0.00	0.00	0.00	0.00
1995	0.00	0.00	0.00	1.13	-0.17	-0.06	-0.02	-0.01	0.00	0.00	0.00	0.00
1996	0.00	0.00	0.00	0.68	-0.10	-0.04	-0.01	0.00	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	1.18	-0.18	-0.06	-0.02	-0.01	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	1.69	-0.26	-0.09	-0.03	-0.01	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	1.74	-0.21	-0.10	-0.04	-0.01	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	1.74	-0.15	0.11	0.13	-0.06	-0.02	-0.01	0.00	0.00
2001	0.00	0.00	0.00	1.74	0.75	-0.25	-0.08	-0.03	-0.01	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.80	-0.10	0.20	0.16	-0.05	-0.02	-0.01	0.00	0.00
2003	0.00	0.00	0.00	1.74	0.64	0.17	0.93	-0.22	-0.07	-0.03	-0.01	0.00
2004	0.00	0.00	0.00	1.74	0.52	-0.22	0.66	-0.14	-0.05	-0.02	-0.01	0.00
2005	0.00	0.00	0.00	1.43	-0.15	-0.09	0.56	-0.10	-0.03	-0.01	0.00	0.00
2006	0.00	0.00	0.00	1.74	-0.21	0.14	0.79	-0.16	-0.05	-0.02	-0.01	0.00
2007	0.00	0.00	0.00	1.07	-0.16	0.18	0.85	-0.16	-0.05	-0.02	-0.01	0.00
2008	0.00	0.00	0.00	1.35	-0.21	0.68	-0.14	-0.05	-0.02	-0.01	0.00	0.00
2009	0.00	0.00	0.00	0.73	-0.11	1.30	0.58	-0.20	-0.07	-0.02	-0.01	0.00
2010	0.00	0.00	0.00	1.07	-0.16	1.28	0.85	-0.24	-0.08	-0.03	-0.01	0.00
2011	0.00	0.00	0.00	1.74	0.35	-0.19	0.22	-0.07	-0.02	-0.01	0.00	0.00
2012	0.00	0.00	0.00	1.32	0.65	0.36	0.74	-0.19	-0.06	-0.02	-0.01	0.00
2013	0.00	0.00	0.00	0.00	0.70	-0.11	-0.04	-0.01	0.00	0.00	0.00	0.00
Average 1970-2013	**0.00**	**0.00**	**0.00**	**1.20**	**0.06**	**0.24**	**0.27**	**-0.09**	**-0.03**	**-0.01**	**0.00**	**0.00**

Source: Net Historic River Depletion in acre-feet per month converted to an average flow rate in cubic feet per second for the month.

