



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

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Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Pete Conovitz, Water Resource Specialist
Stream and Lake Protection Section

DATE: September 20, 2022

AGENDA ITEM: 6b. Cottonwood Irrigating Ditch No. 1 Expedited Loan of Water from Colorado Parks and Wildlife for Instream Flow Use on Cottonwood Creek, Water Division 2 (Chaffee County)

Staff Recommendation

Staff recommends that the Board ratify the CWCB Director's decision to accept Colorado Parks and Wildlife's offer of an expedited temporary loan of water for instream flow use on Cottonwood Creek in Water Division 2.

Background

On July 18, 2022 Colorado Parks and Wildlife (CPW) offered to loan a portion of its interest in the Cottonwood Irrigating Ditch (CID) No. 1 water right to the CWCB to help meet the existing instream flow (ISF) water right on Cottonwood Creek. This offer was proposed as a temporary expedited loan of water pursuant to Section 37-83-105, C.R.S., not to exceed 120 days of use in a single calendar year and nonrenewable. CPW's offer letter is attached as **Exhibit A**. Pursuant to ISF Rule 6k.(1)(b) concerning expedited loans, CWCB Director Mitchell determined the proposed loan to be appropriate for ISF use and notified CPW of the CWCB's intent to accept the temporary expedited loan. The Director's acceptance letter is attached as **Exhibit B**.

CWCB staff subsequently worked with CPW to prepare and submit the necessary documentation to request approval from the State Engineer, and to provide the required public notices and access to documentation provided to the State Engineer under ISF Rule 6k.(1)(b)i. CPW's request for approval of the expedited loan is attached as **Exhibit C**.

On August 16, 2022, the State Engineer issued an approval of the expedited loan (**Exhibit D**), which included terms and conditions to prevent injury to downstream water users as well as other users within the CID No. 1 system. Subsequent to the approval, CPW

and CWCB entered into an Intergovernmental Agreement (IGA) for the use of the CID No. 1 water right and the operation of the loan (**Exhibit E**). The expedited loan went into operation on August 25 and is projected to remain in operation through the end of September.

Pursuant to ISF Rule 6k.(1)(e), at the first regular or special Board meeting after the Director accepts an offer of an expedited loan of water to the Board for temporary instream flow use, the Board shall vote either to ratify or overturn the Director's decision.

Overview and Purpose of Expedited Loan

CPW loaned CWCB 0.84 cfs of its 3.8 cfs interest in the CID #1 water right, which has a point of diversion on Cottonwood Creek approximately four miles upstream of the town of Buena Vista. A location map is attached as **Exhibit F**. The intent of the loan is to help meet the CWCB's existing decreed instream flow water right to preserve the natural environment on Cottonwood Creek (Table 1).

Table 1. ISF Water Right on Cottonwood Creek					
Case No.	Stream	Amount (cfs)	Approp. Date	Upstream Terminus	Downstream Terminus
79CW0115	Cottonwood Creek	20 (1/1-12/31)	3/14/1979	Confluence of Middle and South Fork Cottonwood Creeks	Confluence of Arkansas River

The decreed ISF flow rate is often not met during the later portion of the irrigation season when high water temperatures and loss of stream habitat impact the Cottonwood Creek fishery. Of particular interest is the ISF segment below the Trout Creek Ditch diversion, since the Trout Creek Ditch water right is a senior calling right on Cottonwood Creek. Streamflow below the Trout Creek Ditch diversion can fall below 2 cfs during the late summer. For reference, CPW determined 10 cfs as a "survival" flow rate for the Cottonwood Creek fishery as part of a stipulation in the 79CW0115 decree. In addition, this segment of Cottonwood Creek is adjacent to a popular public nature trail and the location of Buena Vista High School's outdoor ecology classroom that includes educational signage about river health and ecology.

When the loan is in operation, CPW will cease diverting 0.84 cfs of its 3.8 cfs CID No. 1 water right and temporarily loan that portion for ISF use. The amount of loaned water is limited to the amount needed, in combination with the native flow, to help meet the ISF decreed flow rate. While 0.84 cfs is a relatively modest amount of water, CPW has determined that the loaned water would be beneficial throughout the entire ISF reach, and would especially help mitigate critical low flow and temperature impacts below the



Trout Creek Ditch. After the loan ceases operation at the end of September, CPW will resume irrigation through the fall.

Description and Use of the Loaned Water Right

CPW's forgone diversions are associated with the temporary dry up of portions of its Buena Vista State Wildlife Area Hay Barn Property. Historically, CPW utilized the CID No. 1 water right (Table 2) for flood irrigation of pasture grass and wildlife food plots on three parcels known as the Western, Eastern and Central Meadows. During operation of the loan, CPW will cease irrigation deliveries to the Eastern and Central Meadows comprising a total of 51 acres of temporary dry-up.

Table 2. Cottonwood Irrigating Ditch No. 1 Water Rights					
Priority Number	Amount (cfs)	Case No.	Appropriation Date	Adjudication Date	CPW Ownership (cfs)
15	6	CA1127	7/31/1866	6/19/1980	1.2
43	13	CA1127	12/31/1872	6/19/1980	2.6

Historic Consumptive Use and Return Flows

In order to determine the amount of water that would be available for ISF use under the expedited loan, CPW relied on engineering reports associated with a prior water court case involving an adjacent property historically irrigated from the CID No.1. CPW used the underlying data and methods in these reports to perform a site-specific analysis of HCU and return flows associated with the temporary dry up. A summary of CPW's evaluation of HCU and return flows for the loaned portion of the water right, which includes the Central and Eastern Meadows supply, is shown in Table 3.

Table 3. HCU Credits and Return Flows for Loaned Portion of Water right (Central and Eastern Meadows)								
Priority	Headgate Diversion (cfs)	Ditch Loss (cfs)	Field Delivery (cfs)	Consumptive Use (%)	Potential CU Credits (cfs)	Total Return Flows (cfs)	Surface Return Flows (cfs)	Delayed Return Flows (cfs)
15	0.62	0.11	0.51	50	0.25	0.25	0.08	0.18
43	1.34	0.25	1.10	23	0.26	0.84	0.25	0.59
Total	1.96	0.36	1.60	32	0.51	1.09	0.33	0.76

The total headgate diversion from which the loaned portion of the water right is derived is 1.96 cfs. This assumes both priorities are diverting which is typically the case. Of that amount, 0.84 cfs would be available for ISF use to include: 1) the HCU amount associated with the temporary dry up (0.51 cfs), and 2) the surface return flow component (0.33 cfs). Because return flows from CPW's Hay Barn Property accrue to the Arkansas River, the surface return flow component will be delivered to the Arkansas River via



Cottonwood Creek as part of the overall loaned ISF amount. If only the senior ditch priority (No. 15) is available, the amount of loaned water will be reduced to 0.33 cfs in accordance with the values shown for priority 15 in Table 3.

The remaining water left in the CID No.1 and not used for ISF purposes include: 1) any diversions associated with the continued irrigation of the Western Meadow, 2) compensation for ditch seepage loss, and 3) the delayed, or deep percolation, return flow component. CPW will make replacements for delayed return flows by delivering that amount (0.76 cfs) down the CID No. 1, allowing that water to infiltrate into the ground via the ditch in the same general vicinity as the historically irrigated lands. Therefore return flows will be replaced in the general time, place and amount as has historically occurred.

Terms and conditions to prevent injury

The State Engineer's approval included terms and conditions to prevent injury to downstream water users as well as users within the CID No.1 system. This includes measurement to ensure that the quantified irrigation deliveries to the Western Meadow are not exceeded during the operational loan period, as well as measurement to ensure that no more than 0.76 cfs is delivered down the CID No. 1 for delayed return flow replacements. CPW will monitor the delivery and infiltration of the deep percolation deliveries. In addition, measurements will be made to ensure that other water users on the ditch do not suffer increased ditch loss or reduced water deliveries as a result of the loan operation.

One term specifies that the loaned water for ISF use cannot be added to the native flow so as to increase available exchange potential on Cottonwood Creek. In addition to protecting the ISF amount, this ensures that exchanges cannot be made by other water users utilizing the loaned water, which could possibly result in increased upstream diversions by exchange.

Next Steps

CWCB staff will continue frequent communication with CPW and DWR staff to ensure that the loan is operated in accordance with the State Engineer's terms and conditions. CWCB and CPW will also communicate as needed with other water users within the CID No. 1 system to ensure that irrigation water deliveries are not impacted. The loan is anticipated to operate through the end of September, so long as streamflow in Cottonwood Creek remains below the decreed ISF rates.

An outside party may file comments concerning potential injury to the party's water rights due to the operation of the loan. These comments will be due by January 1, 2023.





COLORADO

Parks and Wildlife

Department of Natural Resources

Southeast Region
4255 Sinton Road
Colorado Springs, CO 80907

July 18, 2022

Ms. Rebecca Mitchell, Director
Colorado Water Conservation Board
1313 Sherman Street, Suite 721
Denver CO 80203

Subject: Offer of Temporary Water for Instream Flow Use on Cottonwood Creek in Division 2

Dear Ms. Mitchell:

Colorado Parks and Wildlife (CPW) owns a water right on Cottonwood Creek, a tributary of the Arkansas River in Buena Vista. CPW is interested in loaning a portion of the Cottonwood Irrigating Ditch (CID) No. 1 to the CWCB to help bolster flows on Cottonwood Creek, supplementing the CWCB's decreed ISF right on Cottonwood Creek. CPW would like to enter into an expedited loan with the CWCB, pursuant to section 37-83-105(2) C.R.S. (2020), for the 2022 irrigation season.

CPW is proposing a split-season loan in which the CID No. 1 will be used to perform typical irrigation practices on CPW's State Wildlife Area the Buena Vista Hay Barn Property through early August. When low flow and high temperature conditions warrant, CPW would like to forego diversion of priority water from the CID No. 1 to supplement the CWCB's ISF right on Cottonwood Creek and offer reprieve for the fishery in Cottonwood Creek. CPW is proposing dry-up of 59 acres historically flood irrigated for up to 60-days during the period of August 1 and September 30, amounting to approximately 1 cfs. As high stream temperatures subside, CPW would like to again apply irrigation water to allow fall regrowth.

If directed to move forward with this proposed loan, CPW and CWCB staff will request approval of an expedited loan from the State and Division Engineers. Staff are currently drafting the necessary information to submit to this request to DWR. The terms, conditions, administration practices, and accounting that is included in draft DWR request provide clear transparency on the use of CPW's CID No. 1 shares to demonstrate the timing and volume of diversions for irrigation versus use for instream flow purposes, including compensation for ditch loss and historic return flows. In order to facilitate the expedited loan approval, this offer is based on a simple, yet conservative approach using the best information that is readily available. In the event CPW proposes a renewable loan for the CID No. 1 in the future, the data and lessons learned during the 2022 season would be used to further refine the estimates and assumptions

Exhibit A
Agenda Item 6b
Sept 20, 2022



associated with the consumptive use, return flow patterns, administration, and other dynamics of the system.

This letter serves as CPW's formal offer to CWCB of the temporary loan of water. The temporary loan will help further the missions of both CPW and CWCB by mitigating low-flow impacts to Cottonwood Creek, specifically high water temperatures and loss of habitat that occurs during the critical late summer period. The particular focus of this proposed loan is the stretch of Cottonwood Creek below the senior calling right – Trout Creek Ditch. There is a gage below this diversion structure (“COCRBVCO”) which shows stream flows often fall below the decreed instream flow rate of 20 cfs (2-79CW115), as well as the 10 cfs “survival” flow rate identified in the corresponding stipulation with Southeastern Colorado Water Conservancy District. Gage data demonstrates that flows in Cottonwood Creek often drop to approximately 2 cfs in the late summer. In addition to the benefits this proposed loan will provide to the fishery during a critical stress period, this reach of Cottonwood Creek is home to a locally maintained nature trail that provides public access to the creek and is also the location of the Buena Vista High School’s outdoor ecology classroom which includes educational signage about fish, macroinvertebrates, and river health. Cottonwood Creek supports a robust riparian community and fishery that is a gem to the local community of Buena Vista, and we look forward to working together to implement this loan benefitting Cottonwood Creek.

If you have any questions or concerns regarding this matter, please do not hesitate to reach out to appropriate CPW staff.

Sincerely,

**MITCHELL
MARTIN**

Digitally signed by
MITCHELL MARTIN
Date: 2022.07.18 16:24:18
-06'00'

Mitch Martin

Acting Southeast Regional Manager, Colorado Parks and Wildlife

cc:

Rob Viehl, CWCB Stream and Lake Protection Section

Kaylea White, Stream and Lake Protection Section

Pete Conovitz, CWCB Stream and Lake Protection Section

Katie Birch, Colorado Parks and Wildlife

Jon Erickson, Colorado Parks and Wildlife

Tarn Udall, Assistant Attorney General

Rena Griggs, Colorado Parks and Wildlife



COLORADO

Colorado Water Conservation Board

Department of Natural Resources
1313 Sherman Street, Room 718
Denver, CO 80203

July 21, 2022

Mr. Mitchell Martin
Acting Southeast Regional Manager
Colorado Parks and Wildlife
Southeast Region
4255 Sinton Road
Colorado Springs, CO 80907

Via E-Mail: mitch.martin@state.co.us

RE: Acceptance of Temporary Loan of Water for Instream Flow Use

Dear Mr. Martin:

The Colorado Water Conservation Board (CWCB) Staff has reviewed the July 18, 2022 offer from Colorado Parks and Wildlife (CPW) for a temporary expedited loan of a portion of the Cottonwood Irrigating Ditch No. 1 water right for instream flow use on Cottonwood Creek in Water Division 2. Based on that review, we believe that the proposed loan would benefit the CWCB's instream flow water rights on Cottonwood Creek.

I have directed the CWCB staff to coordinate with CPW on preparing and submitting the necessary documentation to the State and Division Engineers to obtain approval of the loan, 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,

Colorado Water Conservation Board
Rebecca Mitchell, Director

Cc: Rob Viehl, Stream and Lake Protection Section, CWCB
Kaylea White, Stream and Lake Protection Section, CWCB
Pete Conovitz, Stream and Lake Protection Section, CWCB
Katie Birch, Instream Flow Program Coordinator, CPW
Jon Erickson, Water Resources Engineer, CPW
Tarn Udall, Assistant Attorney General
Rena Griggs, Southeast Region Water Specialist, CPW

**Exhibit B
Agenda Item 6b
Sept 20, 2022**





COLORADO

Parks and Wildlife

Department of Natural Resources

Southeast Region
4255 Sinton Road
Colorado Springs, CO 80907

July 19, 2022

Via email

Kevin Rein
State Engineer
Colorado Division of Water Resources
1313 Sherman Street, Room 718
Denver, CO 80203
DWRpermitsonline@state.co.us
Kevin.Rein@state.co.us

Bill Tyner
Division Engineer, Water Division 2
Colorado Division of Water Resources
310 E. Abriendo Ave, Suite B
Pueblo, CO 81004
Bill.Tyner@state.co.us

RE: Request for Approval of Expedited Loan of Water to the Colorado Water Conservation Board for Instream Flow Purposes

Dear State Engineer Rein and Division Engineer Tyner:

The following is a request for approval of a temporary, expedited loan of water from Colorado Parks and Wildlife (CPW) to the Colorado Water Conservation Board (CWCB) for instream flow purposes pursuant to § 37-83-105, C.R.S. (2020).

