

**Water Supply Reserve Fund  
Water Activity Summary Sheet  
September 16-17, 2020  
Agenda Item 19(o)**

**Applicant & Grantee:** Redmesa Reservoir and Ditch Company

**Water Activity Name:** Redmesa Reservoir Enlargement (Final Design and Permitting)

**Water Activity Purpose:** Agricultural/Env & Rec/M&I-Implementation

**County:** La Plata

**Drainage Basin:** Southwest

**Water Source:** La Plata River

**Amount Requested:** \$25,000 Southwest Basin Account  
\$250,000 Statewide Account  
\$275,000 Total Request

**Matching Funds:** Basin Account Match = \$25,000

- 10% of statewide request (meets 10% min)

Applicant & 3<sup>rd</sup> Party Match (cash) = \$307,400

- 122% of the statewide request (meets 10% min)

Total Match (Basin request & Applicant Match) = \$332,400

- 132% of the statewide request (meets 50% min)

<b>Staff Recommendation:</b>
Staff recommends approval of up to \$25,000 from the Southwest Basin Account, and up to \$250,000 from the Statewide Account to help fund the project: Redmesa Reservoir Enlargement (Final Design and Permitting).

**Water Activity Summary:** WSRF Funds, if approved will assist the Redmesa Reservoir and Ditch Company to enlarge Redmesa Reservoir and address its current narrow spillway and aging outlet works to comply with the current Colorado Office of the State Engineer's (SEO) dam safety requirements, while enlarging the reservoir to increase the water supply available for the Reservoir Ditches and varied stakeholders within the La Plata River Basin. The dam safety branch of the SEO has placed a zero-storage restriction on Redmesa Reservoir beginning March 1, 2021 if engineered plans and specifications are not submitted for review to rehabilitate Redmesa Reservoir. Grant money sought in the 2020 CWCB application will be used for the final engineering, geotechnical analysis, and environmental permitting to comply with the SEO's engineered submittal and deadline. RR&DC anticipates construction of the ultimate Redmesa Reservoir enlargement project will occur within two to five years.

Redmesa Reservoir yields approximately 1.0 AF of supply for each of the 1,138 outstanding shares in RR&DC. Water is delivered on a pro-rata basis. Given the limited water available in the area, a maximum of 1,600 acres can be practically irrigated, while in most years approximately 1,140 acres of land is irrigated within the RR&DC's service area. The service area is located mostly around the town of Red Mesa (unincorporated) in the southwestern portion of the La Plata County.

**Discussion:** This effort will assist the Southwest Basin Roundtable achieve several goals as called for in their Basin Implementation Plan, such as: their Agricultural Goal B2 to Implement efficiency measures to maximize beneficial use and production, and also assisting Colorado achieve the goal to Maintain Agricultural Viability as called for in Chapter 10 of Colorado's Water Plan.

**Issues/Additional Needs:** None.

**Eligibility Requirements:** The application meets requirements of all eligibility components.

**Evaluation Criteria:** Staff has determined this activity satisfies the Evaluation Criteria.

<b>Funding Sources/Match</b>	<b>Cash</b>	<b>In-kind</b>	<b>Total</b>	<b>Status</b>
Redmesa Reservoir and Ditch Company	\$232,400	\$0	\$232,400	Secured
Southwestern Water Conservation District	\$75,000	\$0	\$75,000	Secured
Sub-total	\$307,400	\$0	\$307,400	
WSRF Southwest Basin Account	\$25,000	\$0	\$25,000	Secured
Sub-total	\$332,400	\$0	\$332,400	
WSRF Statewide Account	\$250,000	\$0	\$250,000	
<b>Total Project Costs</b>	<b>\$582,400</b>	<b>\$0</b>	<b>\$582,400</b>	

**CWCB Project Manager:** Matt Streans

## SOUTHWEST BASINS ROUNDTABLE

July 24, 2020

Mr. Craig Godbout  
Water Supply Planning Section  
Colorado Water Conservation Board  
1580 Logan Street, Suite 600  
Denver, Colorado 80203

RE: Red Mesa Reservoir and Ditch Company  
WSRF Grant Request

Dear Mr. Godbout,

The Southwest Basins Roundtable approved funding of \$25,000 from the Southwest Basins Roundtable account for the Red Mesa Reservoir and Ditch Company's Red Mesa Reservoir Project. In addition, we are recommending that the Colorado Water Conservation Board approve their request for \$250,000 from the Statewide account. This application was considered fully and approved by the Southwest Basins Roundtable at the July 23, 2020 meeting. There was a quorum of members present at the meeting.

