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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: Gregory.Johnson@state.co.us

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

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

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

Agricultural Projects: Brent.Newman@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 Project Summary

Name of Applicant	Colorado River Water Conservation District
Name of Water Project	Fire Mountain Canal Regulating Reservoir

CWP Grant Request Amount	$100,000.00
Other Funding Sources: PL 566 Watershed Authority	$3,028,000.00
Other Funding Sources: Fire Mountain Canal & Reservoir Company & North Fork Water Conservancy District	$4,000
Applicant Funding Contribution: Colorado River District	$2,000
Total Project Cost	$3,132,000

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Applicant & Grantee Information	
Name of Grantee(s)	Colorado River Water Conservation District
Mailing Address	P.O. Box 1120 / 201 Centennial Street, Suite 200, Glenwood Springs, CO 81602
FEIN	84-6
Organization Contact	Dave Kanzer
Position/Title	Deputy Chief Engineer
Email	dkanzer@crwcd.org
Phone	970-945-8522 Ext. 224 (office) / 970-379-7891 (cell)
Grant Management Contact	Sonja Chavez
Position/Title	Water Resources Specialist
Email	schavez@crwcd.org
Phone	970-945-8522 Ext. 231 (office) / 970-596-4066 (cell)
Name of Applicant (if different than grantee)	North Fork Water Conservancy District
Mailing Address	P.O. Box 217, Hotchkiss, Colorado 81419
Position/Title	Tom Alvey, President
Email	mcf@wic.net
Phone	970-712-4030

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Description of Grantee/Applicant
Provide a brief description of the grantee's organization (100 words or less).
The **Colorado River Water Conservation District (River District)** is a public water policy and planning agency chartered by the Colorado General Assembly in 1937 to be the "appropriate agency for the conservation, use and development of the water resources of the Colorado River and its principal tributaries in Colorado." The River District is composed of 15 West Slope counties in which a majority of the Colorado River Basin in the State of Colorado exists. The River District covers approximately 29,000 square miles, roughly 28% of the land area of Colorado.

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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.
X	**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)
X	Other: Technical Assistance: Design, engineering, refined cost estimate.

Category of Water Project (check all that apply and include relevant tasks)	
X	Supply and Demand Gap Projects - Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap. *Applicable Exhibit A Task(s):* **The construction of a re-regulation reservoir facility on the Fire Mountain Canal (FMC) system will address water supply and demand gaps by improving delivery system efficiency in the water short, North Fork of the Gunnison River sub-basin by matching water supplies with water user demand.* *Please see "Agricultural Projects" section for a description of associated tasks.*
X	**Water Storage Projects** - Projects that facilitate the development of additional storage, artificial recharge into aquifers, and dredging existing reservoirs to restore the reservoirs' full decreed storage capacity. **The construction of a re-regulation reservoir facility on the Fire Mountain Canal (FMC) system will provide additional short-term storage for FMC water users during peak use/demand periods while also extending existing irrigation water supplies in a water short area of the North Fork of the Gunnison River sub-basin.* *Please see "Agricultural Projects" section for a description of associated tasks.*
	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):*

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	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	**Agricultural Projects** - Projects that provide technical assistance and improve agricultural efficiency. *Applicable Exhibit A Task(s):* ***Task 1:*** *Develop feasibility and engineering plans, specifications and a refined cost estimate for the FMC Re-regulation reservoir facility.* ***Task 2:*** *Develop feasibility and engineering plans, specifications, and a refined cost estimate that incorporate headgate control and remote monitoring (Supervisory Control and Data Acquisition or SCADA) at the proposed FMC re-regulation facility.*	
X	**Environmental & Recreation Projects** – Projects that promote watershed health, environmental health, and recreation. **By supporting the creation of pressurized deliveries, this project enables on-farm irrigation efficiency application improvements that may result in additional selenium and salinity load reduction benefits to the Gunnison River thereby supporting efforts related to the Federal Gunnison Basin Selenium Management Program (SMP) and the Federal Lower Gunnison Basin Salinity Control Program.* *Please see "Agricultural Projects" section above for a description of associated tasks.*	
	Other	Explain:

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	38°50'4.17"N (Piping) ; 38°49'49.24"N
Longitude	107°44'48.24"W (Piping); 107°44'14.35"W