TABLE A-23
LAGGED SUBSURFACE RETURNS TO RIVER (AUGUST - OCTOBER INSTREAM FLOW USE)
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1972	0.0	0.0	0.0	0.0	2.6	2.6	0.9	0.3	0.1	0.0	0.0	0.0	7
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1974	0.0	0.0	0.0	0.0	6.6	14.3	10.0	3.4	1.2	0.4	0.2	0.1	36
1975	0.0	0.0	0.0	0.0	1.0	1.1	0.4	0.1	0.0	0.0	0.0	0.0	3
1976	0.0	0.0	0.0	0.0	2.6	2.6	0.9	0.3	0.1	0.0	0.0	0.0	7
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1978	0.0	0.0	0.0	0.0	16.3	32.0	31.3	17.4	6.0	2.1	0.8	0.3	106
1979	0.1	0.0	0.0	0.0	0.3	6.1	11.4	7.5	2.6	0.9	0.3	0.1	29
1980	0.0	0.0	0.0	0.0	1.6	17.3	38.9	28.2	9.7	3.5	1.2	0.4	101
1981	0.2	0.1	0.0	0.0	3.5	6.7	8.0	5.2	1.8	0.6	0.2	0.1	26
1982	0.0	0.0	0.0	0.0	0.0	0.0	7.0	7.0	2.4	0.8	0.3	0.1	18
1983	0.0	0.0	0.0	0.0	2.1	2.1	0.7	0.3	0.1	0.0	0.0	0.0	5
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1985	0.0	0.0	0.0	0.0	0.0	14.2	36.5	27.1	9.3	3.3	1.2	0.4	92
1986	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1987	0.0	0.0	0.0	0.0	0.0	8.4	11.7	6.1	2.1	0.8	0.3	0.1	29
1988	0.0	0.0	0.0	0.0	0.0	1.7	3.9	2.7	0.9	0.3	0.1	0.0	10
1989	0.0	0.0	0.0	0.0	0.0	8.3	18.3	12.8	4.4	1.6	0.6	0.2	46
1990	0.1	0.0	0.0	0.0	0.0	8.3	18.3	12.8	4.4	1.6	0.6	0.2	46
1991	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1992	0.0	0.0	0.0	0.0	13.5	13.5	4.6	1.6	0.6	0.2	0.1	0.0	34
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1994	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1997	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1999	0.0	0.0	0.0	0.0	0.5	0.5	0.2	0.1	0.0	0.0	0.0	0.0	1
2000	0.0	0.0	0.0	0.0	1.0	3.0	4.2	2.6	0.9	0.3	0.1	0.0	12
2001	0.0	0.0	0.0	0.0	9.4	9.5	3.2	1.1	0.4	0.1	0.0	0.0	24
2002	0.0	0.0	0.0	0.0	0.2	2.4	4.3	2.8	1.0	0.3	0.1	0.0	11
2003	0.0	0.0	0.0	0.0	8.4	12.1	16.5	12.3	4.2	1.5	0.5	0.2	56
2004	0.1	0.0	0.0	0.0	7.3	7.3	9.3	7.7	2.6	0.9	0.3	0.1	36
2005	0.0	0.0	0.0	0.0	0.7	0.7	5.7	5.6	1.9	0.7	0.2	0.1	16
2006	0.0	0.0	0.0	0.0	0.5	2.7	10.4	8.9	3.0	1.1	0.4	0.1	27
2007	0.0	0.0	0.0	0.0	0.0	2.1	10.5	9.1	3.1	1.1	0.4	0.1	27
2008	0.0	0.0	0.0	0.0	0.0	6.8	6.8	2.3	0.8	0.3	0.1	0.0	17
2009	0.0	0.0	0.0	0.0	0.0	12.1	19.4	11.5	4.0	1.4	0.5	0.2	49
2010	0.1	0.0	0.0	0.0	0.0	12.1	22.1	14.1	4.8	1.7	0.6	0.2	56
2011	0.1	0.0	0.0	0.0	5.8	5.8	4.6	3.3	1.1	0.4	0.1	0.1	21
2012	0.0	0.0	0.0	0.0	8.0	13.1	16.2	11.0	3.8	1.4	0.5	0.2	54
2013	0.1	0.0	0.0	0.0	6.5	6.5	2.2	0.8	0.3	0.1	0.0	0.0	16
Average 1970-2013	**0.0**	**0.0**	**0.0**	**0.0**	**2.2**	**5.4**	**7.7**	**5.1**	**1.8**	**0.6**	**0.2**	**0.1**	**23.2**

Source: % subsurface flow x return from field x lagged return flow factors.

TABLE A-24
NET HISTORIC RIVER DEPLETION (AUGUST - OCTOBER INSTREAM FLOW USE)
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in Acre-feet