Completion of this project will help supplement stream flows to the critically short La Plata River. These supplemental stream flows will support native fish species in the river and better manage the compact compliance requirements on the river to New Mexico. It will also help to maintain existing irrigation uses within the La Plata River basin.

The proposed project falls under IPP 4-LaP of the Southwest Basins Implementation Plan. It also meets a Measurable Goal or Outcome of the Southwest Basins BIP to Maintain Agricultural Needs, Meet Municipal and Industrial Needs, Meet Environmental Needs and Comply with River Compacts and Manage Risk.

The completed Grant Application will be forwarded directly to you by the applicant. Please contact the applicant directly or me at 970-563-0320, [etolen@laplawd.org](mailto:etolen@laplawd.org), if you have questions or wish to discuss this application in more detail.

Sincerely,



Edward Tolen  
Southwest Basins Roundtable Chair

C/O La Plata Archuleta Water District  
PO Box 1377  
Ignacio, Colorado 81137



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## Colorado Water Conservation Board

### Water Supply Reserve Fund Grant Application

#### Instructions

All WSRF grant applications shall conform to the current [2016 WSRF Criteria and Guidelines](#).

To receive funding from the WSRF, a proposed water activity must be recommended for approval by a Roundtable(s) **AND** the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application.

If you have questions, please contact the WSRF Grant Program Manager (for all Roundtables):

Craig Godbout  
[craig.godbout@state.co.us](mailto:craig.godbout@state.co.us)  
303-866-3441 x3210 (office)  
303-547-8061 (cell)

#### WSRF Submittal Checklist (Required)

<b>TJT</b>	I acknowledge this request was recommended for CWCB approval by the sponsoring roundtable.
<b>TJT</b>	I acknowledge I have read and understand the <a href="#">2016 WSRF Criteria and Guidelines</a> .
<b>TJT</b>	I acknowledge the Grantee will be able to contract with CWCB using the <a href="#">Standard Contract</a> . <sup>(1)</sup>
Application Documents	
✓	Exhibit A: Statement of Work <sup>(2)</sup> ( <i>Word – see Template</i> )
✓	Exhibit B: Budget & Schedule <sup>(2)</sup> ( <i>Excel Spreadsheet – see Template</i> )
✓	Letters of Matching and/or Pending 3 <sup>rd</sup> Party Commitments <sup>(2)</sup>
✓	Map <sup>(2)</sup>
✓	Photos/Drawings/Reports
✓	Letters of Support
Contracting Documents <sup>(3)</sup>	
	Detailed/Itemized Budget <sup>(3)</sup> ( <i>Excel Spreadsheet – see Template</i> )
	Certificate of Insurance <sup>(4)</sup> ( <i>General, Auto, &amp; Workers' Comp.</i> )
	Certificate of Good Standing <sup>(4)</sup>
	W-9 Form <sup>(4)</sup>
	Independent Contractor Form <sup>(4)</sup> ( <i>If applicant is individual, not company/organization</i> )
	Electronic Funds Transfer (ETF) Form <sup>(4)</sup>

(1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting

(2) Required with application if applicable.

(3) Additional documentation providing a Detailed/Itemized Budget maybe required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine specifics.

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

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Schedule		
CWCB Meeting	Application Submittal Dates	Type of Request
January	December 1	Basin Account; BIP
March	February 1	Basin/Statewide Account; BIP
May	April 1	Basin Account; BIP
July	June 1	Basin Account; BIP
September	August 1	Basin/Statewide Account; BIP
November	October 1	Basin Account/BIP

Desired Timeline	
Desired CWCB Hearing Month:	September
Desired Notice to Proceed Date:	October

Water Activity Summary		
Name of Applicant	Redmesa Reservoir and Ditch Company (RR&DC)	
Name of Water Activity	Redmesa Reservoir Enlargement (Final Design and Permitting)	
Approving Roundtable(s)	Basin Account Request(s) <sup>(1)</sup>	
Southwest Basin Roundtable	\$ 25,000 (Approved – See Exhibit E)	
Basin Account Request Subtotal	\$ 25,000	
Statewide Account Request <sup>(1)</sup>	\$ 250,000	
Total WSRF Funds Requested (Basin & Statewide)	\$ 275,000	
Total Project Costs	\$ 582,400	

(1) Please indicate the amount recommended for approval by the Roundtable(s)