Overview of Proposed Loan

CPW requests approval to temporarily loan a portion of its water right decreed to the Cottonwood Irrigating Ditch No. 1 on Cottonwood Creek (the “CID Water Right”) to the CWCB to benefit its decreed instream flow water right on Cottonwood Creek (the “Instream Flow Right”). The loan will provide water to CWCB for instream flow use to preserve the natural environment to a reasonable degree. *See* § 37-83-105(1)(b)(I). CPW seeks approval of this loan under the expedited loan process in § 37-83-105(2)(a)(III.7).

Exhibit C
Agenda Item 6b
Sept 20, 2022



The Instream Flow Right is specifically described in the table below, and the decreed reach is shown on the map attached as Exhibit A.

Case No.	Stream	Amount (cfs)	Approp. Date	Upstream Terminus	Downstream Terminus
2-79CW115	Cottonwood Creek	20 cfs (1/1 – 12/31)	3/14/1979	Confluence of Middle and South Fork Cottonwood Creeks	Confluence of the Arkansas River

During a portion of the 2022 irrigation season, CPW proposes to cease diverting a portion of its CID Water Right to temporarily loan that same portion to the CWCB for instream flow use. Loaned water will be limited to the amount needed, when combined with the native flow, to meet all or part of the decreed flow rate of the Instream Flow Right within the decreed reach. CPW proposes to loan up to 0.97 cfs of its CID Water Right, which is decreed for a total of 3.8 cfs. The proposed loan would operate, in CPW's discretion, for a period of approximately 30 to 60 days sometime during August through the end of September when flows in Cottonwood Creek fall below the required instream flow rate and water temperatures are high, causing extremely stressful conditions for the fish community. In 2022 CPW will divert its full CID Water Right for irrigation except when the loan to the Instream Flow Right is occurring. Following the cessation of high stream temperatures and the critical risk period for fish, CPW will stop exercising the loan and resume irrigation.

Legal Right to Use Water

CPW's CID Water Right was decreed in C.A. 1127 and is described in more detail below. CWCB and CPW will enter into an Interagency Agreement to Loan Water for Instream Flow Use in substantially similar form to the draft Loan Agreement attached hereto as Exhibit B. As the lawful owner of its CID Water Right, CPW has the right to loan the water to CWCB. The pertinent pages from the final decrees for the CID Water Right in C.A. 1127 and the Instream Flow Right in Case No. 2-79CW115 are attached hereto as Exhibit C.

Duration of Loan

The expedited loan would have a term of up to one year. § 37-83-105(2)(a)(III.7). The loan period begins when the state engineer approves the expedited loan. *Id.* If the expedited loan is approved, CPW may not reapply for a second expedited loan of the CID Water Right. Water may be used for instream flows pursuant to this loan for up to 120 days in a calendar year. § 37-83-105(2)(a).

Description of the CID Water Right

The Cottonwood Irrigating Ditch No. 1 (“CID No. 1”) is an active diversion structure located on Cottonwood Creek, approximately four miles upstream of the town of Buena Vista. See Exhibit A. CPW owns a total of 3.8 cfs decreed to the CID No. 1: 1.2 cfs is attributed to Priority No. 15, and 2.6 cfs is attributed to Priority No. 43. The CID Water Right is currently used to irrigate portions of CPW’s Buena Vista State Wildlife Area Hay Barn Property as shown on Exhibits A and D.

Original Point of Diversion

CID No. 1’s point of diversion, as originally described, is located on the south bank of Cottonwood Creek in the SW1/2 of the NE1/4 of Section 13, Township 14 S, Range 79 West, 6th Principal Meridian.

Time, Place, and Types of Use of the Loaned Water Right

CID No. 1 was originally decreed for irrigation. Subsequent decrees have changed certain portions of the water right to include alternate points of diversion, augmentation, and other uses. CPW’s CID Water Right has not been changed and remains in active use for irrigation on the Hay Barn Property. The property is divided into three main sections: the Eastern, Central, and Western Meadows, as shown on Exhibit D.

The historic irrigation season on the Hay Barn Property extends from mid-April through the end of October. CPW actively flood irrigates the two areas known as the Eastern Meadow (33 acres) and the Central Meadow (26 acres). See Exhibit D. Pasture grass is irrigated by CPW for a grazing lease CPW operates during the month of July, as well as forage for wildlife in the late summer and fall.

The proposed loan will not impact irrigation practices on the Western Meadow portion of the Hay Barn Property. This area has been historically irrigated by a combination of mechanisms including direct flood irrigation and subsurface irrigation from the locally elevated groundwater table that is supplied by the ditch. Since the Western Meadow is irrigated, in part, by water that seeps from the ditch as water is delivered further downstream, in order to cease irrigating this area, CPW would likely need to line that portion of the ditch. Such lining is not being contemplated at this time and therefore the Western Meadow will continue to be irrigated according to historic practice with no changes to the amount or timing or return flows or the amount of consumptive use. The portion of CPW’s CID Water Right associated with the Western Meadow will not be included in this expedited loan.

Return Flow Pattern

The pattern of historic return flows from the Hay Barn Property will be similar in timing and location to those from the subject property of Case Nos. 79CW0172 and 19CW3089, which is known as the Ludwig Property. CPW's Hay Barn Property is approximately one mile further down the CID No. 1 than the Ludwig Property and is also downgradient of said property with respect to both the surface runoff patterns and groundwater flow patterns. The engineering report prepared by Colorado River Engineering (CRE) in Case No. 19CW3089, dated May 29, 2020, and CRE's updated report, dated April 30, 2021, indicate that return flows associated with both surface runoff and deep percolation accrue to the mainstem Arkansas River. Previous work by Watts, et al.¹ demonstrates that both the surface runoff patterns and groundwater flow patterns accrue to the mainstem Arkansas River in the area where the Ludwig and Hay Barn Properties are situated.

The Glover Analysis performed for the Ludwig Property by CRE indicates that lagged return flows will take up to 113 months to reach the mainstem Arkansas River. The largest impacts occur in months 11 through 22 and are on the order of 2 to 3 percent of the initial volume of return flow water. CPW performed a Glover Analysis using the same aquifer properties as shown in the CRE report, namely a transmissivity of 39,900 gallons per day per foot, a specific yield of 0.2 (unitless), and an aquifer boundary of 8,310 feet; the distance from the location of irrigation to the Arkansas River was adjusted for the Hay Barn Property, which was determined to be 4,000 feet based on the approximate centroid of the Central and Eastern Meadows. The Unit Response Function associated with the deep percolation return flows is shown in Exhibit E. This demonstrates a similar pattern to that of the Ludwig Property in that the return flows take many years to accrue to the river and are significantly dampened over time. The estimated maximum volumetric impacts based on the potential maximum deep percolation obligation (associated with continuous operation at a rate of 0.88 cfs for 60 days, commensurate with a consumptive use rate of 0.59 cfs) are shown in Exhibit E. The maximum instantaneous accretion rate associated with these deep percolation return flows is 0.08 cfs.

¹ Watts, K.R., 2005, Hydrogeology and quality of ground water in the upper Arkansas River Basin from Buena Vista to Salida, Colorado, 2000–2003: U.S. Geological Survey Scientific Investigations Report 2005–5179, 61 p. Watts, K.R., Ivahnenko, Tamara, Stogner, R.W., and Bruce, J.F., 2014, Groundwater and surface-water interaction and potential for underground water storage in the Buena Vista-Salida Basin, Chaffee County, Colorado, 2011: U.S. Geological Survey Scientific Investigations Report 2014–5095, 63 p., <http://dx.doi.org/10.3133/sir20145095>.

Description of Use of Loaned Water Right: New Points of Diversion, Return Flow Pattern, Stream Reach, and Time, Place, and Types of Use of the Loaned Water Right

If approved, this expedited loan will be for a split-season operation that allows CPW to perform its typical irrigation practices from the beginning of the 2022 irrigation season through early August. By sometime in early August, CPW will cease diverting up to 0.97 cfs of its CID Water Right, and it will loan that same portion to the CWCB to be used for instream flow purposes in Cottonwood Creek. Of CPW's remaining portion of CID shares, 1.53 cfs will continue to be diverted to irrigate the Western Meadow, and 0.42 cfs will be supplied to the ditch to compensate for the historic ditch losses that occurred from delivery of water to the Eastern and Central Meadows. The duration of the loan to CWCB for instream flow purposes will be up to 60 days, sometime in the period between August 1 and September 30. The exact timing and duration of the loan will be determined at CPW's discretion based on streamflow conditions, air and water temperatures, and professional judgment regarding environmental stressors to the fishery. After the lease has been exercised, CPW will resume diversions of the loaned portion of the CID Water Right for irrigation to allow regrowth for fall wildlife forage.

By loaning the amount of water typically used on the Central and Eastern Meadows to CWCB, up to 0.59 cfs of consumptive use can be dedicated to Cottonwood Creek for instream flow purposes. The return flow obligations total 1.26 cfs of which 0.38 cfs is surface returns and the remainder, 0.88 cfs, is deep percolation. CPW is proposing the surface return flow obligations be administered via Cottonwood Creek to the point of historic accretions on the mainstem Arkansas River, potentially generating 0.38 cfs of additional flow during critical periods. CPW is proposing to make replacements for deep percolation by delivering 0.88 cfs down CID No. 1, physically ensuring the deep percolation return flows enter the groundwater table in the same vicinity as their historic point of entry. Details of the analysis and proposed operation are provided below.

CPW proposes to supply the surface return flow obligations to the mainstem Arkansas River by shepherding said flow down Cottonwood Creek to the tributary with the mainstem Arkansas River. These returns historically accrued to the mainstem almost immediately after delivery to the field for irrigation, and therefore are owed to the mainstem in the same month in which the diversions are made. Regarding return flows associated with the new use of the loaned water, such loaned water will be used for instream flows and thus remain in the stream.

CPW proposes replacing the deep percolation return flows by delivering them down the CID No. 1. We assume the additional water will be left in the ditch (not

consumed by downstream users), allowing the return flows to infiltrate in the same general vicinity as the historically irrigated lands. This method of delivery will prevent new depletions from occurring. CPW does not intend to design and construct a designated recharge structure. CPW hopes to minimize the onsite disturbance and activity required to achieve a suitable recharge zone. CPW intends to allow the deep percolation return flows to seep into the ground via the ditch. If necessary, CPW will make simple, temporary site modifications to ensure sufficient seepage occurs to meet the deep percolation return flow requirements without impacting downstream water users. Since a portion of water will not be diverted down the CID No. 1, the travel time in the ditch will increase and the loss rate per mile may increase as well. The Western Meadow is already saturated, and any additional water applied in that area will immediately commingle with existing waters that are in equilibrium with the local water table, resulting in a slight increase to the pressure head and thus an increase to the flowrate through the local water table to the regional aquifer/water table. The water table in the Western Meadow is artificially increased by the pipeline and embankment that divides it from the Central Meadow.

CPW will continue making deliveries to the Western Meadow as well as supplying the historic ditch loss associated with the Central and Eastern Meadows. A complete balance of the various portions of the diversion are summarized below in the Administration section.

Reasonable Estimate of Historic Consumptive Use of Loaned Water Right

To develop a reasonable estimate of historical consumptive use, CPW considered the data and information provided in Case Nos. 79CW0172 and 19CW3089 for the Ludwig Property. The Ludwig Property was historically irrigated primarily for pasture grass through flood irrigation techniques. The Central and Eastern Meadows of the Hay Barn Property are also irrigated using flood irrigation techniques to produce pasture grass to support the grazing lease and fall wildlife forage. Case No. 79CW0172 established that 1 cfs from the CID No. 1 headgate was used to irrigate 26 acres of the Ludwig Property. Ditch loss was estimated to be 8% per mile or approximately 11% of headgate diversions, irrigation application efficiency was estimated as 50% of the delivered water, and the remaining 50% was parsed between surface runoff and deep percolation return flows at 30% and 70%, respectively. The Hay Barn Property is approximately one mile further downstream on the CID No. 1; therefore, the ditch loss is estimated to be 18.4%. Irrigation efficiency and return flow distribution for the Hay Barn Property are assumed to be the same as those for the Ludwig Property.

The historical consumptive use analysis for the Ludwig Property shows the senior Priority No. 15 diversions were typically not sufficient to meet the pasture grass irrigation requirements. During the months of June, July, August, and September,

all of the irrigation water from the senior priority that was available to the crop was consumptively used, i.e., the crop consumptive use was equal to the irrigation application efficiency of 50%. In the analysis of the Ludwig Property, the junior Priority No. 43 was shown to satisfy the remaining crop consumptive use in these months. During the months of August and September, which is when this expedited loan will be exercised, the average percentage of Priority No. 43 water delivered to the field that was used consumptively by the pasture grass was approximately 23%.

As with many of the ditches decreed in C.A. 1127, the duty of water for the CID No. 1 was established based on headgate delivery rates. Variations in individual farm deliveries based on the differences in ditch losses were not explicitly addressed. CPW believes it is reasonable and conservative to apply a similar approach to the Hay Barn Property for this expedited loan request. By applying the same ratio of irrigable acreage per headgate delivery as that used in Case No. 79CW0172, namely 26 acres per cubic foot per second diverted at the headgate, this analysis will inherently result in a lower consumptive use rate compared to a more refined site-specific analysis. For instance, a site-specific analysis would show a lower volume of the senior priority is delivered per acre, and therefore less of the total consumptive use would be satisfied by the senior priority, resulting in a greater amount and higher percentage of the junior priority being used consumptively. CPW's CID Water Right is 3.8 cfs, allowing for irrigation of up to 98.8 acres. As noted above, 26 acres of the Central Meadow and 33 acres of the Eastern Meadows are flood irrigated, leaving water available for 39.8 acres of the Western Meadow to be irrigated. The Central and Eastern Meadows provide a combined 59 acres of irrigated pasture that will be taken out of service during the operating period of this expedited loan. This is associated with a diversion rate of 2.27 cfs. The remaining 1.53 cfs will remain dedicated to the Western Meadow. The following table summarizes by priority the estimated use, losses, and return flows associated with irrigation of the Central and Western Meadows of the Hay Barn Property, based on the above noted assumptions.

