Last Updated: June 2018

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 Projects	Anna.Mauss@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
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	Delta Conservation District
Name of Water Project	Grand Mesa Reservoir Measurement

CWP Grant Request Amount	$ 71,126
Other Funding Sources _____	$
Other Funding Sources _____	$
Other Funding Sources _____	$
Applicant Funding Contribution	$ 89,992
Total Project Cost	$ 161,118

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Applicant & Grantee Information	
Name of Grantee(s)	Delta Conservation District
Mailing Address	690 Industrial Blvd, Delta, CO 81416
FEIN	
Organization Contact	Suzie Bilberry
Position/Title	District Manager
Email	deltaconservationd@gmail.com
Phone	970-399-8194
Grant Management Contact	*(same as above)*
Position/Title	
Email	
Phone	
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

Description of Grantee/Applicant

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

Delta Conservation District is one of 76 Conservation Districts in Colorado established in 1937. As a Special District unit of state government, Delta Conservation District is governed by an active board of nine members. Through its support of the Colorado River Salinity Control Program and other water conservation and education programs, Delta Conservation District has established a close working relationship with the Colorado Water Conservation Board.

We propose that Delta Conservation District be the Grantee from CWCB on behalf of the owners of reservoirs located on the Grand Mesa in Delta County. Delta CD would then administer the grant funds to the individual reservoir owners based on the terms of this application. Essentially, Delta CD will require that applicants contribute approximately 30% of the total project costs including financial and in-kind contributions.

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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.
	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
✓	Construction
	Identified Projects and Processes (IPP)
	Other

Category of Water Project (check the primary category that applies and include relevant tasks)		
✓	Water Storage - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap.. *Applicable Exhibit A Task(s):*	
	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. *Applicable Exhibit A Task(s):*	
	Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website. *Applicable Exhibit A Task(s):*	
	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. *Applicable Exhibit A Task(s):*	
	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. *Applicable Exhibit A Task(s):*	
	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/Counties	Delta County
Latitude	39 10 21.32 N
Longitude	107 44 32.61 W

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.
This project will survey, develop stage vs. storage capacity curves, and install gage rods on reservoirs on the Grand Mesa that provide irrigation and municipal water supplies. Over 6500 irrigated acres are supplied by these water resources, and the communities of Hotchkiss and Cedaredge along with surrounding areas rely on these reservoirs for domestic water supply. Leroux Creek Water Users Association owns and manages 29 reservoirs; Grand Mesa Water Users Association manages 95 reservoirs that are owned and maintained by ditch companies or individual water users; Overland Ditch and Reservoir Company owns and operates one 6163 AF reservoir. Most of these reservoirs are currently managed by the experience informed knowledge of reservoir owners and water commissioners. The State Engineers Office requires measurement on reservoirs and in October 2018 issued letters to owners in both Leroux Creek and Surface Creek drainages stating that gage rods and current stage/capacity curves must be established for key reservoirs in these systems or they will not be allowed to fill. While some efforts to survey Grand Mesa reservoirs have been occurring, this notice made such work a priority. This application proposes to create a fund administered by the Delta Conservation District to ensure that accurate measurement devices are installed in the majority of the Grand Mesa Reservoirs in a timely manner, allowing greatly improved management of this water resource so critical to both irrigation and municipal supplies on the Western Slope.

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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	
38,560 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	
	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
Provide a description of how this water project supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, 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). 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;)
While experience provides functional management of the reservoirs on Grand Mesa during average water years, the need for improved measurement on these reservoirs was sharply evident during the extreme drought experienced during 2018 which prompted the Division 4 office to issue letters requiring compliance. Providing this element critical to good water management, this project meets the following goals of the Colorado Water Plan: Section 6.5 Long-term Goals (pg 6-127): • Use water efficiently to reduce overall future water needs, • Meet community water needs during periods of drought, and • Develop policies and strategies that support meaningful agricultural viability statewide. Section 10 Colorado's Water Plan Values (pg 10-3): 2. Efficient and effective water infrastructure. Section 10.2 Measurable Objectives and Adaptive Management (pg 10-6): E. Storage – while this project does not create new storage, it is a cost effective approach to maximizing the use of existing storage by managing it as efficiently as possible.