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Grantee and Applicant Information	
Name of Grantee(s)	Redmesa Reservoir and Ditch Company
Mailing Address	3064 County Road 119 Hesperus, CO 81326
FEIN	84-0494513
Grantee's Organization Contact <sup>(1)</sup>	Trent Taylor
Position/Title	Vice President
Email	<a href="mailto:Trentjtaylor02@gmail.com">Trentjtaylor02@gmail.com</a>
Phone	(970) 769-0950
Grant Management Contact <sup>(2)</sup>	Mardi Gebhardt
Position/Title	Treasurer
Email	Mardi.geb@gmail.com
Phone	(970) 749-1949
Name of Applicant (if different than grantee)	<u>Same as Grantee</u>
Mailing Address	
Position/Title	
Email	
Phone	

**(1)** Person with signatory authority

**(2)** Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

Description of Grantee
Provide a brief description of the grantee's organization (100 words or less).
<p>The Redmesa Reservoir and Ditch Company (RR&amp;DC) was originally formed as the Red Mesa Ward Reservoir and Ditch Company (Company) in 1923 and is recognized as a not-for-profit corporation under Colorado law. The RR&amp;DC owns and operates the 1,176-acre-foot (AF) Redmesa Reservoir, originally constructed in 1910 and known as the Red Mesa Ward Reservoir and/or Mormon Reservoir. Redmesa Reservoir is an on-channel reservoir located in La Plata County, Colorado on Hay Gulch, tributary to the La Plata River. The water supply stored within Redmesa Reservoir is used for the irrigation of crops by four Reservoir Ditches located below Redmesa Reservoir. RR&amp;DC currently has 1,138 outstanding shares, held by 48 shareholders.</p>



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Type of Eligible Entity (check one)	
	<b>Public (Government):</b> 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.
	<b>Public (Districts):</b> authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises
<input checked="" type="checkbox"/>	<b>Private Incorporated:</b> mutual ditch companies, homeowners associations, corporations
	<b>Private Individuals, Partnerships, and Sole Proprietors:</b> are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
	<b>Non-governmental organizations:</b> broadly, any organization that is not part of the government
	<b>Covered Entity:</b> as defined in <a href="#">Section 37-60-126 Colorado Revised Statutes</a>

Type of Water Activity (check one)	
	Study
<input checked="" type="checkbox"/>	Implementation

Category of Water Activity (check all that apply)		
<input checked="" type="checkbox"/>	Nonconsumptive (Environmental)	
<input checked="" type="checkbox"/>	Nonconsumptive (Recreational)	
<input checked="" type="checkbox"/>	Agricultural	
<input checked="" type="checkbox"/>	Municipal/Industrial	
	Needs Assessment	
	Education & Outreach	
	Other	Explain:

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in <b>decimal degrees</b> . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	La Plata County
Latitude	37.1699221
Longitude	-108.1408645

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### Water Activity Overview

Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. 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, area of habitat improvements. 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, and Schedule.

RR&DC proposes to enlarge Redmesa Reservoir and address its current narrow spillway and aging outlet works to comply with the current Colorado Office of the State Engineer's (SEO) dam safety requirements, while enlarging the reservoir to increase the water supply available for the Reservoir Ditches and varied stakeholders within the La Plata River Basin. The dam safety branch of the SEO has placed a zero-storage restriction on Redmesa Reservoir beginning March 1, 2021 if engineered plans and specifications are not submitted for review to rehabilitate Redmesa Reservoir. Grant money sought in the 2020 CWCB application will be used for the final engineering, geotechnical analysis, and environmental permitting to comply with the SEO's engineered submittal and deadline. RR&DC anticipates construction of the ultimate Redmesa Reservoir enlargement project will occur within two to five years.

Redmesa Reservoir yields approximately 1.0 AF of supply for each of the 1,138 outstanding shares in RR&DC. Water is delivered on a pro-rata basis. Given the limited water available in the area, a maximum of 1,600 acres can be practically irrigated, while in most years approximately 1,140 acres of land is irrigated within the RR&DC's service area. The service area is located mostly around the town of Red Mesa (unincorporated) in the southwestern portion of the La Plata County.

### Measurable Results

To catalog measurable results achieved with WSRF funds please provide any of the following values.

1,190 AF	New Storage Created (acre-feet)
423 AF, average annual non-consumptive yield (1,100 AF of storage)	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
1,176 AF	Existing Storage Preserved or Enhanced (acre-feet)
0	Length of Stream Restored or Protected (linear feet)
0	Efficiency Savings (indicate acre-feet/year OR dollars/year)
0	Area of Restored or Preserved Habitat (acres)
0	Length of Pipe/Canal Built or Improved (linear feet)
	Other Explain:



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### Water Activity Justification

Provide a description of how this water activity supports the goals of [Colorado's Water Plan](#), the most recent [Statewide Water Supply Initiative](#), and the respective [Roundtable Basin Implementation Plan and Education Action Plan](#) <sup>(1)</sup>. 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).