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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 proposal supports technical assistance activities necessary to design and engineer a fifty ac-feet re-regulation reservoir facility (with remote monitoring and control) on the Fire Mountain Canal (FMC), a component of the Federal Paonia Project. The FMC provides irrigation water to 8,200 acres of irrigated lands (480 water users) near Paonia and Hotchkiss, Colorado. The FMC Re-Regulation Reservoir is a critical component needed to create an "on-demand" irrigation delivery system with pressurized deliveries that enable on-farm high efficiency irrigation improvements in the water short, North Fork of the Gunnison River sub-basin. Sources of water include the North Fork of the Gunnison River, Terror Creek and Roatcap Creek. Major crops include livestock feed and fruit, such as apples, peaches, and cherries. Dairy cows and beef are principal livestock of the area.

Support of this project addresses multiple purposes including:

- *Agricultural Sustainability / Supply and Demand / Storage: Stretches limited supplies in a water short area, allows producers to capture, temporarily store and maximize benefits of early spring flood flow;*
- *Efficiency: Re-timed and pressurized deliveries that enable conversion to on-farm high efficiency systems and stabilized flows; and*
- *Environmental (Water-Quality and T&E): Potential reductions to on-farm selenium and salinity loading to the Gunnison and Colorado River benefitting critical fish habitat.*

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Water Project Overview

Measurable Results

To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:

50 ac-ft	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
	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	
	Other	Explain: Water Quality & T&E Benefits: Helps prevent deep percolation and resultant Se loading to critical habitat (Se is a bio-accumulator). Salt loading in the CO River system results in downstream damages of $380M/year.

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

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Water Project Justification

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;)

This project directly addresses the goals of CWP, the Statewide Water Supply Initiative (SWSI), and the Gunnison Basin Roundtable Basin Implementation Plan (GBIP) by working to preserve and sustain irrigated agriculture in the Gunnison Basin and the regional economy it supports.

CWP Goals: This project proposal directly address the following goals (Chapter 6 – pg. 127):

- Use water efficiently: Directly supports implementation of off-farm irrigation efficiency improvements (e.g. piping and re-regulation/storage facilities to re-time deliveries and meet demand);
- Identify projects that meet water supply gap while balancing needs of ag, environment, and recreation: Develops additional water supplies and improves water management in a water short area while supporting ag and improving water quality for the benefit of downstream users and endangered species;
- Obtain State's assistance in the development of storage: Creates additional storage of existing supplies, re-times irrigation deliveries to meet peak demand;
- Meet community water needs during times of drought: Makes additional water supplies (spring flood flows) available by allowing users to capture spring flood flows (short term), re-time irrigation deliveries to match demand, enable on-farm improvements by creating a pressurized delivery system, and over-all increases the local community's resiliency and ability to respond to drought; and
- Develop strategies that support meaningful agricultural viability statewide:

SWSI: Data indicates significant agricultural shortages that can be addressed by modernizing off-farm irrigation delivery system infrastructure, improving on-farm irrigation efficiency, and increasing storage.

Tier 1 GBIP Priorities: This proposal addresses GBIP Projects to meet projected shortages:

- *Fire Mountain Canal Delivery Efficiency Project*: Improve efficiency of the canal system in order to improve flows on the North Fork ($7.8M) (pg. 96, Ref #7); and
- *Regional Conservation Partnership Program (RCPP):* This project directly addresses high priority off-farm modernization goals identified in the RCPP planning study for Roger's Mesa (supported by CWCB) and accurately meets agricultural water demands while improving flow and water-quality (pg. 96, Ref #2).

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.

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Related Studies

CWCB RCPP Technical Assistance: 1.) Directly assists in the implementation of high priority projects as identified in the Roger's Mesa/North Fork Water Conservancy District System Optimization Improvement and Master Plans funded by the CWCB and managed by the River District; and 2) Continues to support existing CWCB investment in Lower Gunnison Project RCPP (River District, Lead Sponsor)

Species Conservation Trust Fund (SCTF): Continues to support the State of Colorado's investments in addressing Se loading to the Gunnison and Colorado Rivers.

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.

WSRA:

1) Fire Mountain Canal Piping Project ($120K) – North Fork Water Conservancy District, Gunnison Basin Round Table, CWCB Board Mtg Date (uncertain), contract number (uncertain), percentage of other CWCB funding for this project (none).

