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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 approved 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 current CWCB staff Roundtable liaison:

Arkansas	**Gunnison | North Platte | South Platte | Yampa/White**	**Colorado | Metro | Rio Grande | Southwest**
Ben Wade	Craig Godbout	Megan Holcomb
ben.wade@state.co.us	craig.godbout@state.co.us	megan.holcomb@state.co.us
303-866-3441 x3238	303-866-3441 x3210	303-866-3441 x3222

WSRF Submittal Checklist (Required)

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

(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:	March 2020
Desired Notice to Proceed Date:	ASAP

Water Activity Summary	
Name of Applicant	Colorado State University (CSU) / Colorado Climate Center (CCC)
Name of Water Activity	Continuation of Weather Stations for North Park lysimeters to determine high altitude, hay meadow crop coefficients.

Approving Roundtable(s)	Basin Account Request(s)(1)
North Platte	$17,884
Basin Account Request Subtotal	$17,884
Statewide Account Request(1)	$
Total WSRF Funds Requested (Basin & Statewide)	$17,884
Total Project Costs	$22,355

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

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Grantee and Applicant Information	
Name of Grantee(s)	Colorado State University
Mailing Address	Sponsored Programs 601 S. Howes St. 2002 Campus Delivery Fort Collins, CO 80523-2002
FEIN	84-6000545
Grantee's Organization Contact(1)	Lisa Anaya
Position/Title	Senior Research Administrator
Email	lisa.anaya@colostate.edu
Phone	970-491-0537
Grant Management Contact(2)	Russ Schumacher & Zach Schwalbe
Position/Title	Colorado State Climatologist/CoAgMET Manager
Email	russ.schumacher@colostate.edu / zach.schwalbe@colostate.edu
Phone	970-491-8140
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).
The Colorado Climate Center was established by the state in 1974 through the Colorado State University Agricultural Experiment Station to provide information and expertise on Colorado's complex climate. Through its program of Climate Monitoring, Climate Research and Climate Services, the center is responding to many climate related questions and problems affecting the state today. One way the Center monitors the climate is through the CoAgMet Network. A network of 87 stations statewide tracking agricultural weather and Colorado's climate. The Climate Center is located at Colorado State University within the Department of Atmospheric Science.

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Type of Eligible Entity (check one)	
X	**Public (Government):** municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
	Public (Districts): authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises
	Private Incorporated: mutual ditch companies, homeowners associations, corporations
	Private Individuals, Partnerships, and Sole Proprietors: 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	
X	Needs Assessment	
X	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/Counties	Jackson County
Latitude	40.716
Longitude	-106.278

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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.
In 2016, two Lysimeters were installed adjacent to the Cowdrey CoAgMET station to better quantify consumptive use in the North Platte Basin. Due to unforeseen issues with the lysimeters prevented quality data to be collected for the first two years of the project. In order to collect enough quality data, this project needs at least three more years of data collection. The CoAgMET weather stations are used to calculate ASCE Reference ET, while the lysimeters collect actual consumptive use. The data from each are then compared and used to calculate crop coefficients for hay meadow environment. This grant will continue the maintenance and operation of the three CoAgMET stations. Annual visits to the weather stations will be made in the spring to ensure the stations are functioning properly and replace bearings for wind monitors. Every other year temperature/relative humidity sensors and pyranometers (solar radiation) will be replaced and calibrated. Other maintenance visits will be completed to fix issues that may arise between scheduled visits. Wendy Ryan, with Colorado River Engineering, will maintain the lysimeters and calculate the consumptive use and crop coefficients.

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	
	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	
X	Other	Explain: Updated Crop Coefficients to better estimate crop consumptive use.

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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 (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).
This project will help sustain agriculture in the basin by better understanding the crop water use requirements from irrigated hay meadows in North Park. Once a better handle on crop consumptive use is understood, it may have an impact on the compact with Wyoming about the consumptive use of irrigated meadows in the basin. While this project will not run the lysimeters, the weather stations are an intrigal part of quantifying crop consumptive use by comparing the lysimeters data from the calculated data. Calculated data can then be modified to match the consumptive use of the lysimeters.

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

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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)
CSU UIC	$4,471.00 (cash)
Total Match	$4,471.00 (cash)
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	

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):
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	

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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.