For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in [2016 WSRF Criteria and Guidelines](#)).

The Southwest Basin Roundtable would like to focus on projects that serve "multiple purposes and multiple uses." In Section 6.5.3 of the Colorado Water Plan, the Southwest Basin Roundtable's goals include implementing "multi-purpose IPPs (including the creative management of existing facilities and the development of new storage as needed." The Red Mesa Ward Reservoir, or Redmesa Reservoir, was a proposed IPP on the Southwest Basin IPP List (ID: 4-LaP) to address agricultural, industrial, and municipal water supply needs.

RR&DC completed its Colorado Water Conservation Board (CWCB) Final Feasibility Study in May 2020 (see Exhibit D). The Final Feasibility Study describes the final conceptual design for an estimated reservoir enlargement of 1,190 AF, which was determined based on the optimization process to maximize the increase in water rights (estimated to provide an average annual water supply increase of 423 AF) and minimize the reservoir's unit construction costs. In addition, the Final Feasibility Study provides a detailed operational plan and overall funding plan for the future enlarged Redmesa Reservoir. The anticipated future users of the 1,190 AF enlargement include:

- 600 AF for the Colorado Division of Water Resources (DWR) for the purpose of supplementing streamflow in the La Plata River to bolster La Plata River Compact compliance. Operations will be in conjunction with the Bobby K. Taylor (BKT) Reservoir.
- 500 AF for Colorado Parks and Wildlife (CPW) for the purpose of supporting and maintaining a live stream in the La Plata River for native fish species. Operations will be in conjunction with the BKT Reservoir.
- 60 AF for continued irrigation use by the four reservoir irrigation ditches to offset sedimentation losses within the existing reservoir.
- 30 AF for augmentation purposes of non-irrigation demands, including: domestic, commercial, and industrial uses.
- As a result of the future Redmesa Reservoir Enlargement Engineering Project, the following benefits will occur:
- The supply diverted and stored within DWR's 600 AF of capacity in the enlarged Redmesa Reservoir will be exchanged to BKT Reservoir for subsequent release to Long Hollow for La Plata River Compact Compliance at the Colorado-New Mexico Stateline.
- A like amount of the RR&DC ditches' BKT Reservoir yield will be exchanged to the enlarged Redmesa Reservoir for irrigation use.
- The future enlarged Redmesa Reservoir and operations with BKT Reservoir will result in fewer days of Compact over-deliveries and under-deliveries from Colorado, as Colorado better manages its portion of its highly variable La Plata River entitlement.
- The reduction in under-deliveries to New Mexico reduces the potential of future litigation between the states.
- The Project will allow for better management and further develop Colorado's usage of its La Plata River entitlement under the 1922 La Plata River Compact.
- Redmesa Reservoir can directly divert supply from the La Plata River which, in conjunction with the future DWR's capacity in the enlarged Redmesa Reservoir, will provide opportunities for RR&DC and DWR staff to better manage diversions to during periods with large fluctuations in diurnal flow.
- The supply diverted and stored within CPW's 500 AF of capacity in the enlarged Redmesa

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### Water Activity Justification

Reservoir will be exchanged to BKT Reservoir for subsequent release to Long Hollow to supplement streamflow within the La Plata River below its confluence with the La Plata River for the benefit of native fish during the non-Compact season of December 1st through February 15th.

- The ability to complete intra-reservoir paper exchanges will further increase the available irrigation water supply.
- The enlarged Redmesa Reservoir will be opened to the public for recreational opportunities, including non-motorized boating and seasonal waterfowl hunting.
- In order to protect the native fish species within the La Plata River Basin, Redmesa Reservoir will not be open for recreational fishing.
- The enlarged Redmesa Reservoir will increase the agricultural yield to its historical capacity of 1,176 AF, which has been incrementally reduced over time due to sedimentation within the existing reservoir.
- All increases in irrigation supply will result in additional ditch and reservoir seepage as well as irrigation return flows, both of which would recharge the Redmesa Aquifer. The aquifer recharge will ultimately accrue to the La Plata River, Government Draw and Long Hollow and will generally increase flows in the lower portion of the basin.
- Increased return flows in the lower portion of the basin will benefit irrigators, provide operational flexibility for water managers and DWR staff, and will provide supplemental flows benefiting the environmental communities within the river and the adjacent riparian habitat.
- RR&DC currently provides augmentation water to users within the extremely water short La Plata River Basin, including Marvel Spring. Marvel Spring is the critical non-potable water supply for approximately 100 users within the basin. Marvel Spring will continue to remain an important water supply in this predominantly rural community and will need continued augmentation for its non-potable use. Additionally, there are other augmentation needs within the basin, including domestic, commercial, and industrial uses. RR&DC will use the 30 AF of capacity for continued and expanded augmentation needs within the community.

