

Colorado Water Conservation Board

Water Plan Grant Application

Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Supply and Demand Gap Projects: Rebecca.Mitchell@state.co.us

Water Storage Projects: Anna.Mauss@state.co.us

Conservation, Land Use Planning: Kevin.Reidy@state.co.us

Education & Innovation Activities: Mara.MacKillop@state.co.us

Agricultural Projects: Gregory.Johnson@state.co.us

Environmental & Recreation Projects: Linda.Bassi@state.co.us

Applicants interested in submitting an 'Intent to Apply' in the future are encouraged to check here ______ and fill in all sections with the best information available at the time. Exhibits excluded.

This "Intent to Apply" will help CWCB prioritize Projects that are not ready for fully completed Water Plan Grant Application due to the initial timeframe and deadlines required.

	Water Projec	t Summary
Name of Applicant	Treanor Enterpri	se Ditch Company
Name of Water Project	Treanor Ditch Li	ning Project
CWP Grant Request Amount		\$17,000
Other Funding Sources Other Local Funding		\$5,000
Other Funding Sources		
Applicant Funding Contribution		\$8,000
Total Project Cost		\$30,000



	Applicant & Grantee Information
Name of Grantee(s)	Treanor Enterprise Ditch Company
Mailing Address	PO Box 93 Marvel, CO 81326
FEIN	84-1076126
Organization Contact	Barbara Hubbs
Position/Title	Secretary Treasurer
Email	barbarahubbs@gmail.com
Phone	(970) 588-3309
Grant Management Contact	Terry Meador
Position/Title	Project Manager
Email	barbarahubbs@gmail.com
Phone	417-594-1886
Name of Applicant (if different than grantee)	Daniel Murphy
Mailing Address	PO Box 96 Marvel, CO 81326
Position/Title	President, Treanor Enterprise Ditch Company
Email	danny.murphy.horseshoeing@gmail.com
Phone	970-749-0881



Description of Grantee/Applicant

Provide a brief description of the grantee's organization (100 words or less).

The Treanor Enterprise Ditch Company is located in the La Plata River Basin and was incorporated in 1968. The Treanor Ditch owns three surface water rights totaling 67.00 cfs of diversions from the La Plata River, which are junior to the 1922 La Plata River Compact. The La Plata River is over appropriated, and under strict administration by the Division of Water Resources. Therefore the Treanor Ditch rarely receives a fully irrigation supply. The Treanor Ditch is a participant in the La Plata Water Conservancy District (LPWCD) and its Bobby K. Taylor (BKT) Reservoir exchange.



COLORADO Colorado Water Conservation Board Department of Natural Resources

Last Updated: July 2017

Type of Eligible Entity (check one)

	Public (Government): Municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
	Public (Districts): Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
Х	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.
	Non-governmental organizations (NGO): Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes.

	Type of Water Project (check all that apply)
	Study
Х	Construction
Х	Identified Process or Program
	Other

		Category of Water Project (check all that apply)
x	implement	d Demand Gap Projects - Multi-beneficial projects and those projects identified in basin ation plans to address the water supply and demand gap.
	recharge ir	age Projects - Projects that facilitate the development of additional storage, artificial nto aquifers, and dredging existing reservoirs to restore the reservoirs' full decreed pacity. (Applicable Exhibit A Task(s))
	Conservation and Land Use Planning Projects - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. (Applicable Exhibit A Task(s))	
	Engagement & Innovation Projects - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application available on the website. (Applicable Exhibit A Task(s))	
x		I Projects - Projects that provide technical assistance and improve agricultural (Applicable Exhibit A Task(s) _1)
		ntal & Recreation Projects – Projects that promote watershed health, environmental recreation. (Applicable Exhibit A Task(s))
	Other	Explain:



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	Location of Water Project
	county and coordinates of the proposed project below in decimal degrees . vide, in Exhibit C, a site map if applicable.
County/Counties	La Plata County
Latitude	37.191°
Longitude	-108.081°

Water Project Overview

Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain.

The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.

The Treanor Ditch diverts irrigation supplies from the La Plata River approximately 6.5 miles to the southwest of the Hesperus Gage. A recent ditch loss study estimated this earthen ditch loses as much as 40 percent of river diversions due to seepage. This project will line a 1,000-foot section of this ditch where seepage losses are greatest. The ditch will be lined with soil amendments (bentonite and lime) and mixed with existing soils. Bentonite is commonly used during well construction forming a seal between the casing and the native formation, and has proven to be a cost-effective ditch lining solution to reduce seepage in the La Plata River Basin with measured water savings of up to 25 percent per mile.

This work will increase irrigation water supplies to individual farmers under the Treanor Ditch who irrigate approximately 2,832 acres to grow alfalfa, brome grass, and other pasture grasses. In addition, the Treanor Ditch can also be used to indirectly convey non-irrigation season deliveries to BKT Reservoir, which once stored in the reservoir increases irrigation exchange supplies, provides Compact storage water, and provides bypass flows below the reservoir for the support of the native fish species (roundtail chub, bluemouth sucker, and flannelmouth sucker).



