



Last Updated: May 2021

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:

Water Storage & Supply Projects	Matthew.Stearns@state.co.us
Conservation, Land Use Planning	Kevin.Reidy@state.co.us
Engagement & Innovation Activities	Ben.Wade@state.co.us
Agricultural Projects	Alexander.Funk@state.co.us
Water Sharing & ATM Projects	Alexander.Funk@state.co.us
Environmental & Recreation Projects	Chris.Sturm@state.co.us

FINAL SUBMISSION: Submit all application materials in one email to waterplan.grants@state.co.us in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.

Water Project Summary

Name of Applicant	The Farmers Water Development Company	
Name of Water Project	Gurley Dam Embankment Slip Reconstruction	
CWP Grant Request Amount		\$ 139,315.00
Other Funding Sources <u>SWCD</u>		\$ 50,000.00
Other Funding Sources <u>San Miguel County, CO</u>		\$ 50,000.00
Other Funding Sources _____		\$
Applicant Funding Contribution		\$ 139,510.00
Total Project Cost		\$ 378,825.00



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Applicant & Grantee Information	
Name of Grantee(s)	The Farmers Water Development Company
Mailing Address	PO Box 10, Norwood, CO 81423
FEIN	84-0201050
Organization Contact	David Alexander
Position/Title	President
Email	farmerswdc@yahoo.com
Phone	(970) 327-4650
Grant Management Contact	Lacey Harris
Position/Title	Secretary
Email	farmerswdc@yahoo.com
Phone	(970) 327-0265
Name of Applicant (if different than grantee)	West End Economic Development Corporation
Mailing Address	PO Box 645, Naturita, CO 81422
Position/Title	Deana Sheriff, Executive Director
Email	dsheriff@chooswestend.org
Phone	(970) 865-2499
Description of Grantee/Applicant	
Provide a brief description of the grantee's organization (100 words or less).	
<p>The Farmers Water Development Company (FWDC) incorporated for the purpose of domestic and agricultural water development for the citizens of Norwood and San Miguel County, CO with a primary focus of managing the Gurley Reservoir.</p> <p>The Gurley Reservoir has pre-compact water rights totaling 3,199af and were acquired between 1888 and 1916.</p>	



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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.
XX	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
XX	Construction
	Other

Category of Water Project (check the primary category that applies and include relevant tasks)			
XX	<p>Water Storage & Supply - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity, multi-beneficial projects, water sharing agreements, Alternative Transfer Methods, and those projects identified in basin implementation plans to address the water supply and demand gap. <i>Applicable Exhibit A Task(s):</i></p> <p>Note: For Water Sharing Agreements or ATM Projects - please include the supplemental application available on the CWCB's website.</p>		
	<p>Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, water efficiency, and drought planning. <i>Applicable Exhibit A Task(s):</i></p>		
	<p>Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. <i>Applicable Exhibit A Task(s):</i></p>		
	<p>Agricultural - Projects that provide technical assistance and improve agricultural efficiency. <i>Applicable Exhibit A Task(s):</i></p>		
	<p>Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. <i>Applicable Exhibit A Task(s):</i></p>		
	<table border="1"> <tr> <td>Other</td> <td>Explain:</td> </tr> </table>	Other	Explain:
Other	Explain:		



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Location of Water Project	
Please provide the general county and coordinates of the proposed project below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Countries	San Miguel, County Colorado
Latitude	38°02' 8.39" N
Longitude	108°14' 50.60" W