Consumptive Use Credits and Return Flows for the Loaned Portion of the Water Right (Central and Western Meadows)								
	Headgate Diversion (cfs)	Ditch Loss (cfs)	Field Delivery (cfs)	Consumptive Use %	Potential CU Credits (cfs)	Total Returns (cfs)	Surface Runoff (cfs)	Deep Percolation (cfs)
Priority 15	0.72	0.13	0.58	50%	0.29	0.29	0.09	0.20
Priority 43	1.55	0.29	1.27	23%	0.30	0.97	0.29	0.68
Total	2.27	0.42	1.85	32%	0.59	1.26	0.38	0.88

Since the duration of this expedited loan will not exceed one year, a rigorous analysis of average, minimum, and maximum uses based on monthly, annual,

cumulative, or multi-year rolling averages is not necessary. The above-described analysis based on recent engineering at a nearby site on the same ditch provides a reasonable instantaneous (i.e., maximum) limit based on decreed rates and uses. There are multiple assumptions that ensure conservatism in the estimated consumptive use rates. Additionally, the plan will only be operated and generate consumptive use credits when one or both of CPW's priorities in its CID Water Right are in priority. Such credit will also be prorated as appropriate if and when there is not sufficient flow to fully satisfy the calling right(s).

Administration

The exercise of this expedited loan will occur in CPW's sole discretion. CPW's decision to cease diverting up to 0.97 cfs of the CID Water Right to loan that water for instream flow purposes will depend upon the timing of stream flow shortages and water temperatures, as well as operational constraints for irrigation practices at the Hay Barn Property.

If and when CPW decides to exercise the expedited loan, by ceasing diversions of up to 0.97 cfs of the CID Water Right and loaning that portion to the CWCBC for instream flow purposes, CPW will cease diversions to the Central and Eastern Meadows, thus causing 59 acres to be removed from irrigation. The Central and Eastern Meadows are not supported by sub-irrigation, and all consumptive use that would have normally occurred during the operating period of the expedited loan can be shepherded down Cottonwood Creek for instream flow purposes (i.e., not available for diversion by other water users) without causing injury to downstream water users. The 59 acres removed from irrigation correspond to a 2.27 cfs diversion rate (which includes 0.42 cfs of ditch loss). The Western Meadow portion of the Hay Barn Property is assumed to use 1.53 cfs by the historical irrigation practices that rely in part on seepage from the ditch for delivery to the crop.

During the operating period of the expedited load, for the total amount of the CID Water Right (3.8 cfs) that CPW is entitled to divert in priority (i.e., both priorities are in priority), the breakout of the various credits, flows, and returns is shown in the table below. In the event only the senior Priority No. 15 is available, (1.2 cfs of the 3.8 cfs), the transferred portion will be scaled accordingly as summarized below.

	Both Priorities	Only Priority No. 15
	(cfs)	(cfs)
Total Eligible for Diversion	3.8	1.20
Diversion to Western Portion to remain in production	1.53	0.48
CU in Cottonwood Creek for ISF	0.59	0.29
Ditch loss compensation	0.42	0.13
Deep percolation returns	0.88	0.20
Surface return flows	0.38	0.09

CPW staff will coordinate with the Water Commissioner to monitor physically and legally available flow on Cottonwood Creek as well as the call status to ensure no injury to other water users. CPW will quantify the amount that is available to divert in-priority daily, including a pro rata adjustment for CPW's share of the calling priority if the full amount is not available for diversion at the CID.

This approach ensures there will be no injury because it will be implemented in real time based on operating within the priority system. Consumptive use credits will only be available and credited to instream flow uses as water is physically and legally available at the CID No. 1 headgate. CPW will physically supply the appropriate pro rata portions of ditch loss, deep percolation, and surface return flows in a manner that will not reduce the amount or materially alter the timing of return flows. The amount of credit converted to instream flow use will be that associated only with the amount of water that normally would have been applied to and consumed by the pasture grass on the Central and Eastern Meadows. Additionally, the exercise of this expedited loan for instream flow use will result in minimal consumption of the loaned water (e.g., the evaporative portion of the transit losses in Cottonwood Creek) compared to the historical consumption of the pasture grass that would have been irrigated by the loaned water; therefore, the operation of this plan will result in a net reduction to the overall amount of CPW's CID Water Right that is consumptively used.

The loaned water will only be available from the original point of diversion at the CID No. 1 headgate to the point of historic return flows obligations on the Arkansas River. Therefore, CPW requests that it be administered as such and shepherded by the water commissioner past diversion structures along the decreed instream flow reach so the entire amount, less transit losses, arrives at the mainstem Arkansas River. CPW acknowledges that a reasonable transit loss will be assessed. As necessary at the request of the water commissioner, CPW can conduct in-channel flow measurements to coordinate operation and administration of this loan.

Since the loan will result in a retiming of flows downstream of the point of historical return flow obligations, and the water will be available to downstream users for other beneficial uses, it will not adversely affect Colorado's compact entitlements.

Notices

Concurrent with this transmittal, as required under § 37-83-105(2)(b)(II), written notice has been provided to all parties on the substitute water supply plan notification list for Water Division 2 and to registered agents of any ditch company, irrigation district, water users' association, or other water supply or delivery entity

within whose system the water rights fall. In accordance with 2 CCR 408-2:6(k)(2)(f), CPW and CWCB have coordinated to provide notice to all persons on the instream flow subscription mailing list for Water Division 2.

Filing Fee

On behalf of CPW, the Colorado Office of the Attorney General will pay the \$300.00 filing fee as required under § 37-83-105(2)(b)(I) via the DWR online payment system.

Should any questions arise before or during the operation of the proposed loan, please contact Katie Birch, CPW's Instream Flow Program Specialist, at Katie.Birch@state.co.us or Jon Erickson, Water Resource Engineer, at Jon.Erikson@state.co.us. Thank you for your prompt consideration of this request.

Sincerely,

MITCHELL MARTIN

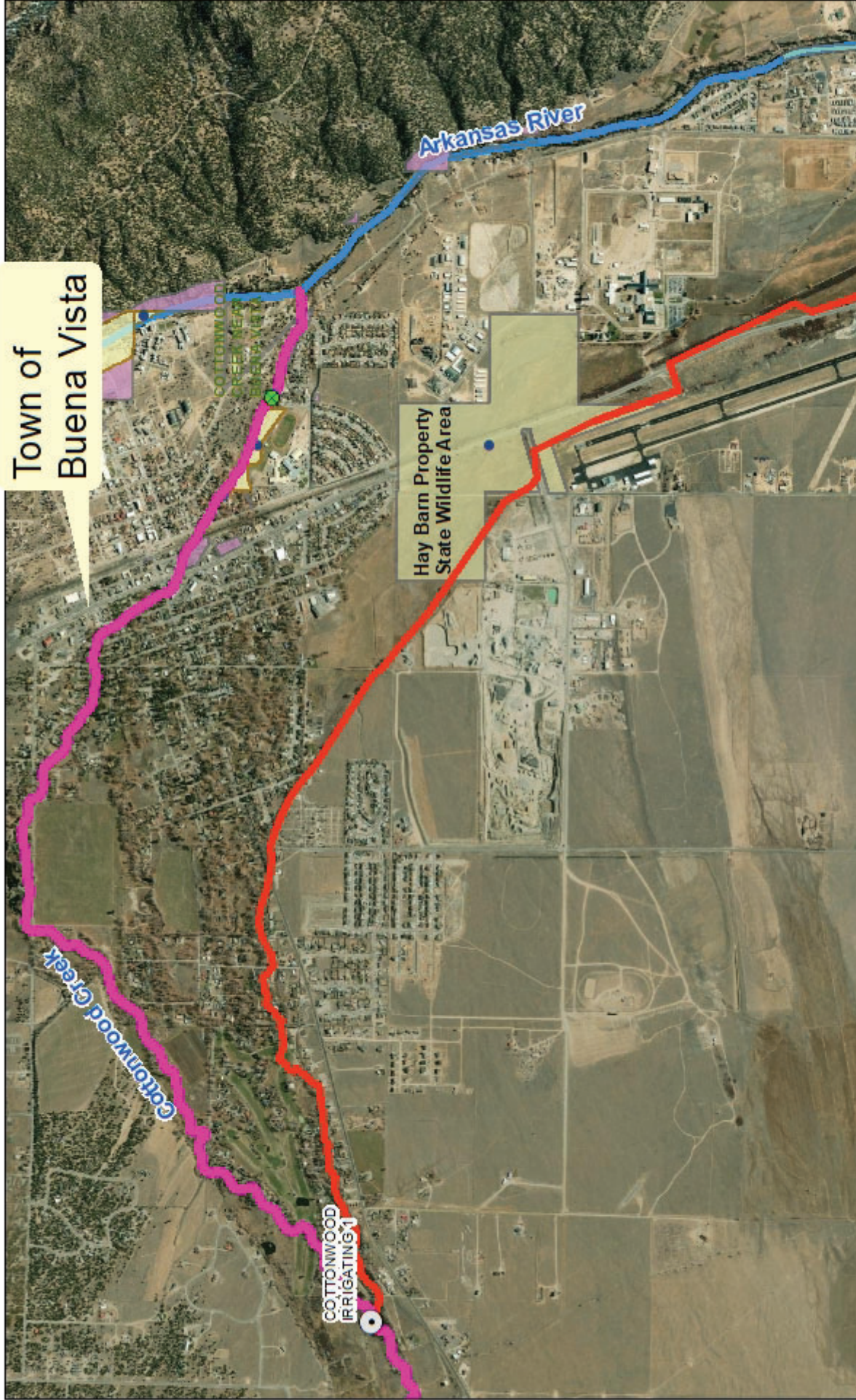
Digitally signed by MITCHELL
MARTIN
Date: 2022.07.19 12:54:36 -06'00'

Mitch Martin
Acting Southeast Regional Manager
Colorado Parks and Wildlife

Encl.

cc all via email:

Rob Viehl, CWCB Stream and Lake Protection Section
Kaylea White, Stream and Lake Protection Section
Pete Conovitz, CWCB Stream and Lake Protection Section
Ed Perkins, Colorado Parks and Wildlife
Katie Birch, Colorado Parks and Wildlife
Jon Erickson, Colorado Parks and Wildlife
Rena Griggs, Colorado Parks and Wildlife
Tarn Udall, Assistant Attorney General



**Cottonwood Irrigating Ditch No. 1 - Expedited ISF Loan
Vicinity Map**

EXHIBIT A



EXHIBIT B

INTERAGENCY AGREEMENT FOR AN EXPEDITED LOAN OF WATER FOR INSTREAM FLOW USE

This Interagency Agreement for an Expedited Loan of Water for Instream Flow Use (“Agreement”) is entered into by and between the State of Colorado, acting by and through the Department of Natural Resources, for the use and benefit of the Colorado Division of Parks and Wildlife (“CPW”) and the State of Colorado, acting by and through the Department of Natural Resources, for the use and benefit of the Colorado Water Conservation Board (“CWCB”) (individually, a “Party” and collectively, the “Parties”).

RECITALS

A. CPW is a division of the Colorado Department of Natural Resources organized and existing under and pursuant to Articles 1, 9 and 10 of Title 33, C.R.S., for the purpose of protecting, preserving, enhancing and managing Colorado’s natural, scenic, scientific, and outdoor recreation areas as well as its wildlife and environment for the use, benefit, and enjoyment of the people of Colorado and its visitors.

B. CWCB is a division of the Colorado Department of Natural Resources organized and existing under and pursuant to Article 60 of Title 37, C.R.S., for the purpose of aiding in the protection and development of water for the benefit of the present and future inhabitants of the State of Colorado.

C. CWCB has the exclusive authority, pursuant to § 37-92-102(3), C.R.S to appropriate and adjudicate instream flow water rights to preserve and improve the natural environment of streams and lakes in the State.

D. The Cottonwood Creek Instream Flow Right (“Instream Flow Right”) was adjudicated on Cottonwood Creek in the amount of 20 cubic feet per second (“cfs”) in the stream reach from the confluence of the Middle and South Forks of Cottonwood Creek to the confluence of Cottonwood Creek and the Arkansas River in Case No. 79CW115 in Division 2 Water Court. The Decree confirming the Instream Flow Right is attached hereto as **Exhibit A**.

E. In recent drought years, some CWCB decreed instream flow rates were not met due to their relatively junior priority, and, as a result, Colorado’s aquatic ecosystems were negatively impacted. CWCB anticipates many decreed instream flows, including the Instream Flow Right, may not be met again this year. The fishery in the instream flow reach in Cottonwood Creek is a valuable aquatic resource, and CPW has an interest in protecting it from decline.

F. Under certain circumstances and subject to State Engineer approval, § 37-83-105(2)(a)(III.7), C.R.S. allows the owner of any decreed water right to loan water to CWCB on a temporary expedited basis to satisfy an instream flow right up to its decreed amount in order to preserve the environment to a reasonable degree.

G. CPW owns a water right decreed to the Cottonwood Irrigating Ditch No. 1 (“CID No. 1”) on Cottonwood Creek (“CID Water Right”). The CID No. 1 was adjudicated in C.A. 1127, and CPW’s CID Water Right is 3.8 cfs total: 1.2 cfs attributed to Priority No. 15,

and 2.6 cfs attributed to Priority No. 43. The pertinent pages of that Decree are attached hereto as **Exhibit B**.

H. If approved by the State Engineer pursuant to § 37-83-105(2), C.R.S., and subject to the terms and conditions of this Agreement, CPW is willing to temporarily loan a portion of the CID Water Right to CWCB for instream flow use to preserve the natural environment to a reasonable degree on an expedited basis for a one-year period.

I. The loan is expected to operate during the late summer and early fall when flows in Cottonwood Creek are below the decreed flow rate for the Instream Flow Right. When this occurs, water temperatures are generally high, causing stressful conditions for the fish community.

AGREEMENT

NOW THEREFORE, the Parties agree as follows:

1. Authority. This Agreement is entered into pursuant to § 37-83-105, C.R.S. for the mutual benefit of CPW and CWCB. No further payment, monetary or otherwise, is required by either Party. Section 29-1-203, C.R.S., as amended, authorizes and enables agencies and departments of the government of the State of Colorado to enter into cooperative agreements or contracts.

2. Term of Loan Agreement. This Agreement is for a term of one year, commencing on the date the State Engineer approves the proposed expedited loan and terminating one year later.

3. Restrictions on Exercise of Loan. Pursuant to § 37-83-105(2)(a), C.R.S., the loan shall not be exercised for more than 120 days during its one-year term.