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Section 10.3 Critical Goals and Actions (pgs 10-10,11)
D. Agriculture
- Maintain Agricultural Viability
- Support Agricultural Conservation and Efficiency.

E. Storage
- Promote Additional Storage and Infrastructure.
  2. Prioritize grants and loans to support the implementation of BIP-identified multipurpose projects.

Providing functional measurement on the Grand Mesa reservoirs is an essential component of the reservoir rehabilitation projects for these reservoirs included in the list of Gunnison Basin Roundtable Tier 1 projects. These include projects number 4. Cole Reservoirs #4 & 5; 6. Doughty #1-Chipmunk Reservoir; 13. Young's Creek Reservoirs #1 & 2; and 17. Rehabilitation of 28 reservoirs in the Leroux Creek Water Users Association. Accurate measurement of storage volumes will significantly improve the ability of water users and commissioners to manage these resources, particularly in drier years, thus meeting the following goals of the Gunnison Basin Roundtable:

Primary Goal: 1. Protect the existing water uses in the Gunnison Basin;

Complimentary Goals:
2. Discourage the conversion of productive agricultural land to all other uses within the context of private property rights.
3. Improve agricultural water supplies to reduce shortages….
8. Restore, maintain, and modernize critical water infrastructure, including hydropower.

Improved management of existing storage will also contribute to addressing Gunnison Basin water supply gap for irrigation, and help meet the increased future municipal demands.

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.

Improved measurement of the Grand Mesa reservoirs complements other rehabilitation projects funded by CWCB including the recently approved application to rehabilitate the outlets of Gray and Goodenough reservoirs in the Leroux Creek system. Measurement and improved management of these and other Leroux Creek reservoirs also contribute to optimizing the use of the Carl Smith reservoir which was also rehabilitated with CWCB funding following a breach in 1998.

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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.
Delta Conservation District, POGG1 PDAA2016000000353, $96,470, Colorado River Salinity Control and Gunnison Selenium
Delta Conservation District, POGG1 PDAA201700000790, $99,000, PDA7000, Colorado River Salinity & Gunnison Selenium
Delta Conservation District, POGG1 PDA201800000233, $99,000, TA for Colorado Basin Salinity
Delta Conservation District, POGG1 PDAA 201700000789, $50,000, PDA7000, Regional Conservation Partnership Program, Lower Gunnison
Delta Conservation District, POGG1 PDAA 21900002203, $33,000, Technical Assistance for Colorado River Basin Salinity
Delta Conservation District, POGG1 PDAA 21900002202, $99,000, Technical Assistance Colorado River Basin Salinity

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.
None known

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

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Colorado Water Conservation Board
Water Plan Grant - Exhibit A

Statement Of Work	
Date:	January 28, 2019
Name of Grantee:	Delta Conservation District
Name of Water Project:	Grand Mesa Reservoir Surveys
Funding Source:	WPG – Water Storage Fund

Water Project Overview:

This project will survey, develop stage vs. storage capacity curves, and install gage rods on reservoirs on the Grand Mesa that provide irrigation and municipal water supplies. Over 6900 irrigated acres are supplied by these water resources, and the communities of Hotchkiss and Cedaredge along with surrounding areas rely on these reservoirs for domestic water supply. Leroux Creek Water Users Association owns and manages 29 reservoirs; Grand Mesa Water Users Association manages 95 reservoirs that are owned and maintained by ditch companies or individual water users; Overland Ditch and Reservoir Company owns and manages one reservoir that irrigates approximately 4400 acres.

Most of these reservoirs are currently managed by the experience informed knowledge of reservoir owners and water commissioners. The State Engineers Office requires measurement on reservoirs and in October 2018 issued letters to owners in both Leroux Creek and Surface Creek drainages stating that gage rods and current stage/capacity curves must be established for key reservoirs in these systems or they will not be allowed to fill. While some efforts to survey Grand Mesa reservoirs have been occurring, this notice made such work a priority.

This application proposes to create a fund administered by the Delta Conservation District to ensure that accurate measurement devices are installed in the majority of the Grand Mesa Reservoirs in a timely manner, allowing greatly improved management of this water resource so critical to both irrigation and municipal supplies on the Western Slope.

Project Objectives:

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Provide accurate measurement of water stored in reservoirs on Grand Mesa to provide improved management of this critical water resource.