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1972	0.0	0.0	0.0	0.0	17.0	-2.6	-0.9	-0.3	-0.1	0.0	0.0	0.0	13
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1974	0.0	0.0	0.0	0.0	43.2	44.5	-10.0	-3.4	-1.2	-0.4	-0.2	-0.1	72
1975	0.0	0.0	0.0	0.0	6.9	-1.1	-0.4	-0.1	0.0	0.0	0.0	0.0	5
1976	0.0	0.0	0.0	0.0	17.3	-2.6	-0.9	-0.3	-0.1	0.0	0.0	0.0	13
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1978	0.0	0.0	0.0	0.0	107.3	87.5	25.7	-17.4	-6.0	-2.1	-0.8	-0.3	194
1979	-0.1	0.0	0.0	0.0	2.0	38.0	30.2	-7.5	-2.6	-0.9	-0.3	-0.1	59
1980	0.0	0.0	0.0	0.0	10.6	102.2	68.5	-28.2	-9.7	-3.5	-1.2	-0.4	138
1981	-0.2	-0.1	0.0	0.0	22.9	17.6	19.6	-5.2	-1.8	-0.6	-0.2	-0.1	52
1982	0.0	0.0	0.0	0.0	0.0	0.0	46.1	-7.0	-2.4	-0.8	-0.3	-0.1	35
1983	0.0	0.0	0.0	0.0	13.8	-2.1	-0.7	-0.3	-0.1	0.0	0.0	0.0	11
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1985	0.0	0.0	0.0	0.0	0.0	93.4	71.9	-27.1	-9.3	-3.3	-1.2	-0.4	124
1986	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1987	0.0	0.0	0.0	0.0	0.0	55.4	13.0	-6.1	-2.1	-0.8	-0.3	-0.1	59
1988	0.0	0.0	0.0	0.0	0.0	11.3	12.5	-2.7	-0.9	-0.3	-0.1	0.0	20
1989	0.0	0.0	0.0	0.0	0.0	54.9	57.5	-12.8	-4.4	-1.6	-0.6	-0.2	93
1990	-0.1	0.0	0.0	0.0	0.0	54.9	57.5	-12.8	-4.4	-1.6	-0.6	-0.2	93
1991	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1992	0.0	0.0	0.0	0.0	88.9	-13.5	-4.6	-1.6	-0.6	-0.2	-0.1	0.0	68
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1994	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1997	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1999	0.0	0.0	0.0	0.0	3.5	-0.5	-0.2	-0.1	0.0	0.0	0.0	0.0	3
2000	0.0	0.0	0.0	0.0	6.9	11.8	9.8	-2.6	-0.9	-0.3	-0.1	0.0	25
2001	0.0	0.0	0.0	0.0	62.3	-9.5	-3.2	-1.1	-0.4	-0.1	0.0	0.0	48
2002	0.0	0.0	0.0	0.0	1.4	14.5	10.9	-2.8	-1.0	-0.3	-0.1	0.0	23
2003	0.0	0.0	0.0	0.0	55.4	15.8	59.2	-12.3	-4.2	-1.5	-0.5	-0.2	112
2004	-0.1	0.0	0.0	0.0	48.3	-7.3	42.6	-7.7	-2.6	-0.9	-0.3	-0.1	72
2005	0.0	0.0	0.0	0.0	4.3	-0.7	35.9	-5.6	-1.9	-0.7	-0.2	-0.1	31
2006	0.0	0.0	0.0	0.0	3.5	13.9	50.6	-8.9	-3.0	-1.1	-0.4	-0.1	55
2007	0.0	0.0	0.0	0.0	0.0	13.8	53.3	-9.1	-3.1	-1.1	-0.4	-0.1	53
2008	0.0	0.0	0.0	0.0	0.0	45.0	-6.8	-2.3	-0.8	-0.3	-0.1	0.0	34
2009	0.0	0.0	0.0	0.0	0.0	79.6	36.3	-11.5	-4.0	-1.4	-0.5	-0.2	98
2010	-0.1	0.0	0.0	0.0	0.0	79.6	53.6	-14.1	-4.8	-1.7	-0.6	-0.2	112
2011	-0.1	0.0	0.0	0.0	38.1	-5.8	15.3	-3.3	-1.1	-0.4	-0.1	-0.1	42
2012	0.0	0.0	0.0	0.0	52.6	25.9	46.9	-11.0	-3.8	-1.4	-0.5	-0.2	109
2013	-0.1	0.0	0.0	0.0	42.8	-6.5	-2.2	-0.8	-0.3	-0.1	0.0	0.0	33
Average 1970-2013	**0.0**	**0.0**	**0.0**	**0.0**	**14.7**	**18.4**	**17.9**	**-5.1**	**-1.8**	**-0.6**	**-0.2**	**-0.1**	**43.1**

Source: Field headgate delivery - (surface returns + lagged subsurface returns).