4. Future Loans. This Agreement shall not be renewed as an expedited loan; however, the Parties may contract for use of the CID Water Right by CWCB under a renewable loan pursuant to § 37-83-105(2), C.R.S., subject to acceptance by the CWCB and approval by the State Engineer.

5. Agreement to Loan a Portion of the CID Water Right. Subject to the terms and conditions in this Agreement, CPW may, in its sole discretion, cease diverting up to 0.97 cfs of its CID Water Right to temporarily loan that same portion to the CWCB to satisfy part of the Instream Flow Right.

(a) Limitations on Use of Loaned Water. CWCB's use of the water loaned hereunder is limited to satisfying part of the Instream Flow Right. Such use is also subject to all conditions imposed pursuant to § 37-83-105(2), C.R.S. and any additional terms imposed by the Division or State Engineers.

(b) Process for Loan of the CID Water Right.

(i) CWCB may notify CPW when water is needed to satisfy part of the Instream Flow Right. As part of the notification, CWCB shall specifically identify the requested timing and rate of flow up to 0.97 cfs. Alternatively, CPW may notify CWCB when it determines conditions warrant CPW's ceasing to divert a portion of the CID Water Right to satisfy part of the Instream Flow Right and to benefit the fishery. As part of the CPW notification, CPW shall specifically identify the timing and rate of flow that it will cease diverting in order to exercise the loan.

(ii) CPW assumes no responsibility for delivering the loaned water to the decreed instream flow reach. CWCB may take such action as is necessary or desirable to protect the use of the loaned water for instream flow purposes once CPW elects to cease diverting a portion of the CID Water Right. Either Party may request that the Division Engineer administer the delivery of the loaned water through the instream flow reach. If CPW requests such action, CPW shall promptly notify CWCB of such request.

(iii) CPW will notify the Division Engineer, with copy to CWCB, of the anticipated timing of the exercise of this loan, including the estimated amount of the CID Water Right it anticipates loaning to the CWCB to satisfy the Instream Flow Right.

(iv) CPW may decline to loan water for CWCB's use in its sole discretion, including, but not limited to, if it does not have sufficient water available for this purpose.

(c) Accounting and Measurement.

(i) CWCB and CPW shall coordinate record keeping and accounting as required under the recording requirements provided in 2 CCR 408-2: ISF Rule 6(g) (2021) and as otherwise may be reasonably required by the State and Division Engineers to administer the CID Water Right for use in satisfying the Instream Flow Right.

(ii) CPW and CWCB are each solely responsible for flow measurements as may be required by the State and Division Engineers for administration of their respective water right(s).

(d) Preservation of CPW's Water Right. CWCB's use of CPW's CID Water Right does not transfer any legal or equitable title or interest to any part of the CID Water Right to CWCB. By permitting CWCB to use a portion of the CID Water Right, CPW is not abandoning, relinquishing, or forfeiting the CID Water Right. CWCB shall not jeopardize CPW's CID Water Right by taking any action that causes or could potentially cause the water court to reopen the adjudication of the CID Water Right decree.

6. Notices. Each individual identified below is the principal representative of the designating Party. All notices required or permitted to be given under this Agreement shall be in writing, and shall be delivered (A) by hand with receipt required, (B) by certified or registered mail to such Party's principal representative at the address set forth below, or (C) as an email to the principal representative at the email address set forth below. Either Party may change its principal representative by notice submitted in accordance with this section without a formal amendment to this Agreement. Unless otherwise provided in this Agreement, notices shall be effective upon delivery of the written notice.

CPW:

Rena Griggs
Southeast Regional Office
Colorado Parks and Wildlife
4255 Sinton Road
Colorado Springs, CO 80907
719-227-5286

CWCB:

Kaylea White
Stream and Lake Protection Section
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, Colorado 80203
Kaylea.White@state.co.us
303-866-3441

7. Termination. The Parties are entering into this Agreement to serve the public interest of the State of Colorado. If this Agreement ceases to further the public interest of the State, either Party, in its discretion, may terminate this Agreement.

8. Dispute Resolution. In the event of disputes concerning performance hereunder or otherwise related to this Agreement, the Parties shall attempt to resolve them at the divisional level. If this fails, disputes shall be referred to senior departmental management staff designated by each Party. If this fails, the director of each Party shall meet and attempt resolution.

9. General Provisions.

(a) Assignment. CWCB shall not assign, transfer, or sub-lease its rights or obligations under this Agreement. Any attempt at assignment or transfer without CPW's consent shall be void.

(b) Captions. The captions and headings in the Agreement are for convenience of reference only and shall not be used to interpret, define, or limit its provisions.

(c) Counterparts. This Agreement may be executed in multiple, identical, original counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

(d) Entire Understanding. This Agreement represents the complete integration of all understandings between the Parties and all prior representations and understandings, oral or written, are merged herein. Prior or contemporaneous additions, deletions, or other changes hereto shall not have any force or effect whatsoever, unless embodied herein.

(e) Legal Counsel. Each Party to this Agreement has engaged legal counsel to negotiate, draft, and/or review this Agreement. Therefore, in the construction and interpretation of this Agreement, the Parties acknowledge and agree that it shall not be construed against any Party on the basis of authorship.

(f) Litigation Reporting. Within 10 days after being served with any pleading in a legal action filed with a court or administrative agency, related to this Agreement or which may affect CWCB or CPW's ability to comply with the terms and conditions of this Agreement, CWCB or CPW shall notify the other Party of such action and deliver copies of such pleadings to CPW's principal representative as identified herein.

(g) Modification.

(i) By the Parties. Except as specifically provided in the Agreement, modifications hereof shall not be effective unless agreed to by the Parties in writing.

(ii) By Operation of Law. This Agreement is subject to such modifications as may be required by changes in Federal or Colorado State law, or their implementing regulations. Any such required modification shall be automatically incorporated as part of the Agreement on the effective date of such changes, as if fully set forth herein.

(i) No Waiver of Immunities. No term or condition of this Agreement shall be construed or interpreted as a waiver, express or implied, or any of the immunities, rights, benefits, protections, or other provisions, of the Colorado Governmental Immunity Act, C.R.S. §24-10-101, et seq., as applicable now or hereafter amended.

(j) Third Party Beneficiaries. Except for the Parties' respective successors and assigns, this Agreement does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. Enforcement of this Agreement and all rights and obligations hereunder are reserved solely to the Parties. Any services or benefits which third parties receive as a result of this Agreement are incidental to this Agreement, and do not create any rights for such third parties.

(k) Waiver. A waiver of a breach of any provision of this Agreement shall not waive any subsequent breach of the same or different provision of this Agreement. Any Party's failure in any one or more instances to insist upon strict performance of any of the

terms and conditions of this Agreement or to exercise any right herein conferred shall not be construed as a waiver or relinquishment of that right or of that Party's right to assert or rely upon the terms and conditions of this Agreement. Any express waiver of a term of this Agreement shall not be binding and effective unless made in writing and properly executed by the waiving Party.

(l) Digital Signatures. If any signatory signs this Agreement using a digital signature in accordance with the Colorado State Controller Contract, Grant and Purchase Order Policies regarding the use of digital signatures issued under the State Fiscal Rules, then any agreement or consent to use digital signatures within the electronic system through which that signatory signed shall be incorporated into this Agreement by reference.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date executed by both Parties.

CWCB

CPW

By _____

By DRAFT _____

Name: Rebecca Mitchell

Name: Mitch Martin

Title: Director, Colorado Water
Conservation Board

Title: Acting Southeast Regional Manager,
Colorado Parks and Wildlife

Date:

Date:

EXHIBIT A

[Instream Flow Decree]

DRAFT

EXHIBIT B

[CID Water Right Decree]

DRAFT

EXHIBIT C

DITCH NUMBER FIFTEEN. THE COTTONWOOD IRRIGATING DITCH.

That said ditch is entitled to Priorities Nos.15 and 43. It is claimed by J. M. McMichael, S.S. Westfall, Thomas A. Gummell, Julia Groves and Louisa C. Treloar. It is used for the irrigation of lands, and 950 acres of land proposed to be irrigated thereby. It takes its supply of water from Cottonwood Creek a tributary of the Arkansas River; the head-gate is located on the south bank of the said Creek in the S.W. 1/2 of the N.E. 1/4 of Sec.13, Tp.14, S.R.79,W., Chaffee County, Colorado.

And it is hereby adjudged and decreed that there be allowed to flow into said ditch from the said Creek, for the use aforesaid, and for the use and benefit of the party or parties lawfully entitled thereto, under and by virtue of appropriation by original construction and priority No. 15, so much water as will flow therein to the amount of Six cubic feet of water per second of time, the appropriation of which water took effect on, and said Priority No.15 dates from the Thirty-first day of July, A. D.1866.

And further, that there be allowed to flow into said ditch from said Creek, for the use and purpose aforesaid, and for the benefit aforesaid, under and by virtue of said appropriation of water by said first enlargement thereof, and Priority No.43, so much additional water as will flow therein to the amount of ^{cubic} Thirteen feet of water per second of time, the appropriation of which last mentioned water took effect on, and said Priority No.43 dates from the Thirty-first day of December, A.D.1872, making the total amount of water appropriated by said ditch No.15 from said Creek in manner as aforesaid, Nineteen cubic feet of water per second of time.

Provided, That the amount of water shall only be granted and allowed to flow into said ditch, from said Creek, for the use and benefit aforesaid, in the proportion of one cubic foot of water per second of time to 50 acres of land irrigated therefrom.

DITCH NUMBER SIXTEEN.

THE BURNETT DITCH.

That said ditch is entitled to Priority No.16. It is claimed by Allen G. Campbell, Mrs.S.M.Burnett, and the Heirs of John Burnett, deceased, It is used for the irrigation of lands, and 195 acres of land proposed to be irrigated thereby. It takes its supply of water from the South Arkansas River; by way of the " Slough " a channel leading therefrom; the head-gate is located on the bank of said River at a point from whence the S.W.Cor.of Sec.6, Tp.49, N.R.8, E. bears S.43°44'W.1347 feet, Chaffee County, Colorado.

IN THE DISTRICT COURT IN AND FOR
WATER DIVISION NO. 2

RECEIVED STATE OF COLORADO
SEP 24 1979 Case No. 79CW115

COPY
RECEIVED
JUL 24 1979

OFFICE OF THE
ATTORNEY GENERAL

COLO.
CONSERVATION BOARD
IN THE MATTER OF THE APPLICA-)
TION FOR WATER RIGHTS OF)
THE COLORADO WATER CONSER-)
VATION BOARD ON BEHALF OF)
THE PEOPLE OF THE STATE OF)
COLORADO)
IN COTTONWOOD CREEK)
A NATURAL STREAM)
IN THE WATERSHED OF THE)
ARKANSAS RIVER)
IN CHAFFEE COUNTY.)

APPLICATION FOR WATER
RIGHTS TO PROTECT THE
NATURAL ENVIRONMENT

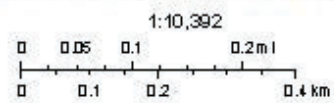
1. Name of applicant: Colorado Water Conservation Board
Address of applicant: 1313 Sherman Street, 8th Floor
Denver, Colorado 80203
2. Name of natural stream: COTTONWOOD CREEK
3. Legal description of stream: (If unsurveyed, longitude and latitude are acceptable.)
 - A. (Stream only) Legal description of beginning and end points of minimum stream flow claimed: The natural stream channel from confl M Fork and S Fork Cottonwood Creek lat 38 49 54 long 106 10 43 as the upstream terminus and confl Arkansas River lat 38 49 42 long 106 06 34 as the downstream terminus, being a distance of approximately 5 miles. This segment can be located on the Buena Vista 15' U.S.G.S. quadrangle.
 - B. (Lake only) Legal description of location of outlet of natural lake: N/A
4. Date of initiation of appropriation: March 14, 1979
5. Amount of water claimed:
 - A. (Lake only) Volume in acre feet and elevation of the minimum lake surface level: N/A
 - B. (Stream only) Flow in C.F.S.: 20 cfs.

Exhibit D

Irrigable Acreage in Central Meadow



June 15, 2022



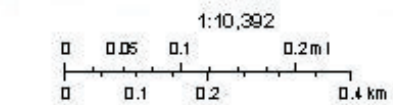
Source: Esri, Intel, Earthstar, GeoEye, and the GIS User Community

This map was generated by the Colorado Hunting Atlas (HigAtlas)

Irrigable Acreage in Eastern Meadow



June 15, 2022



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

The map was generated by the Colorado Hunting Atlas (HApA)

Exhibit E

Central and Eastern Meadow Return Flow - Unit Response Function												
	Month											
Year	1	2	3	4	5	6	7	8	9	10	11	12
1	0.1	1.0	3.5	4.5	4.7	4.2	3.9	3.5	3.0	2.8	2.5	2.4
2	2.2	1.9	2.0	1.8	1.8	1.7	1.6	1.6	1.5	1.5	1.4	1.4
3	1.3	1.2	1.3	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0
4	0.9	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7
5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
6	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
8	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
10	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
* Raw values for cumulative return flows equal 97.2% after 120 months, the remaining 2.8% was redistributed equally across all months.												

Maximum Potential Deep Perc Returned via Cottonwood Creek (AF/mo)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	-	-	-	-	-	-	-	54	54	-	-	-

Central and Eastern Meadow Expected Potential Accretion to River (AF/mo)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.6	4.4	5.0
2023	4.8	4.0	3.9	3.4	3.2	2.8	2.7	2.5	2.2	2.2	2.0	1.9
2024	1.9	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.3	1.3	1.3	1.3
2025	1.2	1.1	1.2	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9
2026	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6
2027	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
2028	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
2029	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
2030	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2031	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2032	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Central and Eastern Meadow Expected Potential Accretion to River (cfs)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	-	-	-	-	-	-	-	0.00	0.01	0.04	0.07	0.08
2023	0.08	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03
2024	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02
2025	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
2026	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2027	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2028	0.01	0.01	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.005	0.005
2029	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
2030	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
2031	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
2032	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001



COLORADO
Division of Water Resources
Department of Natural Resources

August 16, 2022

Mr. Mitchell Martin
Acting Southeast Regional Manager
Colorado Parks & Wildlife
Southeast Region
4255 Sinton Road
Colorado Springs, Co 80907

Re: Expedited Loan of Water for Colorado Water Conservation Board for Instream Flow Purposes
Pursuant to Section 37-83-105, C.R.S.
Section 18, T 1 S, R 91 W and Section 2, T 1 N, R 97 W 6TH P.M.
Water Division 2, Water District 11, Chaffee County
DWR SWSP Database ID 9379

Approval Period: August 16, 2022 through December 31, 2022*

*per the statutory limit to use loaned water for 120 days in a single "calendar year"

Contact Information for Mr. Mitchell Martin: 719-227-5200 and mitch.martin@state.co.us

Dear Mr. Martin:

We have reviewed your letter dated July 19, 2022 in which you request approval of an expedited loan of water pursuant to the expedited loan process under § 37-83-105 (2)(a)(III.7), C.R.S., from the Colorado Parks and Wildlife ("CPW") to the Colorado Water Conservation Board ("CWCB") for instream flow ("ISF") use. As required by § 37-83-105(2)(b)(II), C.R.S., written notice of the request for approval of an expedited loan of water was provided on July 22, 2022 to all parties who have subscribed to the Division 2 Substitute Water Supply Plan ("SWSP") Notification List and Upper Arkansas Water Conservancy District and Cottonwood Irrigating Ditch No. 1. The Division of Water Resources ("DWR") received comments during the statutory 15-day comment period from David M. Shohet of Monson, Cummins, Shohet & Farr, LLC on behalf of Wolf & Neerland Ditch and the Cottonwood & Maxwell Ditch. The statutory \$300 filing fee (receipt no. 10023006) was submitted with this request.