Tasks
Task 1 – Project Administration
Description of Task:
Delta Conservation District will be the Grantee, and will accept applications from and award funds to individual reservoir owners for work required to install accurate measurement of reservoir storage.
Method/Procedure:
Delta CD will advertise and solicit applications for funding reservoir measurement surveys and gage rod installation from individual reservoir owners. An application review committee composed of the District Manager and board members will review applications, and select those eligible for funding.
Deliverable:
Administration of grant funds, submission of pay requests and required reporting to CWCB, provision of all interaction with individual reservoir owners and managers.

Tasks
Task 2 – Reservoir Surveys
Description of Task:
Reservoirs will be surveyed by a certified PLS, either via ground surveys, or drone surveys with adequate ground control points. Costs are based on actual charges for surveys completed in the fall of 2018.
Method/Procedure:

Tasks
Individual reservoir owners will contract with local surveyors to complete work. Reservoirs must be empty for surveys to be completed, so timing is critical and limited.
Deliverable:
Survey data will primarily be used for Task 3, creation of stage vs. capacity curves, though actual survey data could be supplied as CAD files to reservoir owners if requested.

Tasks
Task 3 – Stage vs. Storage Capacity Curves
Description of Task:
Processing of survey data to generate Stage vs. Storage Capacity Curves
Method/Procedure:
Storage Capacity vs. Stage Curves (and/or tables) will be developed by the surveyor from survey data. Costs are based on actual charges for survey data processing completed in the fall of 2018.
Deliverable:
Stage vs. Storage Capacity curves in both paper and digital form for each reservoir.

Tasks
Task 4 – Installation of Gage Rods
Description of Task:
Construction and installation of gage rods at surveyed reservoirs.
Method/Procedure:

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Tasks

Used drill stem pipe will typically be used to construct gage rods. Construction will take an estimated 70 total labor hours to acquire and prepare materials, haul to reservoir site, assemble and place and secure rod, survey 1 foot measurements, and weld numbers on rod. Installation cost includes this labor at $15 per hour, plus four wheeler use and welding supplies. Actual costs will likely be higher if water users are not available to complete this work.

Some reservoirs in the Leroux Creek drainage have recently been surveyed, though gage rods have not yet been installed, thus more gage rod installations are included in this project than reservoir surveys.

Overland Reservoir will require extensive work with removal and replacement of rep rap and foundation excavation to include formwork, concrete placement, tensioning bars and additional equipment requirements.

Deliverable:

Installed storage measurement gage rod.

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.

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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 CWCB in hard copy and electronic format 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 B. 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.
(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.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan Grant - Exhibit B
Budget and Schedule