Water Project Overview
<p>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.</p> <p>The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.</p>
<p>Funding shall be used for the construction and repair of a surface slip on the downstream slope of the dam which occurred in the Spring of 2019. After inspection from the State Water Engineer, storage capacity was limited to 50%. This has become an extreme challenge since it is the only source for municipal water and one of the few sources of agricultural water in the area. Repairing the dam will bring the reservoir back to full operating capacity and will return the storage capacity to 10,000-acre feet, increasing much needed storage. Construction will include material from borrow-pits located at the reservoir, stockpiled, then crushed to the specified size. An outlet tube extension has already been purchased by FWDC.</p> <p>FWDC provides agricultural water to 210 shareholders, covering approximately 12,000 acres of land, with an annual assessment of \$124,477.50. Crops under irrigation include corn, wheat, alfalfa, apple orchards, and animal production. Additionally, FWDC supplies water to the Norwood Water Commission for municipal water for the Town of Norwood and residents of Wrights Mesa (approximately 400 domestic water taps).</p>



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Measurable Results	
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:	
	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
5,000 af	Existing Storage Preserved or Enhanced (acre-feet)
	Length of Stream Restored or Protected (linear feet)
	Efficiency Savings (indicate acre-feet/year OR dollars/year)
	Area of Restored or Preserved Habitat (acres)
	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
	Number of Coloradans Impacted by Engagement Activity
	Other Explain:

Water Project Justification
<p>Provide a description of how this water project supports the goals of Colorado's Water Plan, the Analysis and Technical Update to the Water Plan, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. 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).</p> <p>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;)</p> <p>This project supports the Colorado Water Plan by:</p> <ol style="list-style-type: none"> 1. Ensuring the supply-demand gap is met for the immediate future as well as for future domestic and agricultural water uses. 2. Meeting the San Miguel County and Town of Norwood Water Master Plans' goals of water conservation and the ability to store water from the San Miguel River (allotted 5 cfs presently not being stored). 3. Supporting the San Miguel Watershed Management Plan. <p>This project supports the Analysis and Technical Update to the Water Plan by continuing to supply clean and plentiful water for municipalities, agriculture and environmental and recreational needs.</p>



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This project further supports the Southwest Basin Implementation plan by:

1. Considering population and economic growth.
2. Social/Environmental values.
3. Climate change/Water supply availability.
4. Agricultural economics/Water demand.
5. Municipal and industrial economics/Water demand.

(San Miguel Basin Pilot Project Interim Report, Environment and Recreational Needs Assessment; Section 3, pp. 24-26)

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.

This project is complementary to the Southwest Basin Roundtable Basin Improvement Plan and will help protect the San Miguel River watershed.

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.

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Southwestern Water Conservation District grant: \$50,000.00, approved at the summer meeting, pending contract and receipt of funds. This grant provides 13% of overall funding.

San Miguel County grant: \$50,000, approved by the Board of County Commissioners. This grant provides 13% of overall funding.

Applicant: Farmer Water Development Company
Water activity name: Gurley Dam Embankment Slip Reconstruction

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.

N/A

Submittal Checklist

	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract .
XX	Statement of Work ⁽¹⁾
XX	Budget & Schedule ⁽¹⁾
XX	Engineer's statement of probable cost (projects over \$100,000)
XX	Letters of Matching and/or Pending 3 rd Party Commitments ⁽¹⁾
XX	Map (if applicable) ⁽¹⁾
XX	Photos/Drawings/Reports
XX	Letters of Support (Optional)
XX	Certificate of Insurance (General, Auto, & Workers' Comp.) ⁽²⁾
XX	Certificate of Good Standing with Colorado Secretary of State ⁽²⁾
XX	W-9 ⁽²⁾
	Independent Contractor Form ⁽²⁾ (If applicant is individual, not company/organization)
Water Sharing Agreements and Alternative Transfer Methods ONLY	
	Water Sharing Agreements and Alternative Transfer Methods 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.

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ENGAGEMENT & INNOVATION GRANT FUND SUPPLEMENTAL APPLICATION

Introduction & Purpose

Colorado’s Water Plan calls for an outreach, education, public engagement, and innovation grant fund in Chapter 9.5.

The overall goal of the Engagement & Innovation Grant Fund is to enhance Colorado’s water communication, outreach, education, and public engagement efforts; advance Colorado’s water supply planning process; and support a statewide water innovation ecosystem.