	Measurable Results		
To catalog measurable re values as applicable:	Its achieved with the CWP Grant funds, please provide any of the following		
N/A	New Storage Created (acre-feet)		
N/A	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive		
N/A	Existing Storage Preserved or Enhanced (acre-feet)		
N/A	Length of Stream Restored or Protected (linear feet)		
385 AF	Efficiency Savings (indicate acre-feet/year OR dollars/year)		
N/A	Area of Restored or Preserved Habitat (acres)		
N/A	Quantity of Water Shared through Alternative Transfer Mechanisms		
N/A	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning		
1,000 L.F.	Other Explain: Ditch lining of 1,000 linear feet		

Water Project Justification

Provide a description of how this water project supports the goals of <u>Colorado's Water Plan</u>, the most recent <u>Statewide Water Supply Initiative</u>, and the applicable Roundtable <u>Basin Implementation Plan</u> and <u>Education Action Plan</u>. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)

The Treanor Ditch lining project will reduce ditch losses and is estimated to increase agricultural deliveries by 385 AF each year in an over-appropriated river basin governed by the La Plata River Compact. The project will result in the conservation of ditch losses for increased agricultural supplies, and will not result in additional diversions above historical operations. The Southwest Basin Roundtable specifically addressed the irrigation water supply gap in its Basin Implementation Plan and identified irrigation efficiency projects through its Appendix A Identified Projects and Processes (IPP) List generally in ID No. 4-MB and more specifically in ID No. 15-LaP.

The project will result in a more sustainable irrigation water supply for Treanor Ditch users who historically have not had a sufficient amount of irrigation supply. The project will be conducted on private lands, within an existing ditch, will not negatively impact the environment, and will not require permitting to complete. This project will bolster the quality of life for agricultural users within the La Plata River Basin. In addition, the reduction of ditch seepage will also help to reduce a small amount of sodium from being mobilized within the sediments and then leached into the La Plata River prior to reaching the Colorado River.

The Treanor Ditch is in the process of securing additional local funding from key shareholders within the La Plata River Basin, and will employ a local contractor who has completed several successful ditch lining projects within the area. We know this type of project to be technically and fiscally feasible.



Water Project Justification

This project will more efficiently convey diverted supplies, and will not create any additional burden on the Division Engineer as he administers diversions in compliance with the La Plata River Compact. On the contrary, the reduction of seepage losses will improve ditch deliveries, and may improve Compact operations.

Any water supplies delivered through the Treanor Ditch to the BKT Reservoir during the non-Compact season will result in the storage of water that can be used for additional irrigation supplies, meeting Compact requirements, as well as to provide water during low flows to support the native fisheries in the La Plata River, per the 2007 Memorandum of Understanding with the LPWCD, Colorado Department of Natural Resources, Colorado Division of Parks and Wildlife, and the Division of Water Resources.

Related Studies

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

The LPWCD conducted a study in 2016, and SGM measured a transit loss of 44 percent per mile along the 1,000-foot section of the Treanor Ditch that will be lined for this project. LPWCD also conducted interviews with local stakeholders who also reported significant losses of 40 percent along the Treanor Ditch.

Previous CWCB Grants, Loans or Other Funding

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project.



Previous CWCB Grants, Loans or Other Funding

No previous or current CWCB grants have been awarding to the Treanor Enterprise Ditch Company.

Taxpayer Bill of Rights

The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application. Applicant is not aware of any issues.



Submittal Checklist

Х	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.
Exhil	bit A
Х	Statement of Work ⁽¹⁾
Х	Budget & Schedule ⁽¹⁾ (Spreadsheet)
Х	Letters of Matching and/or Pending 3 rd Party Commitments ⁽¹⁾
Exhil	bit C
Х	Map ⁽¹⁾
	Photos/Drawings/Reports
	Letters of Support (Support letter from Basin Roundtable encouraged)
	Certificate of Insurance (General, Auto, & Workers' Comp.)
	Certificate of Good Standing with Colorado Secretary of State ⁽²⁾
	W-9 ⁽²⁾
	Independent Contractor Form ⁽²⁾ (If applicant is individual, not company/organization)
Enga	agement & Innovation Grant Applicants ONLY
	Engagement & Innovation Supplemental Application ⁽¹⁾

(1) Required with application.

(2) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.