(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.

### Matching Requirements: Basin Account Requests

**Basin (only) Account** grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3<sup>rd</sup> party and shall be accompanied by a **letter of commitment** as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity's letterhead). Attach additional sheet if necessary.

Contributing Entity	Amount and Form of Match (note cash or in-kind)
RR&DC Cash	\$ 50,000
RR&DC Loan from CWCB	\$ 182,400 (loan)
Southwestern Water Conservation District Grant	\$ 75,000 (grant)
Total Match	\$ 307,400
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	



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### Matching Requirements: Statewide Account Requests

**Statewide Account** grant requests require a 50% match as described in the 2016 WSRF Criteria and Guidelines. A minimum of 10% match shall be from Basin Account funds (cash only). A minimum of 10% match shall be provided by the applicant or 3rd party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3<sup>rd</sup> party) and shall be accompanied by a **letter of commitment**. Attach additional sheet if necessary.

Contributing Entity	Amount and Form of Match (note cash or in-kind):
RR&DC Cash	\$ 50,000
RR&DC Loan from CWCB	\$ 182,400 (loan)
Southwestern Water Conservation District Grant	\$ 75,000 (grant)
Total Match	\$ 307,400
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	

### Related Studies

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

**1995 Harris Water Engineering Feasibility Study** – Complimentary  
**2003 Wright Water Engineers Feasibility Study** – Complimentary  
**2016 AECOM Enlargement Feasibility Study** – Complimentary  
**2018/2020 SGM Final Feasibility Study** – Complimentary



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### Previous CWCB Grants

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

**1995 Harris Water Engineering Feasibility Study**

1. Applicant name: *Red Mesa Ward Reservoir & Ditch Company*
2. Water Activity: *Feasibility Study*
3. Approving RTs: *Unknown*
4. CWCB board meeting date: *Unknown*
5. Contract # / purchase order: *Unknown*

**2003 Wright Water Engineers Feasibility Study**

1. Applicant name: *La Plata Water Conservancy District (LPWCD)*
2. Water Activity: *Feasibility Study*
3. Approving RTs: *Unknown*
4. CWCB board meeting date: *Unknown*
5. Contract # / purchase order: *Unknown*

**2016 AECOM Enlargement Feasibility Study**

1. Applicant name: *Redmesa Reservoir & Ditch Company*
2. Water Activity: *Feasibility Study*
3. Approving RTs: *Unknown*
4. CWCB board meeting date: *Unknown*
5. Contract # / purchase order: *Unknown*

**2018/2020 SGM Final Feasibility Study (See Exhibit D)**

1. Applicant name: *Redmesa Reservoir & Ditch Company*
2. Water Activity: *Final Feasibility Study*
3. Approving RTs: *N/A*
4. CWCB board meeting date: *N/A*
5. Contract #/purchase order: *(POGG1,PDAA,201800000760) & (POGG1,PDAA,201900002898)*

### Tax Payer Bill of Rights

The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.

RR&DC is not aware of any TABOR restrictions.



