

**Water Supply Reserve Fund
Water Activity Summary Sheet
November 18-19, 2020
Agenda Item 19a**

Applicant & Grantee: Michigan River Water Conservancy District
Water Activity Name: Hydrographic Survey of Meadow Creek Reservoir
Water Activity Purpose: Agricultural - Study
County: Jackson
Drainage Basin: North Platte
Water Source: Meadow Creek Reservoir
Amount Requested: \$11,342 North Platte Basin Account
Matching Funds: Basin Account Match = \$3,780.27
• 25% of Basin Account request (meets 25% min)

Staff Recommendation:
Staff recommends approval of up to \$11,342 from the North Platte Basin Account to help fund the project: Hydrographic Survey of Meadow Creek Reservoir

Water Activity Summary: If approved, grant funds would be used for a Hydrographic Survey of Meadow Creek Reservoir to determine the current volume of water stored in the reservoir. The reservoir has a storage right for 5,000 acre feet, and shares in the reservoir amount to 4,200 acre feet. By identifying how much water the reservoir contains beyond what is already allocated, the applicant will be able to meet other water demands among current and new shareholders. Currently, Meadow Creek Reservoir supplies 3,000 acre feet to irrigated pasture along Michigan Creek, and 1,200 acre feet to the City of Fort Collins for municipal use.

The underwater survey will use hydrographic survey vessels and sonic depth recording equipment interfaced with a real-time GPS that provides continuous sounding positions throughout the underwater portion of the reservoir covered by the survey vessel. The survey system software continuously records reservoir depths and horizontal coordinates as the survey boat moves along closely-spaced grid lines covering the reservoir area. The survey vessels guidance system gives directions to the boat operator to assist in maintaining the course along these predetermined lines.

For the analysis orthographic aerial images will be used from the USDA data web site to find surface areas and develop reservoir contours. This data, along with the hydrographic sonar data are then used to develop storage-elevation relationships using area-capacity computer programming.

Discussion: The applicant suggests this study will assist the North Platte Basin Roundtable and the Water Plan in achieving the goal to enhance and maintain storage within the basin.

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.

Funding Sources/Match	Cash	In-Kind	Total	Status
Michigan River Water Conservancy District	\$3,780.27	\$0	\$3,780.27	Secured
Sub-total Matching Funds	\$3,780.27	\$0	\$3,780.27	
WSRF North Platte Account	\$11,342	\$0	\$11,342	Secured
Total Project Costs	\$15,122.27	\$0	\$15,122.27	

CWCB Project Manager: Ben Wade

Mr. Ben Wade
Program manager
CWCB
Water Supply Planning Section

Ben,

The North Platte Basin Roundtable voted unanimously on September 21st 2020 for the amount of 11,342.00 dollars to come from basin funds to go to the Michigan River Water Conservancy District for the Meadow Creek Reservoir Capacity Study.

This Application is in line with basin goals and state water plan goals to maintain and enhance reservoir storage.

If you have questions please call me at 970-723-4498.

Sincerely
Ty Wattenberg
Basin Chair



Last Update: July 31, 2018

Colorado Water Conservation Board
Water Supply Reserve Fund Grant Application

Instructions
<p>All WSRF grant applications shall conform to the current 2016 WSRF Criteria and Guidelines.</p> <p>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.</p> <p>If you have questions, please contact the WSRF Grant Program Manager (for all Roundtables):</p> <p style="text-align: center;">Craig Godbout 303-866-3441 x3210 (craig.godbout@state.co.usoffice) 303-547-8061 (cell)</p>

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

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



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- (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.

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 2020
Desired Notice to Proceed Date:	January 1, 2021

Water Activity Summary	
Name of Applicant	Michigan River Water Conservancy District
Name of Water Activity	Hydrographic Survey of Meadow Creek Reservoir
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾
North Platte Basin Roundtable	\$11,342.00
Basin Account Request Subtotal	\$ 11,342.00



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Statewide Account Request ⁽¹⁾	\$
Total WSRF Funds Requested (Basin & Statewide)	\$ 11,342.00
Total Project Costs	\$ 15,122.27

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

Grantee and Applicant Information

Name of Grantee(s)	Michigan River Water Conservancy District
Mailing Address	P. O. Box 1100, Walden, CO 80480
FEIN	320078532
Grantee's Organization Contact ⁽¹⁾	Jim Baller
Position/Title	
Email	ballerranch@yahoo.com
Phone	970-819-1382
Grant Management Contact ⁽²⁾	Greg Peterson
Position/Title	Consultant
Email	petersongap@comcast.net
Phone	720-244-4629
Name of Applicant (if different than grantee)	
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).

Michigan Creek Water Conservancy District provides water for irrigation and also serves as the supply for transbasin diversions via exchange through Michigan Ditch. The Conservancy District operates Meadow Creek Reservoir, which is an off-channel reservoir constructed in the early 1980's and is primarily filled from Squibob Ditch from the Michigan River. The reservoir supplies water for nine downstream ditches, and an additional nine upstream ditches have historically diverted reservoir water via exchange from Meadow Creek Reservoir.



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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: are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
	Non-governmental organizations: broadly, any organization that is not part of the government
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes

Type of Water Activity (check one)	
X	Study
	Implementation

Category of Water Activity (check all that apply)	
	Nonconsumptive (Environmental)
	Nonconsumptive (Recreational)
X	Agricultural
	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 decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Countries	Jackson County
Latitude	40.617935
Longitude	-106.081538

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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.