The grant fund aims to engage the public to promote well-informed community discourse regarding balanced water solutions statewide. The grant fund aims to support water innovation in Colorado. The grant fund prioritizes measuring and evaluating the success of programs, projects, and initiatives. The grant fund prioritizes efforts designed using research, data, and best practices. The grant fund prioritizes a commitment to collaboration and community engagement. The grant fund will support local and statewide efforts.

The grant fund is divided into two tracks: engagement and innovation. The Engagement Track supports education, outreach, communication, and public participation efforts related to water. The Innovation Track supports efforts that advance the water innovation ecosystem in Colorado.

Application Questions

*The grant fund request is referred to as “project” in this application.

Overview (answer for both tracks)
<p>In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)?</p>
<p>To preserve and protect the domestic and agricultural water uses of the Gurley Reservoir.</p>
<p>Who is/are the target audience(s)? How will you reach them? How will you involve the community?</p>
<p>Citizens of Norwood and Wright’s Mesa, CO. Community has been engaged with “Norwood Water Day” held June 5, 2021. Further engagement will occur as changes are made to the reservoir and availability of raw water.</p>
<p>Describe how the project is collaborative or engages a diverse group of stakeholders. Who are the partners in the project? Do you have other funding partners or sources?</p>
<p>The project engages agricultural water users, domestic water users, recreational water users and those with an interest in housing needs within the community. Other funding partners have included San Miguel County, Southwest Water Conservation District, the Town of Norwood, and Davis Engineering Service.</p>



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Describe how you plan to measure and evaluate the success and impact of the project?
The impact will be immediate by allowing the reservoir to fill to capacity and not have to spill valuable water every March to maintain levels required by the State Water Engineer.
What research, evidence, and data support your project?
Detailed engineering report by Davis Engineering Service, Inc.
Describe potential short- and long-term challenges with this project.
Short-term challenges will include gathering an appropriate volume of fill material to sufficiently make repairs to the dam. Long-term challenges would include not being able to repair the dam and have a catastrophic situation of the dam giving way and flooding the Town of Norwood.

Please fill out the applicable questions for either the Engagement Track or Innovation Track, unless your project contains elements in both tracks. If a question does not relate to your project, just leave it blank. Please answer each question that relates to your project. Please reference the relevant documents and use chapters and page numbers (Colorado’s Water Plan, Basin Implementation Plan, PEPO Education Action Plan, etc.).

Engagement Track
Describe how the project achieves the education, outreach, and public engagement measurable objective set forth in Colorado’s Water Plan to “significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys.”
N/A
Describe how the project achieves the other measurable objectives and critical goals and actions laid out in Colorado’s Water Plan around the supply and demand gap; conservation; land use; agriculture; storage; watershed health, environment, and recreation; funding; and additional.
5,000 af of water would be restored to the reservoir (for a total of 10,000 af), preserving its stored use for agriculture, domestic, environmental, and recreational purposes.
Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s).



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Education regarding the value of water and the need for storage started on June 5, 2021. Community will continue to be updated and engaged as progress is made on the repairs to the dam.
Describe how the project achieves the basin roundtable's PEPO Education Action Plans.
N/A

Innovation Track
Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado.
N/A
Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges.
N/A
Describe how the project helps advance or develop a solution to a water need identified through TAP-IN and other water innovation challenges. What is the problem/need/challenge?
N/A
Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation.
N/A



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Water Plan Grant - Exhibit A

Statement Of Work

Date:	June 25, 2021
Name of Grantee:	Farmers Water Development Company
Name of Water Project:	Gurley Dam Embankment Slip Reconstruction
Funding Source:	San Miguel County, SWCD

Water Project Overview:

Engineer's Repair Plan submitted to the State of Colorado, and we are waiting on approval. Our expected start date is August 1, 2021.

Weak material will be replaced with on-site materials pulled from the reservoir borrow pits per the engineered plan and will extend the outlet pipe 25 linear feet and the slope of the dam is flattened. Most labor will be provided in-house (using our own excavator, dozer and dump truck), with the exception of welding of the pipe extension, which will be subcontracted. Any needed equipment can be rented locally.