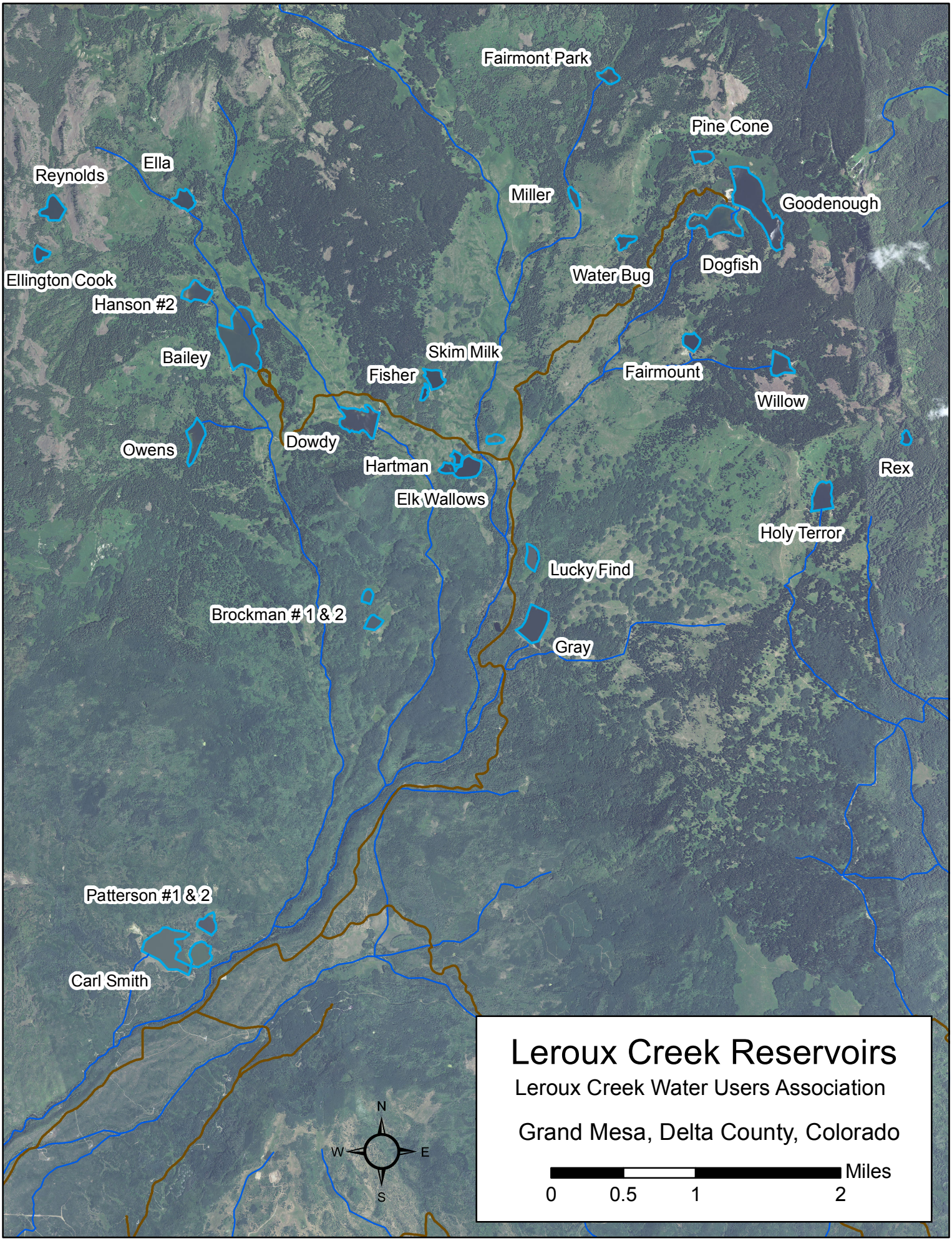
Name of Water Project: Grand Mesa Reservoir Measurement

Project Start Date: September 1, 2019

Project End Date: December 1, 2021

Task No.	Task Description	Quantity	Unit Cost	Total Cost	Grant Funding Request	Match Funding	Total
1	Project Administration		10%	$ 6,466	$ 6,466		$6,466
Leroux Creek							
2	Reservoir Surveys	20	$ 2,000	$ 40,000	$ 40,000		$40,000
3	Stage vs. Capacity curves	20	$ 525	$ 10,500	$ 10,500		$10,500
4	Gage Rod materials	23	$ 200	$ 4,600	$ 4,600		$4,600
4	Gage Rod construction & installation	23	$ 2,250	$ 51,750		$ 51,750	$51,750
Overland Ditch and Reservoir Company**							
3-4	Engineering & Inspection	1	$ 18,319	$ 18,319		$ 18,319	$18,319
4	Gage Rod Materials	1	$ 13,233	$ 13,233	$ 9,560	$ 3,673	$13,233
4	Gage Rod construction & installation	1	$ 16,250	$ 16,250		16250	$16,250
				Total	$71,126	$89,992	$161,118

**The Gunnison Round Table has awarded funds to Overland Ditch and Reservoir Company in the amount of $38,238 ($19,000 CWCB & $19,238 from the CRD) to assist with this project. The Round Table funds would be used as the required matching funds for their project.