Description and Statement of Duration

CPW is proposing a temporary loan of a portion of its water right decreed to the Cottonwood Irrigating Ditch No. 1 (WDID 1100648) ("CID1") on Cottonwood Creek to CWCB to benefit its decreed ISF water right on Cottonwood Creek. CWCB currently holds ISF water right decreed in Case No. 79CW115 on Cottonwood Creek, which is more specifically described in the Table 1 below:

Exhibit D
Agenda Item 6b
Sept 20, 2022



Table 1-CWCB ISF on Cottonwood Creek

Case Number	Upstream Terminus*	Downstream Terminus*	ISF decreed amounts (cfs)	Appropriation Date
79CW115	Lat 38° 49' 54" Long 106° 10' 43" (confluence of Middle Fork and South Fork Cottonwood Creek)	Lat 38° 49' 42" Long 106° 06' 34" (confluence of Cottonwood Creek with the Arkansas River)	20 (11/1-10/31)	March 14, 1979

*Note: The latitude and longitude for the upper and downstream terminus points identified in the 79CW115 decree do not place the upper and downstream terminus points at the confluence of Middle Fork and South Fork Cottonwood Creek or the confluence of Cottonwood Creek with the Arkansas River, therefore we recommend that CWCB applies to the water court for a change of water rights to correct the decreed location for the upper and downstream terminus points for this ISF water right

The Cottonwood Creek ISF water right was decreed to preserve the natural environment to a reasonable degree. The loan of water leased from CPW will be for ISF use within the same segments of Cottonwood Creek as identified in Case No. 79CW115 and shown on the attached Exhibit A map. CPW proposes to loan up to 0.84 cfs of its 3.8 cfs ownership in the CID1 water right, decreed in Case No. CA1127 for irrigation purposes and diversion from Cottonwood Creek. This expedited loan will be for a split season irrigation and ISF use during the historical irrigation season from mid-March through the end of October. CPW will perform its typical irrigation practices from the beginning of the 2022 irrigation season through early August, when CPW will cease diverting up to 0.84 cfs of its CID1 water right, and it will loan this amount to the CWCB for ISF purposes on Cottonwood Creek. CPW's remaining portion of CID1 water right will continue to be diverted for irrigation purposes and to compensate for the historical ditch losses. Following the cessation of high stream temperatures and the critical risk period for fish, CPW will stop exercising the loan and resume irrigation. Loaned water is expected to increase stream depth and wetted perimeter and to lower the water temperature for the fish community.

Pursuant to § 37-83-105(2)(a)(III.7), C.R.S., the expedited loan would have a term of up to one year, and CPW may not reapply for a second expedited loan of the same loaned water right. In addition, the temporary loan is limited to provide water for up to 120 days during the approval period. In this particular case the temporary loan will provide water during the late summer and early fall when the flow in Cottonwood Creek is below the decreed ISF rate.

Applicant's legal right to use the loaned water right

CWCB will enter into an Agreement to Loan Water for Instream Flow Use ("Agreement") with CPW. A copy of the draft Agreement was provided to this office with this request and is attached to this letter as Exhibit B. A copy of the approved Agreement shall be provided to this office when finalized. Under the draft Agreement, CPW will make available to CWCB for ISF use, 0.84 cfs of its ownership in the CID1 water right.

The CWCB existing ISF water right decreed in Case No. 79CW115 was identified as being more junior than the existing water rights on the segment of Cottonwood Creek described above and may be out of priority during much or all of the 2022 irrigation season. Beginning with the day of the approval of this letter, the loaned water is intended to partially make up the CWCB's ISF right of 20 cfs on Cottonwood Creek. Consistent with the terms and condition of the draft Agreement, CPW (with copy to CWCB) shall notify the Division Engineer of the anticipated timing of the exercise of

this loan including the estimated amount of CID1 water right anticipated loaning to CWCB to satisfy the ISF water right. CWCB's use of the CPW's water right in CID1 does not transfer any legal or equitable title or interest to any part of the water right to CWCB.

Historical Use and Estimate of the Consumptive Use of the loaned water right

The CID1 was decreed for irrigation purposes in Case No. CA1127 and was originally decreed to divert water from the south bank of Cottonwood Creek, in the SW1/4 of the NE1/4 of Section 13, Township 14 South, Range 79 West of the 6th P.M., under priorities 15 and 43. In Case No. CA4396, the point of diversion for 3.8 cfs originally decreed in CA1127 was changed to a new point of diversion on the South Easterly bank of Cottonwood Creek in the W1/2 of the E1/2 of Section 13, Township 14 South, Range 79 West of the 6th P.M., whence the NW corner of said Section 13 bears North 52° 38' West, a distance of 4425 feet. Also in Case No. W-344 the point of diversion for Maynard Ditch (Priority No. 194) was changed from its original location decreed in Case No. CA2346 to the present point of diversion of CID1 (Priority No. 15). The CID1 water right that is the subject of the draft Agreement, along with the CPW's ownership are summarized in the Table 2 below:

Table 2- The Coats Bros Ditch water rights

Water Right Name	Priority Number	Decreed Amount (cfs)	Case Number	Appropriation Date	Adjudication Date	CPW's Ownership (cfs)
Cottonwood Irrigating Ditch No. 1	15	6	CA1127	07/31/1866	06/19/1890	1.2
	43	13	CA1127	12/31/1872	06/19/1890	2.6

As shown in the table above CPW owns a total of 3.8 cfs decreed to the CID1; 1.2 cfs is attributed to Priority No. 15, and 2.6 cfs is attributed to Priority No. 43. The CID1 water right is currently used to irrigate portions of CPW's Buena Vista State Wildlife Area Hay Barn Property as shown on attached Exhibits A and D. The Hay Barn Property is divided into three main sections: the Eastern, Central, and Western Meadows, as shown on Exhibit D. A portion of the Maynard Ditch water right was transferred to the CID1 in Case No. W-344, but that water right is not part of this agreement, and per the transfer decree, cannot be diverted during the period in which this loan occurs and therefore should not be a factor in the operation of the plan.

The temporary change of irrigation for the Hay Barn Property is for two areas known as the Eastern Meadow (25 acres) and the Central Meadow (26 acres) (amended Exhibit D). Pasture grass is irrigated on the property for a grazing lease that CPW operates during the month of July, as well as forage for wildlife in the late summer and fall. The proposed loan will not impact historical irrigation practices on the Western Meadow portion of the Hay Barn Property as the portion of CPW's CID1 water right associated with the Western Meadow area will not be included in this expedited loan.

In order to estimate the historical consumptive use ("HCU") for the loan water, CPW relied on the HCU analysis from the engineering report prepared by W.W. Wheeler and Associates, Inc. ("Wheeler Report") in support of Case No. 79CW172 for the property known as the Ludwig property. Based on the information provided, the Ludwig property is located approximately one mile up on the CID1 from the Hay Barn Property. The decree in Case No. 79CW172 did not establish terms and conditions regarding the return flow requirements or diversion limitations. An additional analysis was completed by Colorado River Engineering ("CRE Report") in support of Case No. 19CW3089

Upper Arkansas Water Conservancy District (UAWCD), and CPW also relied on that analysis for information supporting the return flow analysis for the Eastern Meadow and the Central Meadow areas of the Hay Barn Property HCU analysis.

The selected study period identified in the Wheeler Report is 1964 through 1973. The farm headgate diversion during this period averaged 2,267.7 acre-feet. For this period, diversion records for the CID1 were downloaded from the Colorado Decision Support System ("CDSS") as well as from water commissioner field notebooks (1964-1970). The CRE Report looked at the diversion records from 1954 through 2015. During this period, the ditch diverted 3,220 acre-feet from March through November and call records show that Priority No. 15 was always fulfilled. Based on the above, the CRE Report concluded that the diversion amounts used in Case No. 79CW172 were conservatively lower than the long-term study period amounts.

The Ludwig Property was historically flood irrigated for pasture grass. The Central and Eastern Meadows areas of the Hay Barn Property are also irrigated using flood irrigation techniques to produce pasture grass to support the grazing lease and fall wildlife forage. Case No. 79CW0172 established that 1 cfs or 34 acre-feet from the CID1 headgate was consumptively used to irrigate 26 acres of the Ludwig Property. Ditch loss was estimated to be 8 percent per mile or approximately 11 percent of the farm headgate diversions. In addition, an irrigation application efficiency was estimated at 50 percent of the delivered water and the remaining 50 percent was the total return. Of the total return flows, 30 percent was estimated as surface runoff and 70 percent was estimated as deep percolation return flows. The Hay Barn Property is located approximately one mile further downstream on the CID1, therefore, a ditch loss of 18.4 percent was estimated for this property. Irrigation efficiency and return flow distribution for the Hay Barn Property are assumed to be the same as those for the Ludwig Property.

The HCU analysis for the Ludwig Property shows that diversions under Priority No. 15 were not sufficient to meet the irrigation water requirements for the pasture grass, as all of the water under this priority was consumed during the months of June, July, August, and September. Priority No. 43 was used to satisfy the remaining crop consumptive use in these months. During the months of August and September, when this expedited loan is proposed to be used, the average percentage of Priority No. 43 water delivered to the field that was consumptively used by the pasture grass was approximately 23 percent.

For the purpose of this approval, CPW is seeking to apply the same duty of water as used in Case No. 79CW172, specifically 26 acres per 1 cfs of headgate delivery. CPW determined that using the analysis in Case No. 79CW172 would result in a lower consumptive use rate compared to a site-specific analysis since a lower volume of the senior priority is delivered per acre, and therefore less of the total consumptive use would be satisfied by the senior priority, resulting in a greater amount and higher percentage of the junior priority being consumptively used. The 3.8 cfs CPW's ownership in CID1 water right is for the irrigation of up to 90.8 acres. The Central Meadow area irrigates 26 acres and the Eastern Meadows area irrigates 25 acres, leaving water available for 39.8 acres of the Western Meadow to be irrigated. The combined 51 irrigated acres under Central and Eastern Meadows areas will be taken out of service during the period this expedited loan is exercised. The irrigated acres under Central and Eastern Meadows are associated with a diversion rate of 1.96 cfs. The remaining 1.84 cfs will remain dedicated to the Western Meadow. The table below summarizes by priority the estimated CU, ditch losses, and return flows associated with irrigation of the Central and Eastern Meadows areas of the Hay Barn Property.

Consumptive Use Credits and Return Flows for the Loaned Portion of the Water Right (Central and Eastern Meadows)								
	Headgate Diversion (cfs)	Ditch Loss (cfs)	Field Delivery (cfs)	Consumptive Use %	Potential CU Credits (cfs)	Total Returns (cfs)	Surface Runoff (cfs)	Deep Percolation (cfs)
Priority 15	0.62	0.11	0.51	50%	0.25	0.25	0.08	0.18
Priority 43	1.34	0.25	1.10	23%	0.26	0.84	0.25	0.59
Total	1.96	0.36	1.60	32%	0.51	1.09	0.33	0.76

The pattern of historical return flows from the Hay Barn Property will be similar in timing and location to those from the subject property of Case Nos. 79CW0172 and 19CW3089. Based on the engineering report in Case No. 19CW3089, the return flows associated with both surface runoff and deep percolation accrue to the mainstem Arkansas River, below the confluence with Cottonwood Creek, in the NE1/4 of the SE1/4 of Section 16, Township 14 South, Range 78 West, of the 6th P.M. Also, previous work performed by Watts, K.R., 2005, Hydrogeology and Quality of ground water in the Upper Arkansas River Basin from Buena Vista to Salida, Colorado, 2000-2003, demonstrates that both the surface runoff patterns and groundwater flow patterns accrue to the mainstem Arkansas River in the area where the Ludwig and Hay Barn Properties are situated.

The Glover Analysis performed for the Ludwig Property shows that lagged return flows will take up to 113 months to reach the mainstem Arkansas River. The largest impacts occur in months 11 through 22 and are on the order of 2 to 3 percent of the initial volume of return flow water. In order to determine the timing of the deep percolation return flow for the Hay Barn Property CPW performed a Glover analysis using the same aquifer properties used in the Case No. 19CW3089, and summarized in Table 3 below:

Table 3- Summary of Glover Parameters

Distance from Farm to River (ft)	Distance from boundary to River (ft)	Transmissivity (gpd/ft)	Specific Yield
4,000*	8,310	39,900	0.2

*Note: The distance from the location of irrigation to the Arkansas River was adjusted for the Hay Barn Property, based on the approximate centroid of the Central and Eastern Meadows.

CPW developed Unit Response Factors (“URF”) for the deep percolation return flows as shown in attached Exhibit E. The values in Exhibit E represent a 14 percent overestimate of lagged depletions due to the fact that CPW initially proposed to loan 0.97 cfs of its ownership in CID1 to CWC.B. The maximum instantaneous accretion rate associated with these deep percolation return flows is less than 0.08 cfs.

Based on the above, 0.51 cfs of CU associated with Central and Eastern Meadows areas can be loaned to CWC.B and delivered to Cottonwood Creek for instream flow purposes. The return flow obligations total 1.09 cfs of which 0.33 cfs is surface returns and the remainder, 0.76 cfs, is deep percolation.