All material will be stockpiled until a sufficient quantity is gathered. Material will then be crushed using a rented crusher, breaking the material into the specified size.

Project Objectives:

Increase the storage of an existing reservoir from it's present capacity of 5,000 af to a total of 10,000 af. To prevent the unnecessary spillage of stored water in March or April (per Colorado Water Engineer, capacity of the reservoir shall not exceed 50% until repaired).



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Tasks
Task 1 – Gurley Dam Plan Review
Description of Task:
<p>Project was reviewed onsite by Davis Engineering Service, Inc. to determine the current safety status of the reservoir in preparation of needed repairs.</p> <p>During the spring of 2019, snow accumulation had built up on the cornice on the north side of the Gurley Dam had almost entirely melted. A spring storm brought about 3 inches of rainfall. The combination of the snowmelt and spring rainfall event caused complete saturation of the dam embankment in the vicinity of the winter cornice. This proved to be the point at which the embankment stability reached a factor of safety (FS) of less than 1. In the area just below the cornice, a layer about 3 feet in depth slipped and slid down the slope toward the outlet pipe. The total area of the slip was about 75 feet wide and carried 85 feet down the slope. It was determined the embankment slip was caused by excess surface moisture. Testing indicated that seepage through the dam was not the cause. Since then the team has worked towards producing plans and specifications for repair of the failure.</p>
Method/Procedure:
<ol style="list-style-type: none">1. Hire Davis Engineering Service, Inc. to make an onsite review of the dam slippage and determine the overall safety of the Gurley Reservoir.2. Davis Engineering Service, Inc. developed site investigation and geotechnical investigation procedures.3. Davis Engineering Service, Inc. provided geotechnical results to the Farmers Water Development Company.
Deliverable:
<ol style="list-style-type: none">1. Davis Engineering Service, Inc. developed a design and engineer’s estimate of costs to repair the dam so that it could be filled to its full capacity of 10,000 af. Report is attached.



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Tasks	
Task 2 - Preparation of materials	
Description of Task:	
<ol style="list-style-type: none">1. Farmers Water Development Company (FWDC) will begin pulling material from the borrow-pits located at the reservoir site and will stockpile the material.2. A crusher will be rented to break the material to the specified size.3. Crushing will be done on-site by FWDC.4. An outlet tube has been purchased from Recla Metal to meet new engineering specifications.4. Equipment will be staged at the site to begin repairs/expansion as soon as the material is ready.	
Method/Procedure:	
Materials and equipment will be stored on site until all materials are ready for use. Construction is anticipated to begin August 1, 2021, when the water levels are very low in the Gurley Reservoir.	
Deliverable:	
All materials are ready to go for the construction.	



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Tasks	
Task 3 – Construction and Repair of Reservoir	
Description of Task:	
<ol style="list-style-type: none">1. Utilizing the Engineer’s Repair Plan submitted to the State of Colorado, FWDC will replace the weak material on the dam.2. The outlet pipe will be extended 25 linear feet as the slope of the dam is flattened.3. Labor is provided in-house, with the exception of sub-contracted welding on the pipe extension.4. Any necessary equipment will be rented, but most necessary equipment (excavator, dozer, and dump truck) is already owned by FWDC and shall be utilized as much as possible to keep costs down.	
Method/Procedure:	
<ol style="list-style-type: none">1. Utilizing staged equipment and materials, FWDC ditchrider staff will begin repair to slip area of the dam.2. Extend, via a welded addition, the outlet pipe.3. Fill and pack material on dam slope.4. Rent equipment as needed.	
Deliverable:	
Dam slope is repaired and water can begin flowing into the Gurley Reservoir, increasing capacity up to 10,000 acre feet.	



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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.

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 pay out the last 10% of the budget when 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.

Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to as part of the project documentation.

Performance Measures

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit C. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when 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.



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(b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.