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<b><u>Colorado Water Conservation Board</u></b>	
<b>Water Supply Reserve Fund</b>	
<b><u>Exhibit A - Statement of Work</u></b>	
<b>Date:</b>	<b>7/13/2020</b>
<b>Water Activity Name:</b>	<b>Redmesa Reservoir Enlargement Final Design and Permitting</b>
<b>Grant Recipient:</b>	<b>Redmesa Reservoir and Ditch Company (RR&amp;DC)</b>
<b>Funding Source:</b>	<b>RR&amp;DC Cash, Southwestern Water Conservation District Grant, CWCB Loan, Southwest Basin Roundtable WSRF Grant, and Statewide WSRF Grant</b>
<b>Water Activity Overview:</b> (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for. (PLEASE DEFINE ALL ACRONYMS).)	
<p>Redmesa Reservoir &amp; Ditch Company (RR&amp;DC) proposes to enlarge Redmesa Reservoir and address its current narrow spillway and aging outlet works to comply with the current Colorado Office of the State Engineer's (SEO) dam safety requirements, while enlarging the reservoir to increase the water supply available for the Reservoir Ditches and varied stakeholders within the La Plata River Basin. The dam safety branch of the SEO has placed a zero-storage restriction on Redmesa Reservoir beginning March 1, 2021 if engineered plans and specifications are not submitted for review to rehabilitate Redmesa Reservoir. Grant money sought in the 2020 CWCB application will be used for the final engineering, geotechnical analysis, and environmental permitting to comply with the SEO's engineered submittal and deadline.</p>	
<b>Objectives:</b> (List the objectives of the project. (PLEASE DEFINE ACRONYMS).)	
<p>Develop a final Redmesa Reservoir enlargement engineering submittal to comply with the SEO's storage restriction requirements.</p> <ul style="list-style-type: none"><li>• Task 1a – Phase 1: Schematic Design to Verify Site Accommodation</li><li>• Task 1b – Phase 2: Determine Spillway Hazard Classification</li><li>• Task 1c – Phase 3: Surveying &amp; Geotechnical Field Investigations</li><li>• Task 1d – Phase 4: Design Process</li></ul> <p>Complete federal, state, and local permitting documents.</p> <ul style="list-style-type: none"><li>• Task 2a – Phase 1: Section 404 Permitting</li><li>• Task 2b – Phase 2: NEPA Compliance</li></ul>	

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Tasks
Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)
<b><u>Task 1a – Engineering – Phase 1: Schematic Design to Verify Site Accommodation</u></b>
Description of Task:
<p>Phase 1 of the final engineering will assess the existing conditions and geology of the project area and downstream areas of concern. The selected engineer can consider RR&amp;DC's 2020 Final Feasibility Study in finalizing its preliminary schematic design.</p>
Method/Procedure:
<ul style="list-style-type: none"> <li>• Assess downstream hydraulic conditions and identify concern areas</li> <li>• Prepare Computer-aided Design (CAD) model of proposed embankment</li> <li>• Review geologic data</li> <li>• Develop schematic construction costs estimate</li> <li>• Meet with Dam Safety Branch (DSB)</li> </ul>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Final preliminary schematic design for approval by the DSB of the SEO.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
A copy of the final preliminary schematic design.

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Tasks
Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)
<b><u>Task 1b – Engineering – Phase 2: Determine Spillway Hazard Classification</u></b>
Description of Task:
<p>Phase 2 of the final engineering task will use flood models to assess the spillway hazards, survey the project site, and develop mapping of the area to determine the spillway hazard classification and prepare a project design manual.</p>
Method/Procedure:
<ul style="list-style-type: none"> <li>• Prepare Inflow Design Flood (IDF) model for reservoir</li> <li>• Survey existing downstream structures and features</li> <li>• Develop mapping data</li> <li>• Refine embankment design information</li> <li>• Prepare model for spillway probable maximum precipitation (PMP) event</li> <li>• Reclamation Consequence Estimating Methodology (RCEM) analysis</li> <li>• Inundation mapping</li> <li>• Report preparation and delivery to DSB for review.</li> </ul>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Final IDF model, final RCEM analysis, and a determination of the final spillway capacity analysis.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Summary of findings and verification of the spillway hazard classification and development of the project design manual.



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Tasks
Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)
<b><u>Task 1c – Engineering – Phase 3: Surveying &amp; Geotechnical Field Investigations</u></b>
Description of Task:
Phase 3 of the final engineering task will create an existing conditions basemap and stake out the embankment location using survey data gathered in Phase 2. Additionally, the project design manual will be updated per geotechnical field investigations.
Method/Procedure:
<b><i>Survey:</i></b> <ul style="list-style-type: none"><li>• Stake out schematic embankment location</li><li>• Design level survey of area of impact</li><li>• Mapping</li></ul> <b><i>Geotechnical:</i></b> <ul style="list-style-type: none"><li>• DSB review and approval of geotechnical engineer</li><li>• Field investigations</li><li>• Mapping</li><li>• Design reports preparation</li></ul>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Existing conditions basemap, geotechnical report of subsurface conditions, and embankment design criteria.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Copy of the existing conditions basemap, geotechnical report, and an updated version of the project design manual (drainage mitigation, foundation design, and embankment stability analysis).

