



**TO:** Colorado Water Conservation Board Members

**FROM:** Linda Bassi, Stream and Lake Protection Section  
Brandy Logan, Stream and Lake Protection Section

**DATE:** January 22-23, 2018 Board Meeting

**AGENDA ITEM:** 33a-c. Water Plan Grants - Environmental and Recreation  
Final Consideration

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### Introduction

The items listed below were presented by staff for Initial Consideration at the November 2017 Board meeting in Broomfield, Colorado. The Board provided feedback and support for final consideration at this Board meeting. On December 19, 2017, Ducks Unlimited withdrew its application for a grant for the Wellington Wetland Enhancement and Recreation Project, which the Board also initially considered at its November 2017 meeting. On January 8, 2018, Colorado Springs Utilities submitted a request to be substituted as applicant for the Homestake Arkansas River Diversion Improvements Project grant, which is reflected in the table below and the attached datasheet for that grant application.

The Environmental and Recreation category started with \$1 million in available funds. The Board approved \$454,284 in grant funding at its November 2017 meeting, leaving \$545,716 available for additional Environmental and Recreation grant requests. With the final approval of the applications listed below, this Water Plan Grant category will have \$204,716 available for future applications.

### Staff Recommendation

Staff recommends Board approval of the projects/activities listed in the following table for Water Plan Grant funding.

Applicant	Project Name	% of Eligible Project Costs	Grant Amount
a. Colorado Springs Utilities	Homestake Arkansas River Diversion Improvements	16-19%*	\$200,000
b. Colorado Water Trust	McKinley Ditch Project	47%	\$66,000
c. Trout Unlimited	Lower Tomichi Water Conservation Project	50%	\$75,000
		Total	\$341,000

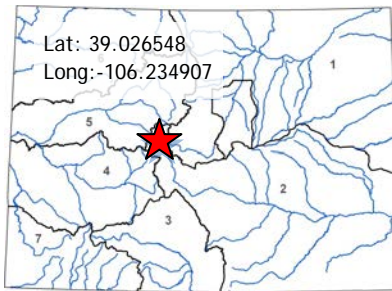
*\*The current design estimate for the boat chute portion of the diversion improvements ranges from \$1,050,000 to \$1,270,000, resulting in a range in the % of Eligible Project Costs.*

See attached Data Sheets for locations and summaries.





## Water Plan Grant Application



L O C A T I O N	
County/Countries:	Chaffee
Drainage Basin:	Arkansas

D E T A I L S	
Total Project Cost:	\$7,650,000*
Water Plan Grant Request:	\$300,000
Other CWCB Funding:	\$0
Other Funding Amount:	\$500,000
Applicant Match:	\$6,850,000
Project Type(s):	Construction & IPP
Project Category(Categories):	Environment & Recreation
Measurable Result:	600 LF of stream restored or protected, 1.37 acres habitat restored, improved fish and boat passage

\*The boat chute portion of the project is estimated to cost between \$1,050,000 and \$1,270,000.

### Organization

Colorado Springs Utilities (CSU) is an enterprise of the City of Colorado Springs, a Colorado home rule city and municipal corporation. CSU owns and operates a municipal water and sewer system for the provision of: (1) water and sewer service to and for the benefit of the citizens of Colorado Springs, and (2) water and sewer service to such extra-territorial customers as it may serve from time to time pursuant to the Colorado Springs City Charter, City Code, and contracts. As equal partners, the Cities of Aurora, Colorado, and Colorado Springs own and operate the Homestake Project, which is a trans-mountain diversion project to deliver water from the western slope to the cities.

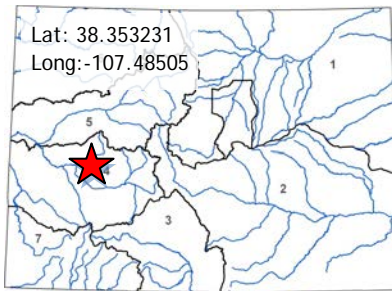
### Overview

The Homestake Arkansas River Diversion (ARD), located below the Town of Granite on the Upper Arkansas River was constructed in 1965 as the original point of diversion for the Homestake Project. The ARD is a rockfill diversion dam with steel sheet pile and articulated concrete mat armoring at the crest. In the 1980s, the intake pipeline was extended to Twin Lakes and the ARD was retained as a backup facility. Since the 1980s, the diversion dam and intake have deteriorated, including failure of portions of the articulated concrete armoring and erosion of the rockfill. In its current condition, the ARD presents a hazard to navigation due to exposed rebar and sheet pile and powerful hydraulic conditions on the downstream face.

The ARD Improvements Project (Project) will reconstruct the diversion and intake to provide a reliable river intake, provide fish passage for brown and rainbow trout, and reduce risk to recreational users by minimizing entrapment risk and reducing retentive hydraulic conditions. In its current configuration, the Project includes a reconstructed lateral intake, diversion dam, spillway, an engineered fish passage, and appurtenant structures. The Project will improve approximately 600 LF of river frontage, and restore approximately 1.37 acres. This multi-objective project includes a boat chute that will allow for improved navigability through this reach of the Arkansas River. CSU worked with Colorado Parks and Wildlife and the Arkansas Headwaters Recreation Area on evaluating the need for improved navigability of the ARD. CSU has invested significant funding to design the ARD with a boat chute and to analyze the technical feasibility of the project. This grant would fund the additional incremental cost of adding the boat chute to an ARD that has the minimum requirements of a fish passage and spillway. The boat chute comprises approximately 20% of the total project cost. The requested grant funding is less than 5% of the entire project cost that will be covered by the Authority.