The CoAgMET network currently has a similar project with the Yampa-White-Green roundtable to run lysimeters adjacent to the CoAgMET station at the Carpenter Ranch in Hayden. This project has the same goal to assess crop coefficients for high elevation hay meadows.

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

1) CSU
2) Colorado Agricultural Meteorological Network (CoAgMet)/ Colorado Mesonet Enhancements
3) Info
4) Info
5) CT PDAA 2018-00991

1) CSU
2) CWCB Mesonet FY19
3) Info
4) Info
5) CT PDAA 2019-002684

1) CSU
2) Re-establishment of Lysimeters in North Park to Determine High Altitude, Hay Meadow Crop Coefficients
3) Info
4) Info
5) CTGG1 2015-2323

1) CSU
2) CWCB Mesonet FY20
3) Info
4) Info
5) POGG1,PDAA,2020000002256

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.

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BUDGET

	P1(04/01/2020 - 03/31/2021)	P2(04/01/2021 - 03/31/2022)	P3(04/01/2022 - 03/31/2023)	Totals
Personnel				
Salary	$3,133.96	$3,227.98	$3,324.82	$9,686.76
Fringe	$899.45	$926.43	$954.22	$2,780.10
Personnel Subtotal	$4,033.41	$4,154.41	$4,279.04	$12,466.86
Non-personnel				
Other Direct	$1,028.20	$1,028.20	$1,028.20	$3,084.60
Non-personnel Subtotal	$1,028.20	$1,028.20	$1,028.20	$3,084.60
CSU Totals				
Total Direct Cost	$5,061.61	$5,182.61	$5,307.24	$15,551.46
Total F&A Costs	$759.24	$777.39	$796.09	$2,332.72
Totals Subtotal	$5,820.85	$5,960.00	$6,103.33	$17,884.18
Basin Account Match (25%)*	$1,455.21	$1,490.00	$1,525.83	$4,471.05
TOTAL	$7,276.06	$7,450.00	$7,629.16	$22,355.23
*Contributing entity is CSU unrecovered indirect (UIC)				

Water Supply Reserve Fund
Water Activity Summary Sheet
March 11-12, 2020
Agenda Item 23(x)

Applicant & Grantee:	Colorado State University – Colorado Climate Center
Water Activity Name:	Continuation of Weather Stations for North Park Lysimeters to determine high altitude, hay meadow crop coefficients.
Water Activity Purpose:	Agricultural
County:	Jackson
Drainage Basin:	North Platte
Water Source:	n/a
Amount Requested:	$17,844 North Platte Basin Account
Matching Funds:	Applicant Match (cash) = $4,471 • 25% of the Basin Account request (meets 25% min)

Staff Recommendation:

Staff recommends approval of up to $17,844 from the North Platte Basin Account to help fund the project: Continuation of Weather Stations for North Park Lysimeters to determine high altitude, hay meadow crop coefficients.

Water Activity Summary: WSRF Funds, if approved will assist Colorado State University operate weather stations in North Park to compliment the efforts of the North Platte Basin Roundtable and Colorado River Engineering's lysmeters operations and data collection and reporting (agenda item 23(y)) to better understanding the crop water use requirements from irrigated hay meadows.

Discussion: This effort will assist the North Platte Basin Roundtable meet the Goal #1: Maintain and maximize the consumptive use of water permitted in the Equitable Apportionment Decree and the baseline depletion allowance of the Three State Agreement as described in their Basin Implementation 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.

Funding Sources/Match	**Cash**	**In-kind**	**Total**	**Status**
Colorado State University	$4,471	$0	$4,471	Secured
WSRF North Platte Basin Account	$17,844	$0	$17,844	Secured
Total Project Costs	$22,315	$0	$22,315	

CWCB Project Manager: Craig Godbout

Dear Craig,

On January 21, 2020 the North Platte Basin Roundtable voted unanimously to allow the WSRF Grant from Colorado Climate Center at CSU, to keep the weather stations running for the Re-Establishment of lysimeters in North Park, to determine high altitude hay meadow crop coefficients.

The Grant amount is for $17,884.00 dollars, to be funded from the North Platte Basin Account. This grant is in compliance with our BIP goals.

Thank you,

Ty Wattenberg

Chair