Last Update: March 17, 2020

<https://cwcb.colorado.gov/>

Tasks
Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)
<b><u>Task 1d – Engineering – Phase 4: Design Process</u></b>
Description of Task:
<p>Phase 4 of the final engineering task will finalize the spillway and embankment design and prepare the associated construction plans, cost estimates, technical specifications, and emergency action plan.</p>
Method/Procedure:
<ul style="list-style-type: none"> <li>• Prepare hydrology/spillway report for PMP event</li> <li>• Analyze water control features</li> <li>• Design embankment zone and foundation and prepare associated report, construction plans, and details</li> <li>• Prepare instrumentation and monitoring plan and details</li> <li>• Prepare cost estimate and technical specifications</li> <li>• Prepare Emergency Action Plan (EAP)</li> <li>• Prepare and submit application package to DSB</li> </ul>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<p>Final set of construction documents including: construction plans, technical specifications, geotechnical analysis, EAP, emergency notification plan for coordination with the National Weather Service and corresponding agencies, instrumentation and monitoring plan, cost estimate, and design embankment zone and foundation with associated report.</p>
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<p>A set of the final construction documents.</p>

Last Update: March 17, 2020

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Tasks
Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)
<b><u>Task 2a – Permitting – Phase 1: Section 404 Permitting</u></b>
Description of Task:
Phase 1 of the permitting task will work to secure a Section 404 individual permit under the Clean Water Act.
Method/Procedure:
<ul style="list-style-type: none"> <li>• Prepare maps and identify limits of project site</li> <li>• Prepare alternative analysis</li> <li>• Prepare a mitigation/monitoring plan</li> <li>• Submit a Jurisdictional Determination (JD) report</li> <li>• Submit pre-construction notification to Army Corps of Engineers (Corps)</li> <li>• Submit 401 certification application</li> <li>• Apply for an “Individual Permit.”</li> </ul>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
JD report, pre-construction notification to the Corps, 401 certification application, and individual permit application.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Copies of the JD report, pre-construction notification to the Corps, 401 certification application, and individual permit application.



Last Update: March 17, 2020

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Tasks
Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)
<b><u>Task 2b – Permitting – Phase 2: NEPA Compliance</u></b>
Description of Task:
Phase 2 of the permitting task will conduct all archeological and biological surveys needed to comply with the National Environmental Policy Act (NEPA).
Method/Procedure:
<ul style="list-style-type: none"><li>• Contract an archaeologist to survey project area and prepare report for compliance with Section 106 of the National Historical Preservation Act (NHPA)</li><li>• Perform Threatened and Endangered and Candidate species survey and prepare report in compliance with Section 7 of the Endangered Species Act (ESA)</li><li>• Possible additional biologic surveys for New Mexico Meadow Jumping Mouse</li><li>• Prepare Environmental Assessment (EA).</li></ul>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
NHPA Section 106 Report, ESA Section 7 Report, and EA.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Copies of NHPA Section 106 Report, ESA Section 7 Report, and EA.

Last Update: March 17, 2020

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## Budget and Schedule

**Exhibit B - 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](#). A separate [excel formatted](#) Budget is required for engineering costs to include rate and unit costs.

## Reporting Requirements

**Progress Reports:** The grantee 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 grantee shall provide the CWCB a Final Report on the grantee'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.

## Payments

Payment will be made based on actual expenditures, must include invoices for all work completed and must be on grantee's letterhead. 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.

The CWCB will pay the last 10% of the entire water activity 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 water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or contract may be denied consideration for future funding of any type from CWCB.

## Performance Requirements

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 Grant Guidelines, the CWCB will pay out the last 10% of the budget when the final deliverable is completed to the satisfaction of CWCB staff. Once the final deliverable has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per the 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 the 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 Supply Reserve Fund

#### EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs

**Date: 7/13/2020**

**Water Activity Name: Redmesa Reservoir Enlargement Final Design and Permitting**

**Grantee Name: Redmesa Reservoir and Ditch Company**

<u>Task No.</u> <sup>(1)</sup>	<u>Description</u>	<u>Start Date</u> <sup>(2)</sup>	<u>End Date</u>	<u>Matching Funds</u> (cash & in-kind) <sup>(3)</sup>	<u>WSRF Funds</u> (Basin & Statewide combined) <sup>(3)</sup>	<u>Total</u>
1a	Engineering - Phase 1: Schematic Design to Verify Site Accommodation	9/14/2020	10/12/2020	\$7,000.00	\$6,500.00	\$13,500
1b	Engineering - Phase 2: Determine Spillway Hazard Classification	11/16/2020	1/18/2021	\$12,500	\$11,000	\$23,500
1c	Engineering - Phase 3: Surveying & Geotechnical Field Investigations	2/15/2021	5/17/2021	\$79,400	\$70,000	\$149,400
1d	Engineering - Phase 4: Design Process	6/14/2021	8/16/2021	\$148,500	\$132,500	\$281,000
2a	Permitting - Phase 1: Section 404 Permitting	9/14/2020	10/12/2021	\$28,500	\$26,500	\$55,000
2b	Permitting - Phase 2 - NEPA Compliance	11/16/2020	1/18/2022	\$31,500	\$28,500	\$60,000
<b>Total</b>				<b>\$307,400</b>	<b>\$275,000</b>	<b>\$582,400</b>

**(1)** The single task that include costs for Grant Administration must provide a labor breakdown (see Indirect Costs tab below) where the total WSRF Grant contribution towards that task does not exceed 15% of the total WSRF Grant amount.