TABLE A-25
NET HISTORIC RIVER DEPLETION (AUGUST - OCTOBER INSTREAM FLOW USE)
COATS BROS DITCH - KRUTHAUPT RANCH
Monthly Amounts in CFS

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1970	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1971	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1972	0.00	0.00	0.00	0.00	0.28	-0.04	-0.01	-0.01	0.00	0.00	0.00	0.00
1973	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1974	0.00	0.00	0.00	0.00	0.70	0.75	-0.16	-0.06	-0.02	-0.01	0.00	0.00
1975	0.00	0.00	0.00	0.00	0.11	-0.02	-0.01	0.00	0.00	0.00	0.00	0.00
1976	0.00	0.00	0.00	0.00	0.28	-0.04	-0.01	-0.01	0.00	0.00	0.00	0.00
1977	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1978	0.00	0.00	0.00	0.00	1.74	1.47	0.42	-0.29	-0.10	-0.03	-0.01	0.00
1979	0.00	0.00	0.00	0.00	0.03	0.64	0.49	-0.13	-0.04	-0.01	-0.01	0.00
1980	0.00	0.00	0.00	0.00	0.17	1.72	1.11	-0.47	-0.16	-0.06	-0.02	-0.01
1981	0.00	0.00	0.00	0.00	0.37	0.30	0.32	-0.09	-0.03	-0.01	0.00	0.00
1982	0.00	0.00	0.00	0.00	0.00	0.00	0.75	-0.12	-0.04	-0.01	-0.01	0.00
1983	0.00	0.00	0.00	0.00	0.23	-0.04	-0.01	0.00	0.00	0.00	0.00	0.00
1984	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1985	0.00	0.00	0.00	0.00	0.00	1.57	1.17	-0.46	-0.15	-0.05	-0.02	-0.01
1986	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1987	0.00	0.00	0.00	0.00	0.00	0.93	0.21	-0.10	-0.03	-0.01	0.00	0.00
1988	0.00	0.00	0.00	0.00	0.00	0.19	0.20	-0.05	-0.02	-0.01	0.00	0.00
1989	0.00	0.00	0.00	0.00	0.00	0.92	0.94	-0.22	-0.07	-0.03	-0.01	0.00
1990	0.00	0.00	0.00	0.00	0.00	0.92	0.94	-0.22	-0.07	-0.03	-0.01	0.00
1991	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1992	0.00	0.00	0.00	0.00	1.45	-0.23	-0.07	-0.03	-0.01	0.00	0.00	0.00
1993	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1994	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1995	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1996	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.06	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.11	0.20	0.16	-0.04	-0.01	-0.01	0.00	0.00
2001	0.00	0.00	0.00	0.00	1.01	-0.16	-0.05	-0.02	-0.01	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.02	0.24	0.18	-0.05	-0.02	-0.01	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.90	0.27	0.96	-0.21	-0.07	-0.02	-0.01	0.00
2004	0.00	0.00	0.00	0.00	0.78	-0.12	0.69	-0.13	-0.04	-0.02	-0.01	0.00
2005	0.00	0.00	0.00	0.00	0.07	-0.01	0.58	-0.09	-0.03	-0.01	0.00	0.00
2006	0.00	0.00	0.00	0.00	0.06	0.23	0.82	-0.15	-0.05	-0.02	-0.01	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.23	0.87	-0.15	-0.05	-0.02	-0.01	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.76	-0.11	-0.04	-0.01	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00	1.34	0.59	-0.19	-0.06	-0.02	-0.01	0.00
2010	0.00	0.00	0.00	0.00	0.00	1.34	0.87	-0.24	-0.08	-0.03	-0.01	0.00
2011	0.00	0.00	0.00	0.00	0.62	-0.10	0.25	-0.06	-0.02	-0.01	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.86	0.44	0.76	-0.19	-0.06	-0.02	-0.01	0.00
2013	0.00	0.00	0.00	0.00	0.70	-0.11	-0.04	-0.01	0.00	0.00	0.00	0.00
Average 1970-2013	**0.00**	**0.00**	**0.00**	**0.00**	**0.24**	**0.31**	**0.29**	**-0.09**	**-0.03**	**-0.01**	**0.00**	**0.00**

Source: Net Historic River Depletion in acre-feet per month converted to an average flow rate in cubic feet per second for the month.

Modeling Assumptions

The following modeling assumptions were made in estimating the historic consumptive use and river depletions for the Coats Bros Ditch.