Colorado Water Conservation Board

Water Plan Grant - Exhibit A

	Statement Of Work
Date:	July 31, 2017
Name of Applicant:	Treanor Enterprise Ditch Company
Name of Water Project:	Treanor Ditch Lining Project
Funding Source:	СWCB
	ease provide a summary of the proposed water project (200 words or less). sed from Page 5 of the CWP Grant Application.
southwest of the Hesperus G as 40 percent of river diversion project will line a 1,000-foot s lined with soil amendments (b sides. Bentonite is commonly native formation, and has pro Plata River Basin. This work will increase irrigati approximately 2,832 acres to Treanor Ditch can also be use which once stored in the rese	gation supplies from the La Plata River approximately 6.5 miles to the age. A recent ditch loss study estimated this earthen ditch loses as much ons due to seepage through the native porous soils. The Treanor Ditch ection of this ditch where seepage losses are greatest. The ditch will be bentonite and lime) and mixed with existing soils on the ditch bottom and vused during well construction forming a seal between the casing and the ven to be a cost-effective ditch lining solution to reduce seepage in the La on water supplies to individual farmers under the Treanor Ditch who irrigate grow alfalfa, brome grass, and other pasture grasses. In addition, the ed to indirectly convey non-irrigation season deliveries to BKT Reservoir, rvoir increases irrigation exchange supplies, provides Compact storage ows below the reservoir for the support of the native fish species (roundtail flannelmouth sucker).
Improve overall La F	work: I water supplies by reducing ditch losses. Plata River management of water supplies. ver operations for Compact compliance. fish species.



Tasks
Provide a detailed description of each project task using the following format:
Task 1 – Line approximately 1,000 feet of the Treanor Ditch
Description of Task:
Use soil amendments of bentonite, lime, and clay to line approximately 1,000 feet of the Treanor Ditch, to more efficiently convey irrigation water supplies to agricultural users. The Treanor Ditch may also be used to convey water supplies indirectly to BKT Reservoir outside of the Compact period.
Method/Procedure:
 Treanor Ditch contractor will use a dozer, backhoe, and excavator to grade and shape area of ditch that will be lined.
 The heavy equipment will be used to loosen the soils to incorporate the bentonite and lime. The natural moisture will help bind and hydrate the bentonite to the lime and clayey soil to help reduce leakage in the ditch. The lime will help to reduce rodents from burrowing in and along the ditch which will also help to reduce seepage in the ditch.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
Complete 1,000 feet of dich lining.
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
A final report will be submitted documenting work performed including photographs and any issues that may have occurred.



Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

Reporting Requirements

Progress Reports: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.

Final Report: At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will withhold disbursement the last 10% of the budget until the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

THE TREANOR-ENTERPRISE DITCH COMPANY PO BOX 93 MARVEL, COLORADO 81329 treanorditch@gmail.com

July 26, 2017

Mr. Gregory Johnson Colorado Water Conversation Board

Dear Mr. Johnson,

We are very excited about the available Colorado Water Plan Grant funding. The Treanor Enterprise Ditch Company, in coordination with our consultant, has prepared the Treanor Ditch Lining Project application. The Treanor Ditch currently has 64 shareholders and irrigates more than 2,800 acres within the over-appropriated La Plata River Basin in southwest Colorado.

We have reserved \$8,000 for capital improvement projects, namely to reduce our ditch losses throughout our system. We commit to allocating the full \$8,000 in conjunction with the Colorado Water Plan Grant funds available as sought for by the Treanor Ditch's application. In addition, we are working with the La Plata Water Conservancy District to receive additional

local funding.

We will utilize a local contractor who has had success lining ditches with bentonite and lime to reduce losses by up to 25 percent. After the completion of this project we anticipate the additional water supply available to our irrigators in this water short system will be 385 AF. The water conserved will decrease our agricultural water supply gap need, without additional diversions and will reduce the amount of sodium leached into the La Plata River and subsequently the Colorado River.

We appreciate your consideration of this application and look forward to working with the Colorado Water Conservation Board. Please contact me if you have any questions.

Sincerely,



President

LA PLATA WATER CONSERVANCY DISTRICT PO Box 71 Marvel, CO 81329-0071

July 31, 2017

Email: Gregory.johnson@state.co.us

Mr. Gregory Johnson Colorado Water Conversation Board 1313 Sherman St, Room 718 Denver, CO 80203

Re: Colorado Water Plan Grant Fund Application – Treanor Ditch Lining Project

Dear Mr. Johnson,

The Treanor Enterprise Ditch Company is within the La Plata Water Conservancy District (LPWCD) and completed a ditch loss study in 2016 to find the portions of most seepage within its canal. The Treanor Ditch has applied for a Colorado Water Plan Grant to line approximately 1,000 feet of the ditch to decrease losses. The completion of this project will increase agricultural water supplies, improve overall La Plata River management of water supplies, improve La Plata River operations for Compact compliance, and reduce the transport of sodium. The Treanor Ditch is a participant in the Bobby K. Taylor Reservoir project and exchanged its allocation for irrigation uses which will be more fully used after the completion of this project.

We are very supportive of this project and are seeking board approval of a \$5,000 grant for the Treanor Ditch Lining Project for its Colorado Water Plan Grant Fund Application at the upcoming LPWCD board meeting to be held on August 8th, 2017, which is our first opportunity to considered this issue. We anticipate the Board will fully endorse and approve of a grant for the Treanor Ditch Lining Project. We request the CWCB also support this important project in the La Plata River Basin. Please contact me if you have any questions.

LA PLATA WATER CONSERVANCY DISTRICT

Brice F. Lee, President