Fairmont Park
Pine Cone
Ella
Reynolds
Miller
Goodenough
Dogfish
Water Bug
Ellington Cook
Hanson #2
Bailey
Skim Milk
Fisher
Fairmount
Willow
Owens
Dowdy
Hartman
Rex
Elk Wallows
Holy Terror
Lucky Find
Brockman # 1 & 2
Gray
Patterson #1 & 2
Carl Smith
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Leroux Creek Reservoirs
Leroux Creek Water Users Association
Grand Mesa, Delta County, Colorado
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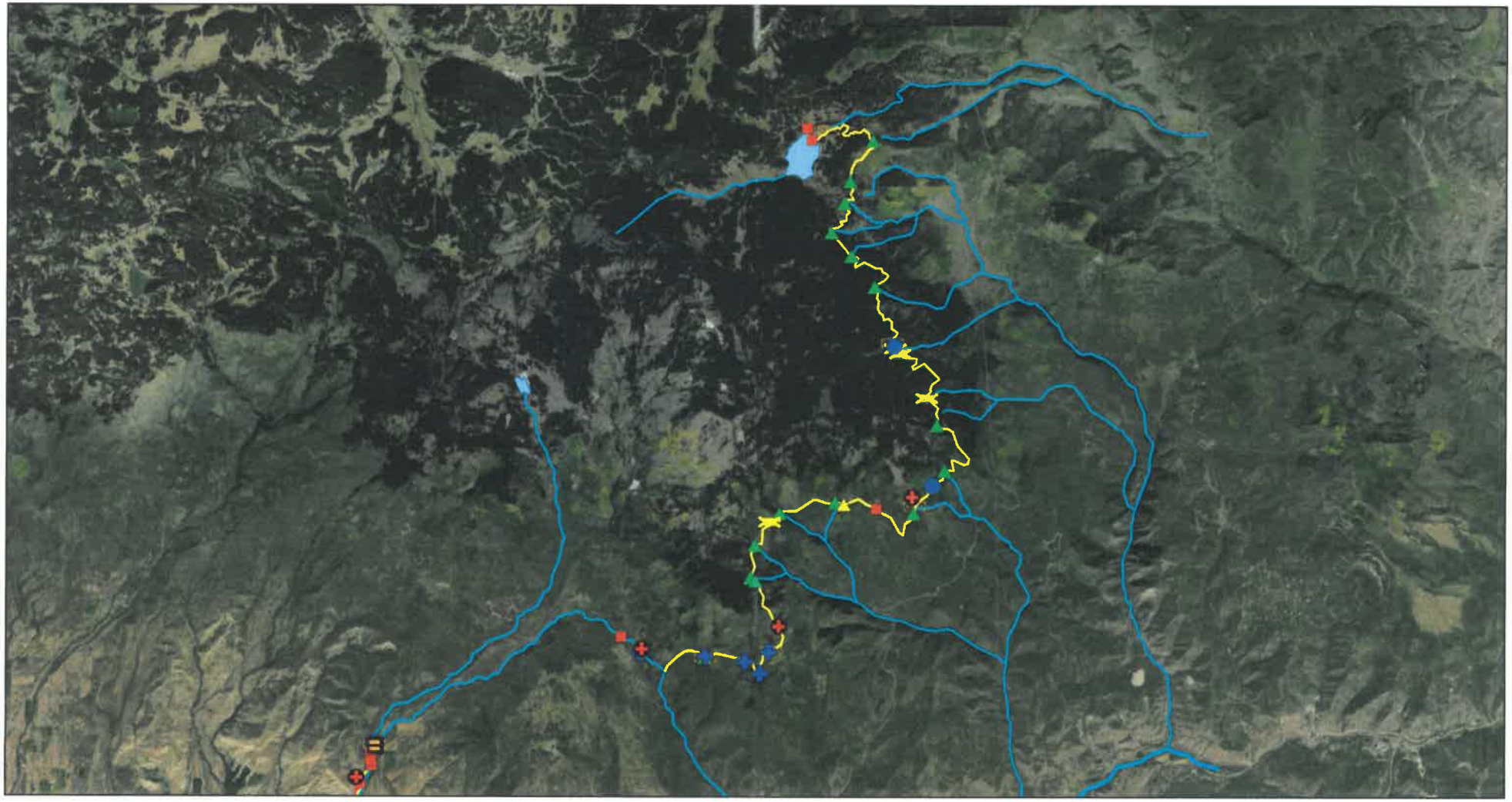
Overland Ditch & Reservoir Company Water Network



January 30, 2019

Upper Ditch Structures
- Automated Flume
- Flood Control
- Flume
- Headgate
- Overshot
- PLS Point
- PWS Pipe
- Undershot / Flood Control
- Valve

<all other values>

Redlands Mesa
- Currant Creek Ditch
- Overland Ditch

- Natural Drainage
- North Fork Gunnison River
- Gunnison River
- Wetlands Water Line

1:144,448

0 1.25 2.5 5 mi

0 2.25 4.5 9 km

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/ Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community