CPW proposes to deliver the surface return flow obligations down Cottonwood Creek to the mainstem Arkansas River. These returns historically accrued to the mainstem in the same month in which the diversions are made. The surface return flows associated with the new ISF use will remain in the stream. CPW is proposing to make replacements for deep percolation by delivering 0.76 cfs down CID1, allowing the deep percolation return flows to infiltrate into the ground via the ditch in the same general vicinity as the historically irrigated lands. Although CPW does not intend to construct a recharge structure, CPW seeks to minimize the onsite disturbance and activity required to achieve a suitable recharge zone. CPW is proposing to make temporary site modifications to ensure sufficient seepage occurs to meet the deep percolation return flow requirements without impacting downstream water users. Since a portion of water will not be diverted down the CID1, the travel time in the ditch will increase and the loss rate per mile may increase as well. CPW will continue making deliveries to the Western Meadow area as well as supplying the historic ditch loss associated with the Central and Eastern Meadow areas. Delivery to the Western Meadows area shall be properly measured as required by the division engineer to ensure that no more than 1.84 cfs is delivered to this area during the period of this expedited loan. In addition, delivery to make replacement of the deep percolation shall also be properly measured as required by the division engineer to ensure that no more than 0.76 cfs is delivered down CID1.

CPW's decision to cease diverting up to 0.84 cfs of the CID1 water right to loan that water for ISF purposes will depend upon the timing of stream flow shortages and water temperatures, as well as operational constraints for irrigation practices at the Hay Barn Property. The total amount of the CID1 water right (3.8 cfs) that CPW is entitled to divert in priority (under both priorities), including ditch loss, CU credits, and returns flows are shown in the table below. In the event only Priority No. 15 is available, (1.2 cfs of the 3.8 cfs), the transferred portion will be reduced in accordance with the values in the table below.

	Both Priorities in Priority	Only the Senior
	(cfs)	(cfs)
Total Eligible for Diversion	3.8	1.20
Diversion to Western Portion	1.84	0.58
CU in Cottonwood Creek for ISF	0.51	0.25
Ditch loss compensation	0.36	0.11
Deep percolation returns	0.76	0.18
Surface return flows	0.33	0.08

The amount of credit converted to ISF use will be that amount associated only with the amount of water that normally would have been applied to and consumed by the pasture grass on the Central and Eastern Meadow areas. The HCU will be available in Cottonwood Creek from the original point of diversion at the CID1 headgate to the downstream terminus of the ISF at the confluence with the Arkansas River and the historical surface return flows are to be delivered downstream in the Arkansas River to the point of historical return flow obligations. CPW acknowledges that a reasonable transit loss will be assessed, therefore transit losses should be assessed as required by the Division Engineer.

The state engineer has reviewed the loan allowing the new time, place and use of this water right and determined, as required by § 37-83-105(2)(a) and (2)(b), that it will not injure the existing water rights of others and the Arkansas River compact entitlements.

The timing of exercising this loan will depend upon the timing of stream flow shortages. Once the loan water reaches the downstream terminus of the decreed ISF reach at the confluence of Cottonwood Creek and the Arkansas River, the loan water will no longer be claimed by CWCB.

Conditions of Approval

This temporary loan of water is hereby approved pursuant to Section 37-83-105, C.R.S., subject to the conditions below:

1. This approval applies to loan water from CPW's ownership of the CID1 water right beginning August 16, 2022 through December 31, 2022 and is limited to 120 days of operation during this calendar year.
2. Approval of this temporary loan of water is for the purposes stated herein, specifically for loaning water from CPW's ownership of the CID1 water right to CWCB for ISF use on Cottonwood Creek reach identified in Case No. 79CW115.
3. The diversion period of the subject CID1 approved under this temporary loan of water is March 24th through October 31 under the proposed split season irrigation and ISF use.
4. The Applicant must provide the name, address and phone number of the person who will be responsible for the operation of this temporary loan of water to the SEO, the division engineer (Bill Tyner, at bill.tyner@state.co.us) and water commissioner (Willem Scott at willem.scott@state.co.us) within 20 days of the receipt of this approval.
5. The person responsible for the operation of this temporary loan must notify the division engineer and water commissioner 48 hours in advance of the desire to exercise this loan and within 24 hours of any changes to this temporary loan including its cessation.
6. CPW's loan water and instream flows shall be measured as required by the division engineer. The Applicant shall install and maintain measuring devices as required by the division engineer for operation of this temporary loan.
7. Delivery to the Western Meadows area shall be properly measured as required by the division engineer to ensure that no more than 1.84 cfs is delivered to this area during the period of this expedited loan. In addition, delivery to make replacement of the deep percolation shall also be properly measured as required by the division engineer to ensure that no more than 0.76 cfs is delivered down CID1.
8. The Applicant must submit accounting reports to the division engineer (Bill Tyner, at bill.tyner@state.co.us) and water commissioner (Willem Scott at willem.scott@state.co.us) on a daily basis or other interval acceptable to both of them. The Applicant shall also provide a report to the division engineer and water commissioner by November 15th, which summarizes releases made pursuant to this temporary loan of water. Accounting forms are subject to modification and approval by the division engineer. Flow rates shall be reported in cfs, volumes shall be reported in acre-feet.
9. Operation of this temporary loan will require the CPW to ensure that portions of the CID1 water right that are not included in this loan Agreement will be delivered to down-ditch owners without diversion on the Hay Barn Property property. This may require the CPW to restrict flow through laterals on their property during operation of this temporary loan. Further, the loaned water to Cottonwood Creek to the downstream

terminus of the instream flow decreed in 79CW115 cannot be added to the native flows on Cottonwood Creek as available for exchange potential on Cottonwood Creek by other ditch owners. Additionally, in order to ensure that CPW's proposed method of maintaining deep percolation return flows through additional anticipated ditch seepage is sufficient to produce the required amount of deep percolation, CPW must monitor the rate of percolation, keep this water separated from deliveries further downstream in the ditch, and take timely steps as necessary to ensure return flows are adequately maintained.

10. The state engineer may revoke this temporary loan of water or add additional restrictions to its operation, if at any time the state engineer determines that injury to other vested water rights has occurred or will occur as a result of the operation of this temporary loan of water.
11. The decision of the division engineer shall have no precedential or evidentiary force, shall not create any presumptions, shift the burden of proof, or serve as a defense in a water court case or any other legal action that may be initiated concerning the loan. This decision shall not bind the division engineer to act in a similar manner in any other applications involving other loans and shall not imply concurrence with any findings of fact or conclusions of law contained herein, or with the engineering methodologies used by the Applicant. Any appeal of a decision made by the division engineer concerning a temporary loan of water pursuant to Section 37-83-105, C.R.S., shall be to the Division 2 Water Judge within fifteen days of the date of this decision.

Should you have any questions regarding this temporary loan of water, please contact me at (303) 358-3022.

Sincerely,



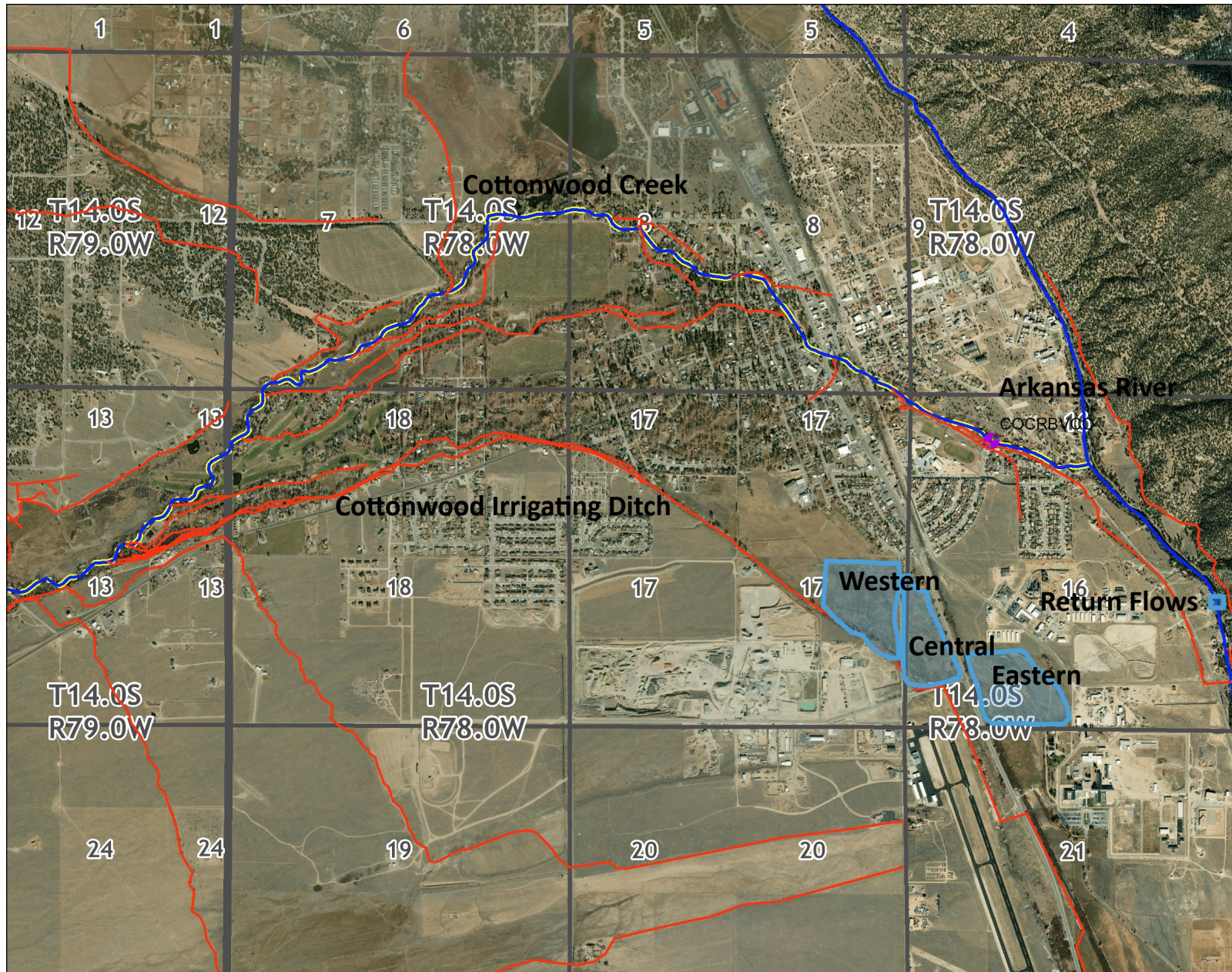
Kevin G. Rein, P.E.
State Engineer, Director

Attachments: Overview Map of Hay Barn Property and point of Return flow
Exhibit A - Map of the ISF reach
Exhibit B - Draft Agreement to Loan Water for ISF Use
Amended Exhibit D - Irrigable Acreage in Central and Eastern Meadow Areas
Exhibit E - URFs

Ec: Bill Tyner, P.E., Division Engineer, Water Division 2, bill.tyner@state.co.us
Rachel Zancanella, P.E., Assistant Division Engineer, Division 2, rachel.zancanella@state.co.us
Melissa Van Der Poel, P.E., Team Leader, Team 237, melissa.vanderpoel@state.co.us
Willem Scott, Water Commissioner District 11, willem.scott@state.co.us
Robert Veihl, CWCB, Chief Stream and Lake Protection, rob.veihl@state.co.us
Kaylea White, CWCB, kaylea.white@state.co.us
Pete Conowitz, CPW, pete.conowitz@state.co.us



Cottonwood Instream Flow Loan Overview Map



Legend

- Active Gage - Diversion
- Active Gage - Reservoir
- Active Gage - Stream
- Irrigation Ditch
- Source Water Route Framework
- ISF Decreed Flow Rate
- Township
- Section
- County

Location

Notes

Estimated extent of CPW Hay Barn property in blue.
Estimated location of return flow obligation in blue.

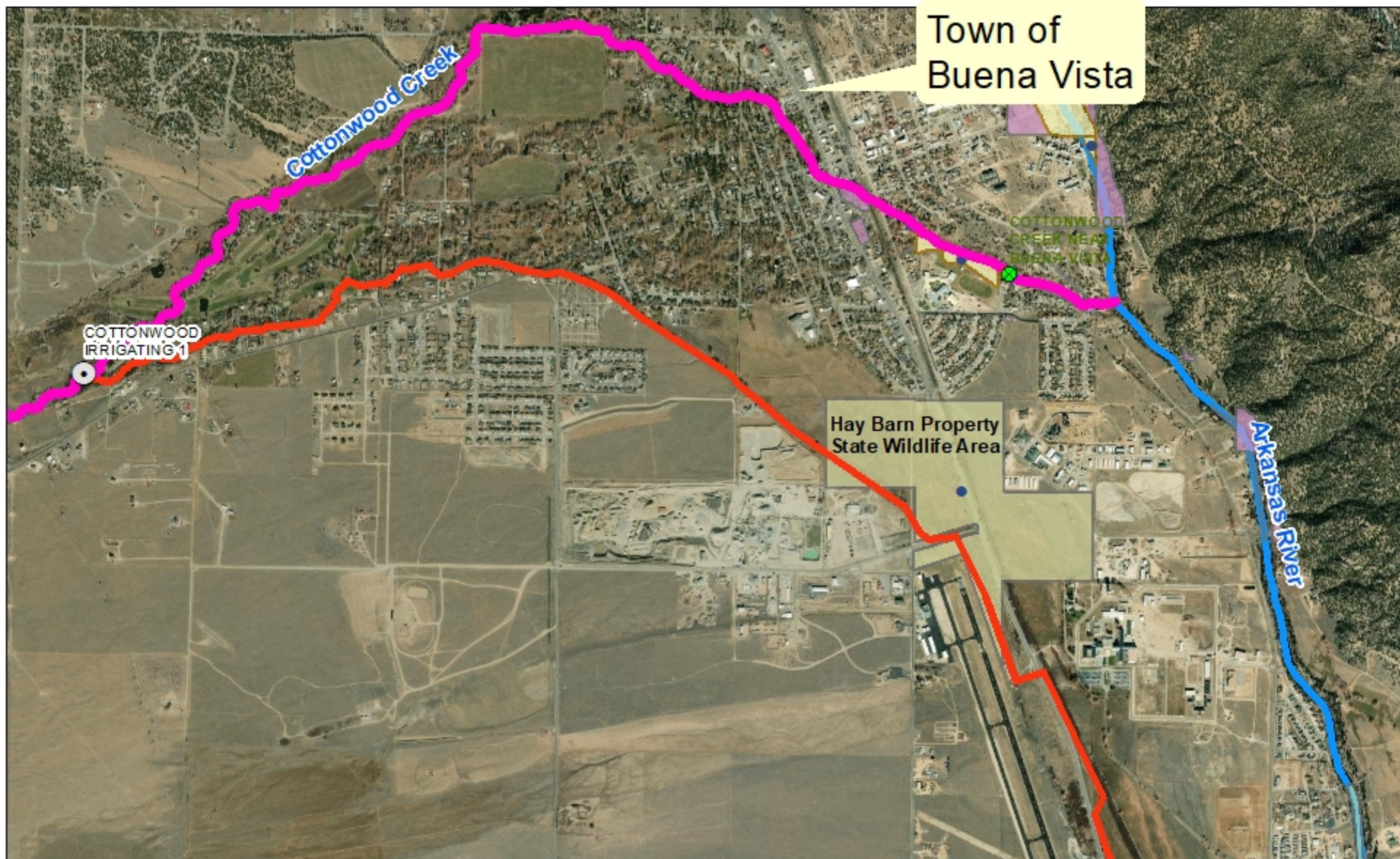
4,677 0 2,339 4,677 Feet

1: 28,064



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Date Prepared: 8/15/2022 6:31:37 PM



Cottonwood Irrigating Ditch No. 1 - Expedited ISF Loan Vicinity Map

-  COCRBVCO
-  Cottonwood Creek Decreed ISF Water Right (20 cfs)
-  Cottonwood Irrigating Ditch 1 Alignment

1 0.5 0

1 Miles

N



EXHIBIT B

INTERAGENCY AGREEMENT FOR AN EXPEDITED LOAN OF WATER FOR INSTREAM FLOW USE

This Interagency Agreement for an Expedited Loan of Water for Instream Flow Use (“Agreement”) is entered into by and between the State of Colorado, acting by and through the Department of Natural Resources, for the use and benefit of the Colorado Division of Parks and Wildlife (“CPW”) and the State of Colorado, acting by and through the Department of Natural Resources, for the use and benefit of the Colorado Water Conservation Board (“CWCB”) (individually, a “Party” and collectively, the “Parties”).