- Climate data: Gunnison 3SW weather station. Gaps in data for individual months were filled with long term average monthly data for the period 1970-2013.
- Gunnison weather station elevation: 7622 feet
- Mean temperature to begin growing season: 42°F
- Mean temperature to end growing season: 42°F
- NRCS soil series: Gas Creek Sandy Loam (44% of field area), Gold Creek Silty Clay Loam (31%), Irim Loam (23%) and Duffson Loam (2%). Obtained from USDA Soil Conservation Service (1975).
- Maximum root zone depth: 60 inches
- Average soil moisture capacity: 0.09 inches of water/inch of soil
- Crop type: Grass pasture
- Consumptive use modeling method: Original Blaney-Criddle
- Blaney-Criddle crop coefficients: Denver Water High Altitude
- Effective precipitation: SCS TR-21 method
- Source of diversion records: DWR HydroBase on-line database
- Period of record evaluated: 1970-2013
- Ditch length: 1 mile
- Conveyance Efficiency: 85%. Conveyance efficiency has been estimated using a weighted average of conveyance efficiencies for the soil types present in the Coats Bros Ditch based upon conveyance efficiency curves as published by the USDA Soil Conservation Service in the Farm Irrigation Rating Index, Figure 8 (1991). This methodology was implemented in the South Platte Decision Support System (Leonard Rice Engineers, Inc., 2008).
- Under a short-term lease, the full amount of historical ditch losses for the Coat Bros Ditch will continue to be diverted at the headgate of the ditch to prevent injury.
- Method of irrigation: Flood
- Maximum irrigation application efficiency: 50%. Maximum irrigation application efficiency has been estimated based upon the potential efficiency for uncontrolled flood irrigation as published by the USDA Soil Conservation Service in the Farm Irrigation Rating Index, Table 3 (1991).
- Short-term curtailment of irrigation while haying is underway has the potential to reduce crop consumptive use during the time of curtailment. This is taken into account in the model through use of the historic diversion record for the ditch.
- Number of Kruthaupt irrigated acres modeled under Coats Bros Ditch – 165 acres. This is 50% of the total acreage decreed under the two senior ditch priorities.
- Subirrigation from high water table: 0% of field area after July 1 in dry years. Soil survey reports from the USDA Soil Conservation Service (1975) indicate that the water table lies 12" to 24" below the surface for Gold Creek soils and 36" below the surface for Gas Creek and Irim soils for much of the irrigation season. However, the ranch owner indicates that his fields can be fully dried up in the summer. It is assumed in this analysis that the water table drops after spring streamflows have receded, and that after July 1 in

dry years when the short-term lease program is likely to be in operation the water table will have dropped below the root zone.

- Return flows from other irrigated lands and other sources of water which irrigate the subject lands – None
- Modeling time step: Monthly, modified to take into account the number of days per month that diversions occurred.
- Irrigation returns: 50% surface flow, 50% subsurface flow. The percentage of irrigation returns estimated to return to the river as surface flow and as subsurface flow (deep percolation) is based upon information published by the USDA Soil Conservation Service in the Farm Irrigation Rating Index, Table 9 (1991).Modeling of delayed subsurface return flows: IDS AWAS "Glover" analysis. Model inputs: Distance from the centroid of the field to the river: X = 950 ft. Alluvial aquifer width, W = 1800 ft., Transmissivity = 50,000 gpd/ft. Specific yield = 0.15.

Explanation of Terms and Calculations

- Recorded Diversions: Diversion records downloaded as monthly volumes in acre-feet from the Colorado Division of Water Resources on-line HydroBase diversion records database. Throughout this report where amounts are presented in tables in units of both acre-feet and cubic feet per second (cfs), the amounts in cfs have been computed by converting the monthly volume in acre-feet to an average monthly flow. This analysis does not supply information regarding flow rates on individual days of the month.
- Number of Days with Diversions: Downloaded from the Colorado Division of Water Resources on-line HydroBase diversion records database.
- Diversions under Priorities 18 and 40: Lesser of 12.50 acre-feet/day (6.302 cfs for one day) x the number of days with diversions or the recorded diversion from the DWR HydroBase on-line database.
- Field Headgate Delivery: Diversions under priority 18 and 40 x % ownership of ditch x conveyance efficiency.
- Root Zone Delivery: Field headgate delivery x irrigation application efficiency. Root zone delivery is the amount of water that reaches the root zone of the field and is entirely available to the crop or the soil moisture reservoir.
- Consumptive Irrigation Water Requirement: Estimated using the StateCU consumptive use model.
- Diversions Direct to Crop Consumptive Use: Lesser of consumptive irrigation water requirement or root zone delivery.
- Diversions to Soil Moisture Reservoir: Root zone delivery minus diversions direct to crop consumptive use up to a limit of the prior month's end of month unfilled soil moisture reservoir capacity. Occurs only if root zone delivery is greater than consumptive irrigation water requirement.
- Withdrawals from Soil Moisture Reservoir: Consumptive irrigation water requirement minus diversions direct to crop consumptive use up to a limit of the prior month's end-of-month storage in the soil moisture reservoir. Occurs only if root zone delivery is less than consumptive irrigation water requirement.
- End of Month Soil Moisture Storage: The prior month's end-of-month storage in the soil moisture reservoir + current month diversions to soil moisture reservoir – current month withdrawals from the soil moisture reservoir.