## Water Plan Grant Application



L O C A T I O N	
County/Countries:	Montrose & Gunnison
Drainage Basin:	Gunnison

D E T A I L S	
Total Project Cost:	\$140,300
Water Plan Grant Request:	\$66,000
Other CWCB Funding:	\$0
Other Funding Amount:	\$74,300
Applicant Match:	\$0
Project Type(s):	Construction & Other
Project Category(Categories):	Environment & Recreation
Measurable Result:	9.2 miles of stream restored or protected, 857.2 AF of water shared through ATM

### Organization

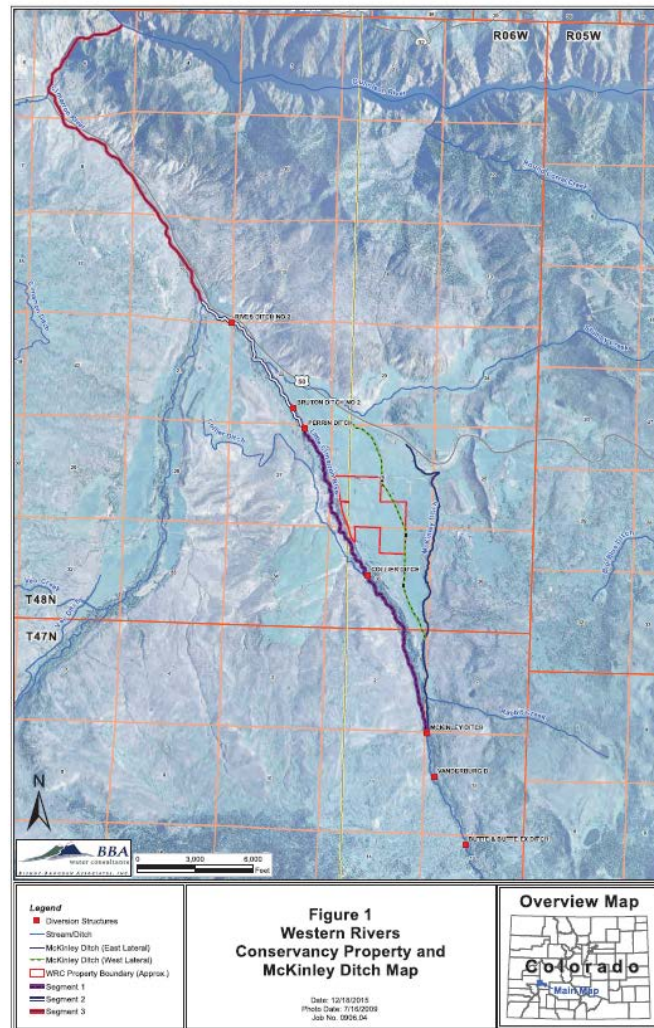
Founded in 2001, the Colorado Water Trust's mission is to restore flows to Colorado's rivers in need. The Trust works directly with water rights owners to find ways of effectively restoring flows to dry rivers using market-based transactions. By innovating within Colorado's water laws, originally designed to take water from rivers, the Trust uses existing legal mechanisms to return water to rivers to keep them flowing strong. Over the past 16 years, the Trust has returned over 6.5 billion gallons of water to nearly 400 miles of rivers and streams.

### Overview

The McKinley Ditch Project is a groundbreaking, collaborative water-sharing agreement between agriculture and the environment. Under this pioneering project, historic lands will continue to be irrigated in the early season (June-July), maintaining the local agricultural heritage. Later in the summer, water will be used to restore flows to a seasonally dry 3.3 mile reach of the Little Cimarron River. This Project will reconnect the upper and lower portions of the Little Cimarron River year round. In 2014, the Colorado Water Trust purchased 1.5 shares of water in the McKinley Ditch and conveyed to the CWCB a permanent right to use those water rights for instream flow use under this proposed split-season operation. The CWCB voted unanimously to accept the offered water rights. Members commended the Water Trust for taking this novel idea from a "conversation to a concept," and for helping the state realize the consumptive/non-consumptive partnerships envisioned by the Water Plan.

The final components of this project are to design and build bypass structures at two locations on the Little Cimarron River and to purchase additional shares in the Ditch. Funding from this grant will be used for final design and construction at the McKinley Ditch to manage the McKinley shares for the split-season operation and to measure and protect the water applied to instream flow use.