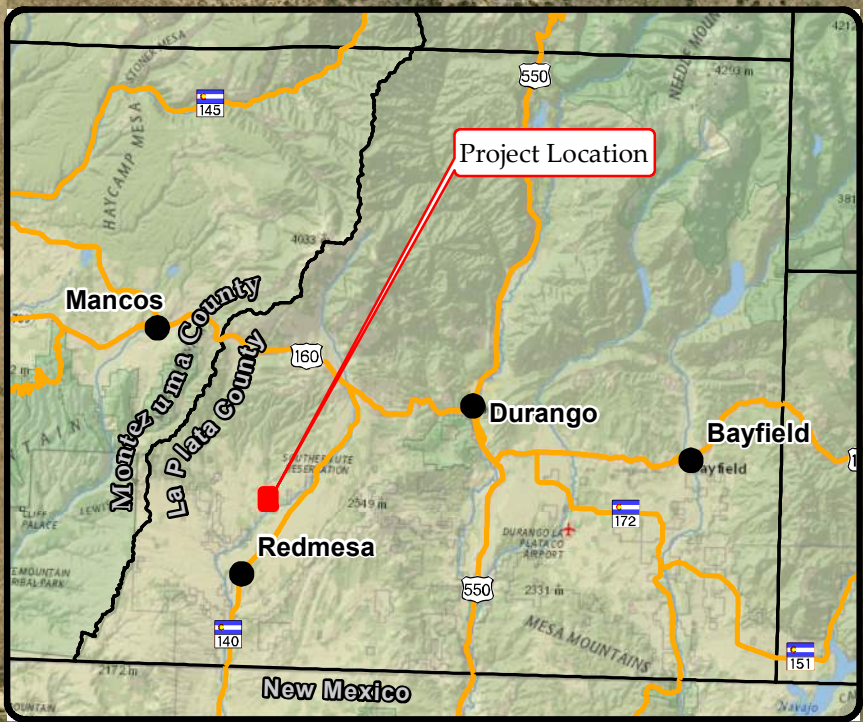
**(2)** Round values up to the nearest hundred dollars.

• Additional documentation providing a Detailed/Itemized Budget may be required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine specifics.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of the CWCB staff project manager. Once the Final Report has been accepted, the final payment has been issued, the water activity and purchase order (PO) or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to the CWCB with 90 days of the expiration of the PO or contract may be denied consideration for future funding of any type from the CWCB.

• Additionally, the applicant shall provide a progress report every 6 months, beginning from the date of contract execution

108°8'30"W



37°10'30"N

37°10'0"N

37°10'30"N

37°10'0"N

**Redmesa  
Reservoir**

**Map Legend**

Existing Water Level at Full Pool

**Inundation Pools**

500 AF Enlargement (77 acres)

900 AF Enlargement (90 acres)

1190 AF Enlargement (102 acres)

State Highway

County Road



**THE SOUTHWESTERN WATER CONSERVATION DISTRICT**

Developing and Conserving the Waters of the  
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES  
IN SOUTHWESTERN COLORADO  
West Building – 841 East Second Avenue  
DURANGO, COLORADO 81301  
(970) 247-1302

March 9, 2020

Trent Taylor  
Redmesa Reservoir & Ditch Company  
3064 CR 119  
Hesperus, CO 81326

*Re: 2020 Reservoir Enlargement Final Engineering*

Dear Mr. Taylor:

Thank you for the application for financial assistance and the presentation to the Southwestern Water Conservation District Board of Directors at the February 13th meeting.

After discussing the merits of the application, the Board voted to approve the grant in the full amount of \$75,000. Enclosed with this letter is a *Document of Understanding* that outlines the conditions of the grant. Please review, sign, and return it at your earliest convenience.

We ask that the Redmesa Reservoir & Ditch Company request the funds when the money is needed in 2020. There is a *Request for Release of Funds* form enclosed that also needs to be signed and sent to our office (or [lauras@swgcd.org](mailto:lauras@swgcd.org)).

If you have any questions, please contact the District office at (970) 247-1302.

Best Regards,

Frank Kugel  
Executive Director