- Historic Crop Consumptive Use: Diversions direct to crop consumptive use + withdrawals from soil moisture reservoir.
- Field Depletion: Diversions direct to crop consumptive use + diversions to soil moisture reservoir.
- Returns from the Field: Field headgate delivery - field depletion.
- Surface Returns to River: Returns from the field x % surface return flow.
- Lagged Subsurface Returns to River: Returns from the field x % subsurface return flow x lagged return flow factors.
- Net Historic River Depletion (for the field(s) to be included in the short-term lease): Field headgate delivery - (surface returns to river + lagged subsurface returns to river).

COLORADO WATER TRUST

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March 20, 2015

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

Dear Mr. Eklund,

The Colorado Water Trust ("CWT") is a non-profit organization that acquires water rights from willing parties in order to place those water rights in Colorado's Instream Flow Program. Trout Unlimited ("TU") is also a nonprofit organization that works to conserve, protect, and restore North America's coldwater fisheries and their watersheds. The Colorado Water Trust and Trout Unlimited are pleased to offer to the Colorado Water Conservation Board ("CWCB") a Temporary Loan of water rights pursuant to C.R.S. 37-83-105. This lease supports the missions of both organizations. The water rights offered for lease are decreed to the Coats Bros Ditch, which diverts from Tomichi Creek, a tributary to the Gunnison River, in Gunnison County. CWT and TU have worked with CWCB staff on this project, and believe this Temporary Loan will benefit the CWCB's instream flow water right on Tomichi Creek. CWT and TU are requesting CWCB staff initiate the process described in ISF Rule 6k. for reviewing and approving Temporary Loans of Water to the Board.

CWT and TU have entered into a lease agreement with Greg and Patricia Kruthaupt to use in the Instream Flow Program 50% of the two most senior priorities decreed to the Coats Bros Ditch, up to approximately 3.151 cfs. This Temporary Loan will bolster the existing junior instream flow right held by CWCB on Tomichi Creek between the confluence of Marshall Creek and the confluence with Quartz Creek, and will help preserve the natural environment in both average and dry years. Once CWCB has completed its use for instream flows, the leased water will remain in Tomichi Creek and the Gunnison River for subsequent consumptive use by downstream water rights.

We look forward to working with the CWCB to complete this transaction.

Sincerely,

Amy W. Beatie
Executive Director
Colorado Water Trust

Drew Peternell
Director, Colorado Water Project
Trout Unlimited

Enclosures (4): Lease, Offer Summary, Map, Check for $100 for Division Engineer's filing fee

COLORADO
Colorado Water
Conservation Board
Department of Natural Resources

1313 Sherman Street, Room 721
Denver, CO 80203

March 24, 2015

Drew Peternell, Director, Colorado Water Project
Trout Unlimited
222 ½ F Street
Salida, CO 81201

Amy W. Beatie, Executive Director
Colorado Water Trust
1420 Ogden Street, Suite A2
Denver, CO 80218

RE: Temporary Lease Offer on Tomichi Creek (Water Division 4)

Dear Mr. Peternell and Ms. Beatie:

The CWCB staff has reviewed the March 20, 2015 offer from the Colorado Water Trust and Trout Unlimited of a temporary lease of water rights associated with the Coats Brothers Ditch for instream flow use on Tomichi Creek in Water Division 4. Based upon that review, we believe that the proposed lease would benefit the CWCB's instream flow water right on the Tomichi Creek. I have directed the CWCB staff to coordinate with the Colorado Water Trust on preparing and submitting the necessary documentation to the State and Division Engineers to obtain approval of the lease, and on providing the statutorily required public notice of the proposed lease. Thank you for working with the CWCB to protect Colorado's streams.

Sincerely,

James Eklund, Director