CWCB RCPP TA:

1) Roger's Mesa Irrigation Efficiency Improvements Study ($90,000) – CO River District, No Roundtable approval required, CWCB Board Mtg Date (uncertain), Contract #, percentage of other CWCB funding for this project (none).

CWCB Technical Assistance:

1) North Fork Water Conservancy District Master Plan ($25,000) – Co River District, No Roundtable approval required, CWCB Board Mtg Date (uncertain), Contract #, percentage of other CWCB funding for this project (none).

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.

It is anticipated that the Colorado River District will have sufficient TABOR capacity to overcome revenue limitations currently preventing the NFWCD and FMCRC from directly managing CWP funds.

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Submittal Checklist	
X	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.
Exhibit A –	
	Statement of Work(1) – See Attached Exhibit A
	Budget & Schedule(1) *(Spreadsheet)* – See Attached Exhibit A.
	Letters of Matching and/or Pending 3rd Party Commitments(1) – To be submitted in the very near term.
Exhibit C –	
	Map (if applicable)(1) – See Attached Exhibit C
	Photos/Drawings/Reports -
	Letters of Support (Support letter from Basin Roundtable encouraged) – To be submitted in the very near term.
	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) – Not applicable.
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.

NEW PIPE TO LEROUX CREEK PROJECT

1375+00

1370+00

RESERVOIR OUTLET

1365+00

2:1

APPROXIMATELY 50 ACRE-FOOT
RE-REGULATING RESERVOIR

1360+00

1355+00

BUREAU OF RECLAMATION
PROPERTY LINE

EARTH EMBANKMENT DAM

1350+00

N

0 60 120

SCALE IN FEET

J-U-B ENGINEERS, INC.

J-U-B ENGINEERS, INC.
466 North 900 West
Kaysville, Utah 84037

Phone: 801.547.0393
Fax: 801.547.0397
www.jub.com

PRELIMINARY PLANS

NOT FOR CONSTRUCTION

NO.	DESCRIPTION	BY	APPR.	DATE

REVISION

FIRE MOUNTAIN CANAL AND RESERVOIR COMPANY RE-REGULATING RESERVOIR

CONCEPT LAYOUT

FILE : FIRE MOUNTAIN POND
JUB PROJ. # : 55-14-124
DRAWN BY: DDF
DESIGN BY: BKW
CHECKED BY: BKW

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

LAST UPDATED: 4/18/2016

SHEET NUMBER:

C-101

Plot Date:4/19/2016 1:49 PM Plotted By: Dexter Fisher
Data Created:4/18/2016 F:\PROJECTS\JUB\COLORADO RIVER DISTRICT\55-14-124 - COLORADO RIVER DISTRICT - LOWER GUNNISON\MASTER PLANS\NORTH FORK\CAD\MODEL\CIVIL\FIRE MOUNTAIN POND.DWG

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Colorado Water Conservation Board
Water Plan Grant - Exhibit A

Statement Of Work	
Date:	**10-02-17**
Name of Applicant:	**Colorado River Water Conservation District**
Name of Water Project:	**Fire Mountain Canal Re-Regulating Reservoir**
Funding Source:	**Water Plan Grant**

Water Project Overview: Please provide a summary of the proposed water project (200 words or less). The same summary can be used from Page 5 of the CWP Grant Application.

This project proposal supports technical assistance activities necessary to design and engineer a fifty ac-feet re-regulation reservoir facility (with remote monitoring and control) on the Fire Mountain Canal (FMC), a component of the Federal Paonia Project. The FMC provides irrigation water to 8,200 acres of irrigated lands (480 water users) near Paonia and Hotchkiss, Colorado. The FMC Re-Regulation Reservoir is a critical component needed to create an "on-demand" irrigation delivery system with pressurized deliveries that enable on-farm high efficiency irrigation improvements in the water short, North Fork of the Gunnison River sub-basin.

Objectives: List the objectives of the project.