RECITALS

A. CPW is a division of the Colorado Department of Natural Resources organized and existing under and pursuant to Articles 1, 9 and 10 of Title 33, C.R.S., for the purpose of protecting, preserving, enhancing and managing Colorado’s natural, scenic, scientific, and outdoor recreation areas as well as its wildlife and environment for the use, benefit, and enjoyment of the people of Colorado and its visitors.

B. CWCB is a division of the Colorado Department of Natural Resources organized and existing under and pursuant to Article 60 of Title 37, C.R.S., for the purpose of aiding in the protection and development of water for the benefit of the present and future inhabitants of the State of Colorado.

C. CWCB has the exclusive authority, pursuant to § 37-92-102(3), C.R.S to appropriate and adjudicate instream flow water rights to preserve and improve the natural environment of streams and lakes in the State.

D. The Cottonwood Creek Instream Flow Right (“Instream Flow Right”) was adjudicated on Cottonwood Creek in the amount of 20 cubic feet per second (“cfs”) in the stream reach from the confluence of the Middle and South Forks of Cottonwood Creek to the confluence of Cottonwood Creek and the Arkansas River in Case No. 79CW115 in Division 2 Water Court. The Decree confirming the Instream Flow Right is attached hereto as **Exhibit A**.

E. In recent drought years, some CWCB decreed instream flow rates were not met due to their relatively junior priority, and, as a result, Colorado’s aquatic ecosystems were negatively impacted. CWCB anticipates many decreed instream flows, including the Instream Flow Right, may not be met again this year. The fishery in the instream flow reach in Cottonwood Creek is a valuable aquatic resource, and CPW has an interest in protecting it from decline.

F. Under certain circumstances and subject to State Engineer approval, § 37-83-105(2)(a)(III.7), C.R.S. allows the owner of any decreed water right to loan water to CWCB on a temporary expedited basis to satisfy an instream flow right up to its decreed amount in order to preserve the environment to a reasonable degree.

G. CPW owns a water right decreed to the Cottonwood Irrigating Ditch No. 1 (“CID No. 1”) on Cottonwood Creek (“CID Water Right”). The CID No. 1 was adjudicated in C.A. 1127, and CPW’s CID Water Right is 3.8 cfs total: 1.2 cfs attributed to Priority No. 15,

and 2.6 cfs attributed to Priority No. 43. The pertinent pages of that Decree are attached hereto as **Exhibit B**.

H. If approved by the State Engineer pursuant to § 37-83-105(2), C.R.S., and subject to the terms and conditions of this Agreement, CPW is willing to temporarily loan a portion of the CID Water Right to CWCB for instream flow use to preserve the natural environment to a reasonable degree on an expedited basis for a one-year period.

I. The loan is expected to operate during the late summer and early fall when flows in Cottonwood Creek are below the decreed flow rate for the Instream Flow Right. When this occurs, water temperatures are generally high, causing stressful conditions for the fish community.

AGREEMENT

NOW THEREFORE, the Parties agree as follows:

1. Authority. This Agreement is entered into pursuant to § 37-83-105, C.R.S. for the mutual benefit of CPW and CWCB. No further payment, monetary or otherwise, is required by either Party. Section 29-1-203, C.R.S., as amended, authorizes and enables agencies and departments of the government of the State of Colorado to enter into cooperative agreements or contracts.
2. Term of Loan Agreement. This Agreement is for a term of one year, commencing on the date the State Engineer approves the proposed expedited loan and terminating one year later.
3. Restrictions on Exercise of Loan. Pursuant to § 37-83-105(2)(a), C.R.S., the loan shall not be exercised for more than 120 days during its one-year term.
4. Future Loans. This Agreement shall not be renewed as an expedited loan; however, the Parties may contract for use of the CID Water Right by CWCB under a renewable loan pursuant to § 37-83-105(2), C.R.S., subject to acceptance by the CWCB and approval by the State Engineer.
5. Agreement to Loan a Portion of the CID Water Right. Subject to the terms and conditions in this Agreement, CPW may, in its sole discretion, cease diverting up to 0.84 cfs of its CID Water Right to temporarily loan that same portion to the CWCB to satisfy part of the Instream Flow Right.
 - (a) Limitations on Use of Loaned Water. CWCB's use of the water loaned hereunder is limited to satisfying part of the Instream Flow Right. Such use is also subject to all conditions imposed pursuant to § 37-83-105(2), C.R.S. and any additional terms imposed by the Division or State Engineers.

(b) Process for Loan of the CID Water Right.

(i) CWCB may notify CPW when water is needed to satisfy part of the Instream Flow Right. As part of the notification, CWCB shall specifically identify the requested timing and rate of flow up to 0.84 cfs. Alternatively, CPW may notify CWCB when it determines conditions warrant CPW's ceasing to divert a portion of the CID Water Right to satisfy part of the Instream Flow Right and to benefit the fishery. As part of the CPW notification, CPW shall specifically identify the timing and rate of flow that it will cease diverting in order to exercise the loan.

(ii) CPW assumes no responsibility for delivering the loaned water to the decreed instream flow reach. CWCB may take such action as is necessary or desirable to protect the use of the loaned water for instream flow purposes once CPW elects to cease diverting a portion of the CID Water Right. Either Party may request that the Division Engineer administer the delivery of the loaned water through the instream flow reach. If CPW requests such action, CPW shall promptly notify CWCB of such request.

(iii) CPW will notify the Division Engineer, with copy to CWCB, of the anticipated timing of the exercise of this loan, including the estimated amount of the CID Water Right it anticipates loaning to the CWCB to satisfy the Instream Flow Right.

(iv) CPW may decline to loan water for CWCB's use in its sole discretion, including, but not limited to, if it does not have sufficient water available for this purpose.

(c) Accounting and Measurement.

(i) CWCB and CPW shall coordinate record keeping and accounting as required under the recording requirements provided in 2 CCR 408-2: ISF Rule 6(g) (2021) and as otherwise may be reasonably required by the State and Division Engineers to administer the CID Water Right for use in satisfying the Instream Flow Right.

(ii) CPW and CWCB are each solely responsible for flow measurements as may be required by the State and Division Engineers for administration of their respective water right(s).

(d) Preservation of CPW's Water Right. CWCB's use of CPW's CID Water Right does not transfer any legal or equitable title or interest to any part of the CID Water Right to CWCB. By permitting CWCB to use a portion of the CID Water Right, CPW is not abandoning, relinquishing, or forfeiting the CID Water Right. CWCB shall not jeopardize CPW's CID Water Right by taking any action that causes or could potentially cause the water court to reopen the adjudication of the CID Water Right decree.

6. Notices. Each individual identified below is the principal representative of the designating Party. All notices required or permitted to be given under this Agreement shall be in writing, and shall be delivered (A) by hand with receipt required, (B) by certified or registered mail to such Party's principal representative at the address set forth below, or (C) as an email to the principal representative at the email address set forth below. Either Party may change its principal representative by notice submitted in accordance with this section without a formal amendment to this Agreement. Unless otherwise provided in this Agreement, notices shall be effective upon delivery of the written notice.

CPW:

Rena Griggs
Southeast Regional Office
Colorado Parks and Wildlife
4255 Sinton Road
Colorado Springs, CO 80907
719-227-5286

CWCB:

Kaylea White
Stream and Lake Protection Section
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, Colorado 80203
Kaylea.White@state.co.us
303-866-3441

7. Termination. The Parties are entering into this Agreement to serve the public interest of the State of Colorado. If this Agreement ceases to further the public interest of the State, either Party, in its discretion, may terminate this Agreement.

8. Dispute Resolution. In the event of disputes concerning performance hereunder or otherwise related to this Agreement, the Parties shall attempt to resolve them at the divisional level. If this fails, disputes shall be referred to senior departmental management staff designated by each Party. If this fails, the director of each Party shall meet and attempt resolution.

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(b) Captions. The captions and headings in the Agreement are for convenience of reference only and shall not be used to interpret, define, or limit its provisions.

(c) Counterparts. This Agreement may be executed in multiple, identical, original counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

(d) Entire Understanding. This Agreement represents the complete integration of all understandings between the Parties and all prior representations and understandings, oral or written, are merged herein. Prior or contemporaneous additions, deletions, or other changes hereto shall not have any force or effect whatsoever, unless embodied herein.

(e) Legal Counsel. Each Party to this Agreement has engaged legal counsel to negotiate, draft, and/or review this Agreement. Therefore, in the construction and interpretation of this Agreement, the Parties acknowledge and agree that it shall not be construed against any Party on the basis of authorship.

(f) Litigation Reporting. Within 10 days after being served with any pleading in a legal action filed with a court or administrative agency, related to this Agreement or which may affect CWCB or CPW's ability to comply with the terms and conditions of this Agreement, CWCB or CPW shall notify the other Party of such action and deliver copies of such pleadings to CPW's principal representative as identified herein.

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(i) By the Parties. Except as specifically provided in the Agreement, modifications hereof shall not be effective unless agreed to by the Parties in writing.

(ii) By Operation of Law. This Agreement is subject to such modifications as may be required by changes in Federal or Colorado State law, or their implementing regulations. Any such required modification shall be automatically incorporated as part of the Agreement on the effective date of such changes, as if fully set forth herein.

(i) No Waiver of Immunities. No term or condition of this Agreement shall be construed or interpreted as a waiver, express or implied, or any of the immunities, rights, benefits, protections, or other provisions, of the Colorado Governmental Immunity Act, C.R.S. §24-10-101, et seq., as applicable now or hereafter amended.

(j) Third Party Beneficiaries. Except for the Parties' respective successors and assigns, this Agreement does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. Enforcement of this Agreement and all rights and obligations hereunder are reserved solely to the Parties. Any services or benefits which third parties receive as a result of this Agreement are incidental to this Agreement, and do not create any rights for such third parties.

(k) Waiver. A waiver of a breach of any provision of this Agreement shall not waive any subsequent breach of the same or different provision of this Agreement. Any Party's failure in any one or more instances to insist upon strict performance of any of the

terms and conditions of this Agreement or to exercise any right herein conferred shall not be construed as a waiver or relinquishment of that right or of that Party's right to assert or rely upon the terms and conditions of this Agreement. Any express waiver of a term of this Agreement shall not be binding and effective unless made in writing and properly executed by the waiving Party.

(l) Digital Signatures. If any signatory signs this Agreement using a digital signature in accordance with the Colorado State Controller Contract, Grant and Purchase Order Policies regarding the use of digital signatures issued under the State Fiscal Rules, then any agreement or consent to use digital signatures within the electronic system through which that signatory signed shall be incorporated into this Agreement by reference.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date executed by both Parties.

CWCB

CPW

By_____

By DRAFT_____

Name: Rebecca Mitchell

Name: Mitch Martin

Title: Director, Colorado Water
Conservation Board

Title: Acting Southeast Regional Manager,
Colorado Parks and Wildlife

Date:

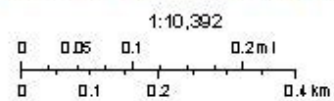
Date:

Exhibit D

Irrigable Acreage in Central Meadow



June 15, 2022



Source: Esri, Intel, Earthstar, GeoGraphics, and the GIS User Community

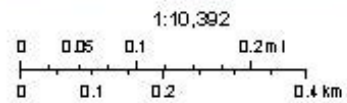
This map was generated by the Colorado Hunting Atlas (HigA)