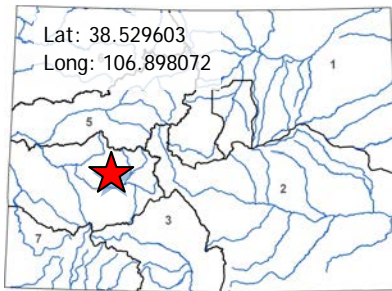




*McKinley Ditch Primary Head Gate and Turnback Structures*



## Water Plan Grant Application



L O C A T I O N	
County/Countries:	Gunnison
Drainage Basin:	Gunnison

D E T A I L S	
Total Project Cost:	\$300,000
Water Plan Grant Request:	\$150,000
Other CWCB Funding:	\$0
Other Funding Amount:	\$125,000
Applicant Match:	\$25,000
Project Type(s): Study and Water Conservation Program	
Project Category(Categories): Environment & Recreation, Supply & Demand Gap, Conservation & Land Use Planning	
Measurable Result: 1,000 AF of new annual water supply conserved and potentially shared through ATMs, 5 miles of stream restored	

### Organization

Trout Unlimited (TU), the nation's largest coldwater conservation organization, representing more than 150,000 members and volunteers nationwide, including 10,000 in Colorado, has a program in the Upper Gunnison Basin focused on water use solutions that will benefit agricultural operations as well as protect and improve cold water trout habitat.

### Overview

This agricultural water conservation project proposal is located in the upper Gunnison Basin on Tomichi Creek, tributary to the Gunnison River above Blue Mesa Reservoir. This section of Tomichi Creek can experience low flows causing agricultural shortages, increased water temperatures, and less than desirable aquatic habitat. TU coordinated this proposal with six individual land owners, local water leaders, and The Nature Conservancy. This three-year water conservation project will involve regional coordination to improve environmental and recreational flows through the Tomichi State Wildlife Area (SWA), and to reduce agricultural shortages below the SWA. The project will demonstrate how temporary and coordinated split-season agricultural water conservation can provide the flexibility necessary to sustain robust agriculture and healthy streams in the upper Gunnison Basin.

The primary focus of this proposal will be will to reduce local shortages during drought years. The secondary goal is to provide a conservation program template that will be useful in the future.

Participating water rights will reduce irrigation withdrawals from the stream during critical times, which will benefit stream flows, satisfy downstream water rights and potentially prevent a basinwide call. The method for conserving water is temporary, voluntary, and compensated so the participating water right owners will retain ownership and management of their water rights for existing and future uses.

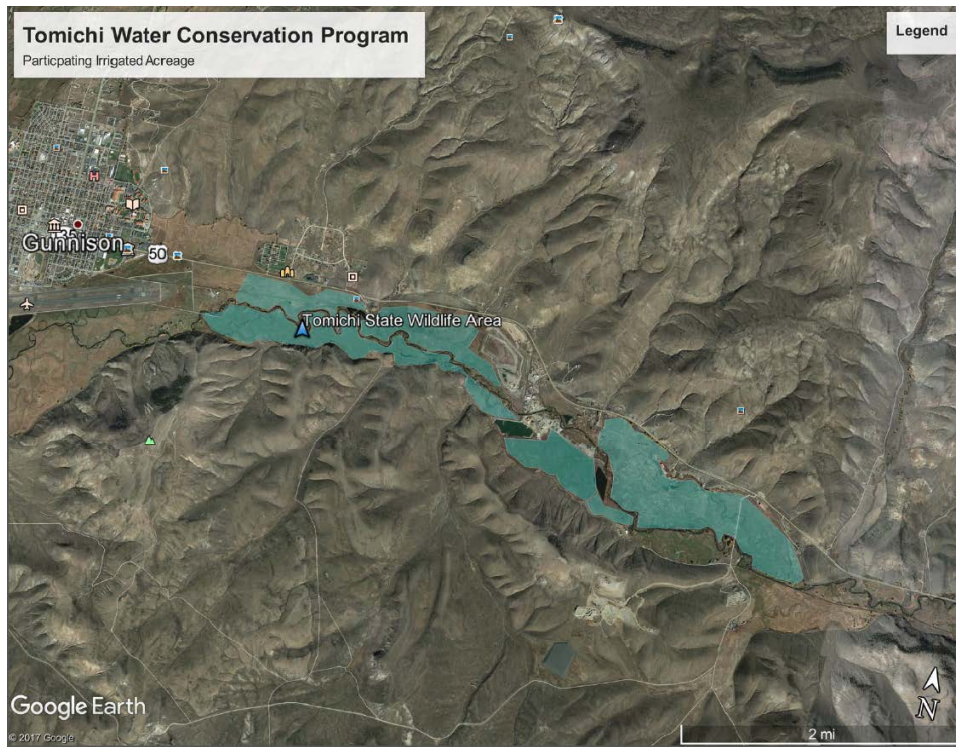
The program will provide an example of how temporary, voluntary, and compensated reduction of consumptive use can be used to reduce local watershed shortages during drought years and protect water users from increasing water demands on the Colorado River. This water conservation approach will be transferable to other areas in the upper Gunnison and western Colorado. Documents used for contracting, accounting, verification, and monitoring will be provided as project deliverables to support future innovative water conservation efforts throughout the state.





# Lower Tomichi Water Conservation Project Trout Unlimited

January 2018 Board Meeting  
Final Consideration



Project Map