The objectives of the project are to meet CO Watershed Plan and GBIP Goals :

I. Develop a multi-purpose funding plan through grant application support via CWCB and NRCS Watershed Authority Funds;
II. Promote a multi-purpose initiative that supports environmental, agricultural and water resource goals including ATM's, demand and supply gaps, and storage infrastructure;
III. Promote vibrant and sustainable cities by supporting the agricultural economy surrounding the North Fork Valley;
IV. Address agricultural viability and efficiency through implementation of the proposed re-regulating facility;
V. Support a strong environment: healthy rivers, healthy species, good water-quality, water conservation;
VI. Prepare for an uncertain future associated with potential water resource demands associated with compact compliance, climate change, and imperiled species.

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Tasks
Provide a detailed description of each project task using the following format:
Task 1 – [Design & Engineering]
Description of Task:
Develop design and feasibility level engineered plans with detailed cost estimate for the Fire Mountain Canal (FMC) Re-Regulating Reservoir, remote monitoring and SCADA.
Method/Procedure:
A. Release a Request for Proposals (RFP) from licensed, professional Colorado engineer(s)/engineering company; B. Contract with selected engineering company; and C. Work with engineer, FMC and NFWCD to develop engineered plans and cost estimate.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
1) Feasibility level engineering plans and cost estimates for the construction of the FMC Re-Regulating Reservoir with remote monitoring and SCADA.
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
1) Final feasibility-level engineered plans (signed and stamped by licenses professional Colorado engineer) and cost estimate for both reservoir construction and remote monitoring and SCADA implementation. Plans will be fully vetted and approved by the River District, Fire Mountain Canal and Reservoir Company, and North Fork Water Conservancy District.

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Tasks
Provide a detailed description of each task using the following format:
Task 2 – [Funding Plan]
Description of Task:
Work with the FMC Company and North Fork Water Conservancy District (NFWCD) to develop a sound funding plan for the project.
Method/Procedure:
River District staff will work with the FMC Company and NFWCD to prepare a grant application to the NRCS Watershed Authority Funding Program (PL 566) in support of the Fire Mountain Canal Re-Regulating Reservoir Construction Implementation.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
PL 566 grant application and notification of funding award status (anticipated October 2017)
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
Copies of PL 566 grant applications submitted and notification of award (anticipated October 2017)

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Tasks
Provide a detailed description of each task using the following format:
Task 3 – [Grant Administration & Project Management]
Description of Task:
A. Provide one semi-annual project progress and budget report to the identified CWCB representative/staff member during the contract term (1 year); B. Provide one final project and budget report at completion documenting project progress and completion; and C. Provide overall project management and fiscal oversight.
Method/Procedure:
A. Track project progress through regular project meetings; B. Document any difficulties encountered and resolutions; C. Carefully track and report project expenditures, cash match and in-kind contributions; and D. Prepare project reports.
Grantee Deliverable: Describe the deliverable the grantee expects from this task
A. One (1) semi-annual progress and budget reports prepared by River District; B. One (1) final project progress and budget report prepared by River District; and C. Regular and efficient communication with CWCB staff representative/manager.
CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task
A. One (1) semi-annual progress and budget reports; and B. One (1) final report; and C. Regular email and phone communication with requests for project meeting participation as available.

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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. 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.

Project Budget: Fire Mountain Canal Re-Regulating Reservoir (Design and Engineering Only)

Project Costs (Technical Assistance - Engineering)	**Amount**
Task 1) Design and Engineering	$ 204,000
Task (2) Funding Plan	$ 1,000
Task (3) Grant Administration & Project Management	$ 1,000
Total Project Cost:	**206,000**

Continued on next page

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Project Funding Plan:

Funding Sources	CWCB: TA	Other: TA	Other: FA	Total
NRCS Watershed Authority (PL 566): Construction implementation grant award. Notification anticipated October 2017.		$ 100,000	$ 2,928,000	$ 3,028,000
State Grant Funds (cash)	$ 100,000			$ 100,000
River District (in-kind)		$ 2,000		$ 2,000
NF Water Conservancy (cash)		$ 2,000		$ 2,000
FMC (cash)		$ 2,000		$ 2,000
Totals:	**$ 100,000**	**$ 106,000**	**$ 2,928,000**	**$ 3,132,000**

Project Timeline:

Schedule	Q4 - 17	Q1 - 18	Q2 - 18	Q3 - 18	Q4 - 18
Task 1: Design & Engineering		X	X	X	X
Task 2: Funding Plan	X	X			
Task 3: Grant Administration & Project Management	X	X	X (Semi)	X	X (Final)