Irrigable Acreage in Eastern Meadow

Reduced from 33 acres to 25 acres
See next page



June 15, 2022

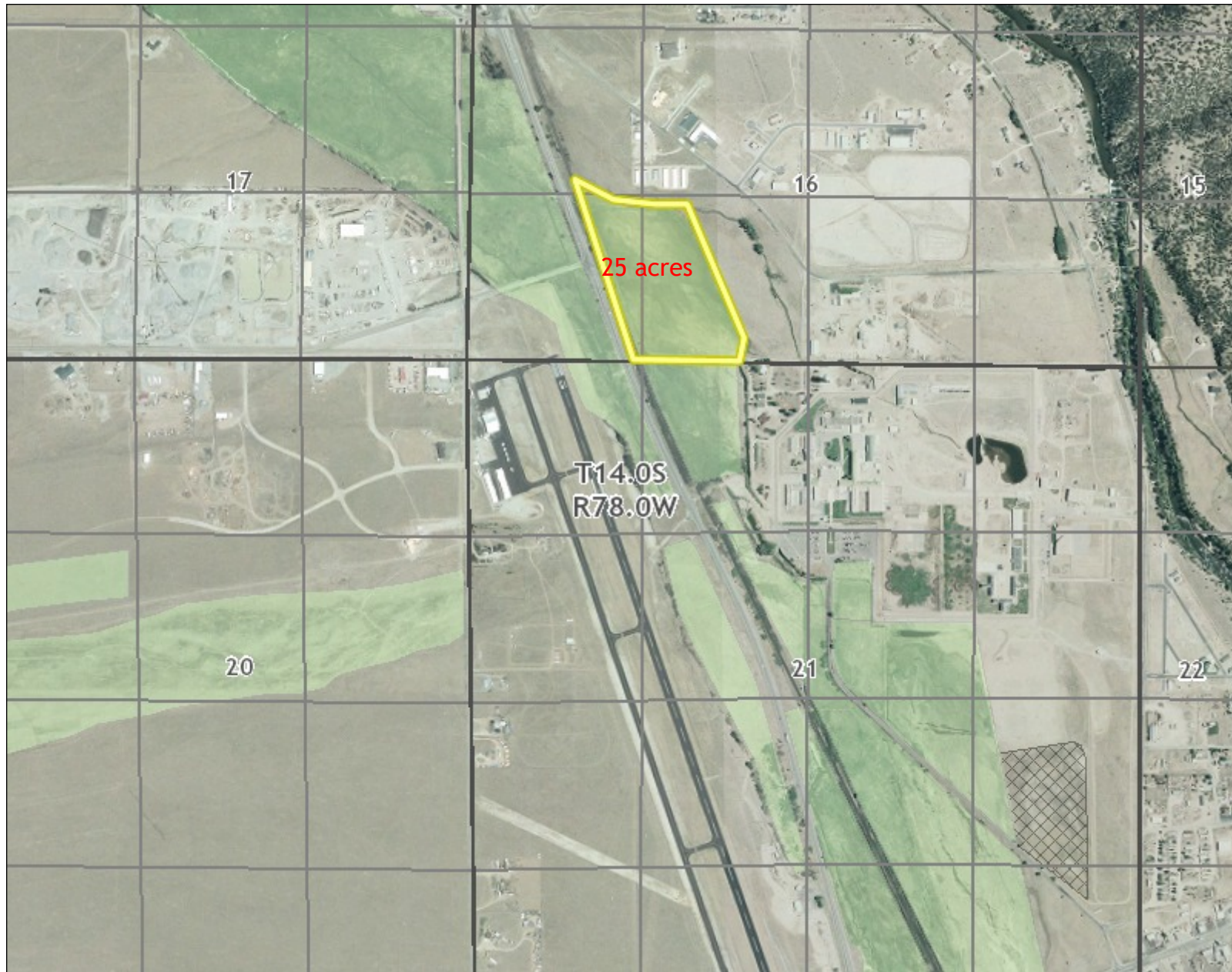


Source: Esri, Intel, GeoEye, AeroGRID, IGN, and the GIS User Community

This map was generated by the Colorado Hunting Atlas (HtA)



Map Viewer



Legend

- Township
- Section
- Q40
- County
- 1975 Irrigated Land**
 - ALFALFA
 - BARLEY
 - BLUEGRASS
 - CORN
 - CORN_GRAIN
 - CORN_SILAGE
 - COVER_CROP
 - DRY_BEANS
 - DRY_UP
 - GRASS_PASTURE
 - NEW_ALFALFA
 - NO_CROP

Location



Notes

Eastern Meadows area irrigated lands

2,339 0 1,169 2,339 Feet

1: 14,032



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Date Prepared: 8/15/2022 6:00:34 PM

Exhibit E

Central and Eastern Meadow Return Flow - Unit Response Function												
	Month											
Year	1	2	3	4	5	6	7	8	9	10	11	12
1	0.1	1.0	3.5	4.5	4.7	4.2	3.9	3.5	3.0	2.8	2.5	2.4
2	2.2	1.9	2.0	1.8	1.8	1.7	1.6	1.6	1.5	1.5	1.4	1.4
3	1.3	1.2	1.3	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0
4	0.9	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7
5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
6	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
8	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
10	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
* Raw values for cumulative return flows equal 97.2% after 120 months, the remaining 2.8% was redistributed equally across all months.												

Note, all values will reduced by 14% under reduced acreage at Eastern meadow.

Maximum Potential Deep Perc Returned via Cottonwood Creek (AF/mo)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	-	-	-	-	-	-	-	54	54	-	-	-

Central and Eastern Meadow Expected Potential Accretion to River (AF/mo)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.6	4.4	5.0
2023	4.8	4.0	3.9	3.4	3.2	2.8	2.7	2.5	2.2	2.2	2.0	1.9
2024	1.9	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.3	1.3	1.3	1.3
2025	1.2	1.1	1.2	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9
2026	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6
2027	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
2028	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
2029	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
2030	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2031	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2032	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Central and Eastern Meadow Expected Potential Accretion to River (cfs)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	-	-	-	-	-	-	-	0.00	0.01	0.04	0.07	0.08
2023	0.08	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03
2024	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02
2025	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
2026	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2027	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2028	0.01	0.01	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.005	0.005
2029	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
2030	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
2031	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
2032	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001

INTERAGENCY AGREEMENT FOR AN EXPEDITED LOAN OF WATER FOR INSTREAM FLOW USE

This Interagency Agreement for an Expedited Loan of Water for Instream Flow Use (“Agreement”) is entered into by and between the State of Colorado, acting by and through the Department of Natural Resources, for the use and benefit of the Colorado Division of Parks and Wildlife (“CPW”) and the State of Colorado, acting by and through the Department of Natural Resources, for the use and benefit of the Colorado Water Conservation Board (“CWCB”) (individually, a “Party” and collectively, the “Parties”).

RECITALS

A. CPW is a division of the Colorado Department of Natural Resources organized and existing under and pursuant to Articles 1, 9 and 10 of Title 33, C.R.S., for the purpose of protecting, preserving, enhancing and managing Colorado’s natural, scenic, scientific, and outdoor recreation areas as well as its wildlife and environment for the use, benefit, and enjoyment of the people of Colorado and its visitors.

B. CWCB is a division of the Colorado Department of Natural Resources organized and existing under and pursuant to Article 60 of Title 37, C.R.S., for the purpose of aiding in the protection and development of water for the benefit of the present and future inhabitants of the State of Colorado.

C. CWCB has the exclusive authority, pursuant to § 37-92-102(3), C.R.S to appropriate and adjudicate instream flow water rights to preserve and improve the natural environment of streams and lakes in the State.

D. The Cottonwood Creek Instream Flow Right (“Instream Flow Right”) was adjudicated on Cottonwood Creek in the amount of 20 cubic feet per second (“cfs”) in the stream reach from the confluence of the Middle and South Forks of Cottonwood Creek to the confluence of Cottonwood Creek and the Arkansas River in Case No. 79CW115 in Division 2 Water Court. The Decree confirming the Instream Flow Right is attached hereto as **Exhibit A**.

E. In recent drought years, some CWCB decreed instream flow rates were not met due to their relatively junior priority, and, as a result, Colorado’s aquatic ecosystems were negatively impacted. CWCB anticipates many decreed instream flows, including the Instream Flow Right, may not be met again this year.

F. The Instream Flow Right has a fishery within its decreed reach. The fishery is a valuable aquatic resource, and CPW has an interest in protecting it from decline.

F. Under certain circumstances and subject to State Engineer approval, § 37-83-105(2)(a)(III.7), C.R.S. allows the owner of any decreed water right to loan water to CWCB on a temporary expedited basis to satisfy an instream flow right up to its decreed amount in order to preserve the environment to a reasonable degree.

G. CPW owns a water right decreed to the Cottonwood Irrigating Ditch No. 1 (“CID No. 1”) on Cottonwood Creek (“CID Water Right”). The CID No. 1 was adjudicated in

C.A. 1127, and CPW's CID Water Right is 3.8 cfs total: 1.2 cfs attributed to Priority No. 15, and 2.6 cfs attributed to Priority No. 43. The pertinent pages of that Decree are attached hereto as **Exhibit B**.

H. If approved by the State Engineer pursuant to § 37-83-105(2), C.R.S., and subject to the terms and conditions of this Agreement, CPW is willing to temporarily loan a portion of the CID Water Right to CWCB for instream flow use to preserve the natural environment to a reasonable degree on an expedited basis for a one-year period.

I. The loan is expected to operate during the late summer and early fall when flows in Cottonwood Creek are below the decreed flow rate for the Instream Flow Right. When this occurs, water temperatures are generally high, causing stressful conditions for the fish community.

AGREEMENT

NOW THEREFORE, the Parties agree as follows:

1. Authority. This Agreement is entered into pursuant to § 37-83-105, C.R.S. for the mutual benefit of CPW and CWCB. No further payment, monetary or otherwise, is required by either Party. Section 29-1-203, C.R.S., as amended, authorizes and enables agencies and departments of the government of the State of Colorado to enter into cooperative agreements or contracts.

2. Term of Loan Agreement. This Agreement is for a term of one year, commencing on the date the State Engineer approves the proposed expedited loan and terminating one year later.

3. Restrictions on Exercise of Loan. Pursuant to § 37-83-105(2)(a), C.R.S., the loan shall not be exercised for more than 120 days during its one-year term.

4. Future Loans. This Agreement shall not be renewed as an expedited loan; however, the Parties may contract for use of the CID Water Right by CWCB under a renewable loan pursuant to § 37-83-105(2), C.R.S., subject to acceptance by the CWCB and approval by the State Engineer.

5. Agreement to Loan a Portion of the CID Water Right. Subject to the terms and conditions in this Agreement, CPW may, in its sole discretion, cease diverting up to 0.84 cfs of its CID Water Right to temporarily loan that same portion to the CWCB to satisfy the Instream Flow Right.

(a) Limitations on Use of Loaned Water. CWCB's use of the water loaned hereunder is limited to satisfying the Instream Flow Right. Such use is also subject to all conditions imposed pursuant to § 37-83-105(2), C.R.S. and any additional terms imposed by the Division or State Engineers.

(b) Process for Loan of the CID Water Right.

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(ii) CPW assumes no responsibility for delivering the loaned water to the decreed instream flow reach. CWCB may take such action as is necessary or desirable to protect the use of the loaned water for instream flow purposes once CPW elects to cease diverting a portion of the CID Water Right. Either Party may request that the Division Engineer administer the delivery of the loaned water through the instream flow reach. If CPW requests such action, CPW shall promptly notify CWCB of such request.

(iii) CPW will notify the Division Engineer, with copy to CWCB, of the anticipated timing of the exercise of this loan, including the estimated amount of the CID Water Right it anticipates loaning to the CWCB to satisfy the Instream Flow Right.

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Rena Griggs
Southeast Regional Office
Colorado Parks and Wildlife
4255 Sinton Road
Colorado Springs, CO 80907
719-227-5286

CWCB:

Pete Conovitz
Stream and Lake Protection Section
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, Colorado 80203
pete.conovitz@state.co.us
702-403-4942

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IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date executed by both Parties.

CWCB

CPW

By_____

By_____

Name: Rebecca Mitchell

Name: Mitch Martin

Title: Director, Colorado Water
Conservation Board

Title: Acting Southeast Regional Manager,
Colorado Parks and Wildlife

Date:

Date:

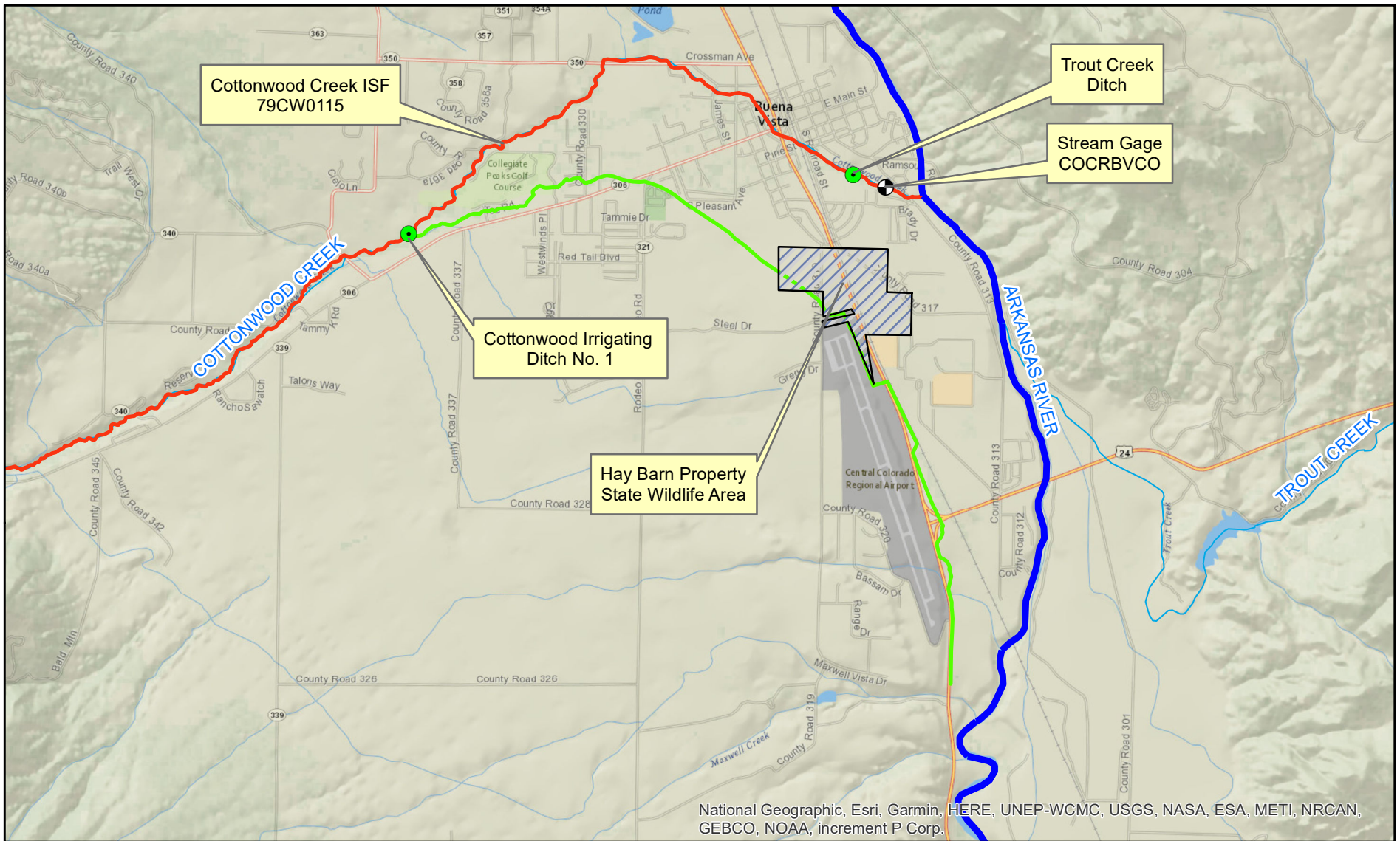
EXHIBIT A

[Instream Flow Decree]

EXHIBIT B

[CID Water Right Decree]

Exhibit F



COLORADO
Colorado Water Conservation Board

Department of Natural Resources

September 20-21, 2022 CWCB Board Meeting
 Agenda Item 6b. Expedited Loan of Water
 from Colorado Parks and Wildlife for Instream Flow
 Use on Cottonwood Creek (Water Division 2)

0 0.5 1 2 Miles