The project is a Gross Reservoir Hydrographic Survey of Meadow Creek Reservoir to determine the current volume of water stored in the reservoir. The reservoir has a storage right for 5,000 AF, and shares in the reservoir amount to 4,200 AF. By identifying how much water the reservoir contains beyond what is already allocated, the Conservancy District will be able to meet other water demands among current and new shareholders. Currently, Meadow Creek Reservoir supplies 3,000 AF to irrigated pasture along Michigan Creek, and 1,200 AF to the City of Fort Collins for municipal use.

Measurable Results

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

	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
4,200	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)
	Length of Pipe/Canal Built or Improved (linear feet)
	Other Explain:

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](#) ⁽¹⁾. 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](#)).

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The State Water Plan and Technical Update show that there are and will be considerable gaps in water supply for irrigation and other uses. One of the greatest tools for meeting these gaps is the development of water storage, and the optimization of the current storage facilities we have throughout the state. The North Platte Basin Implementation Plan (BIP) also calls for maximizing consumptive use of water for irrigated acreage and storage for irrigation permitted in the Equitable Apportionment Decree.

Meadow Creek Reservoir may be able to provide additional water resources to current or future stakeholders through a storage capacity study. Once a study is completed, any additional water identified can then be put to beneficial use. Even in years with above average annual streamflow, there are already large shortages of water for crop consumptive use in the basin. The average annual Ag water gap is 85,700 acre-feet (Technical Update – Ag Demands, 6) In drought years, shortages of water supply can increase to 60 percent of normal (BIP, 31-32)

It is also likely that in most future scenarios, the basin will need increased supplies of water resources to meet the growth of irrigated acreage and increasing temperatures. There may be an additional 10,600 irrigated acres by 2050 in the basin. Climate impacts may increase agricultural demands and the Ag water gap by 8 to 14 percent (Technical Update, 113).

Utilizing more water from Meadow Creek Reservoir can take advantage of storage already built to address current and future shortages of water for irrigation. This would not surpass the amount of storage for irrigation permitted under the Equitable Apportionment Decree.

(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 3rd 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)
Michigan River Water Conservancy District	\$3,780.27
Total Match	\$ 3,780.27



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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 3rd 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):
Total Match	\$
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.

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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



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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.



Colorado Water Conservation Board	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	
Water Activity Name:	Hydrographic Survey of Meadow Creek Reservoir
Grant Recipient:	Michigan River Conservancy District
Funding Source:	North Platte Basin Roundtable
Water Activity Overview: (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.)	
The project is a Gross Reservoir Hydrographic Survey of Meadow Creek Reservoir to determine the current volume of water stored in the reservoir. The funds will be used to complete a hydrographic survey by Survey Systems.	
Objectives: (List the objectives of the project)	
<ul style="list-style-type: none"> • Complete hydrographic survey of Meadow Creek Reservoir to determine volume of water 	

Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 - (Hydrographic Survey of Meadow Creek Reservoir)</u>
Description of Task:
A gross reservoir hydrographic survey will be completed by Survey Systems to develop updated reservoir topography and compute the present striate -elevation relationship (area-capacity tables).
Method/Procedure:
The underwater survey will use hydrographic survey vessels and sonic depth recording equipment interfaced with a real-time 9RTK) global positions systems (GPS) that provides continuous sounding positions throughout the underwater portion of the reservoir covered by the survey vessel. The survey system software continuously records reservoir depths and horizontal coordinates as the survey boat moves along closely-spaced grid lines covering the reservoir area. The survey vessels guidance system gives directions to the boat operator to assist in maintaining the course along these predetermined lines.
For the analysis orthographic aerial images will be used from the USDA data web site to find surface areas and develop reservoir contours. These data, along with the hydrographic sonar data are then used to develop storage-elevation relationships using area-capacity computer programming.



Tasks
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<ul style="list-style-type: none"> • Reservoir topography • Computed area-capacity relationships • Estimated storage
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<ul style="list-style-type: none"> • Hydrographic Survey Report of Meadow Creek Reservoir by Survey Solutions

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 <u>excel format</u> . A separate <u>excel formatted</u> 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: <ul style="list-style-type: none"> • 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 <u>entire</u> 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



Reporting 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.

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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: November 2020

Water Activity Name: Meadow Creek Reservoir Survey

Grantee Name: MRWCD

<u>Task No.</u> ⁽¹⁾	<u>Description</u>	<u>Start Date</u> ⁽²⁾	<u>End Date</u>	<u>Matching Funds</u> (cash & in-kind) ⁽³⁾	<u>WSRF Funds</u> (Basin & Statewide combined) ⁽³⁾	<u>Total</u>
1	Hydrographic Survey of Meadow Creek Reservoir	1-Jan-21		\$3,780.27	\$11,342.00	\$15,122.27
Total				\$3,780.27	\$11,342	\$15,122.27

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.

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



Meadow Creek Reservoir



Imagery ©2020 Landsat / Copernicus, Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2020 2000 ft



Meadow Creek Reservoir

4.7 ★★★★★ (27)

Lake

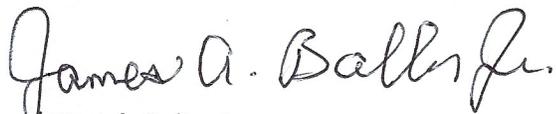
Colorado Water Conservation Board
1313 Sherman St., Room 718
Denver, CO 80203

RE: Letter of Matching Funding

To Whom It May Concern:

On behalf of the Michigan River Water Conservancy District, we intend to match \$3,780.27 (Cash match) to Colorado Water Conservation Board grant application Hydrographic Survey of Meadow Creek Reservoir.

Sincerely,

A handwritten signature in cursive script that reads "James A. Baller Jr.".

James A. Baller Jr.

Michigan River Water Conservancy District
P.O. Box 13
Walden, CO 80480