

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

Applicant & Grantee: Huerfano County Water Conservancy District
Water Activity Name: Maria Stevens Reservoir 50% Design
Water Activity Purpose: Multi-Purpose
County: Huerfano
Drainage Basin: Arkansas
Water Source: Cucharas River
Amount Requested: \$17,500 Arkansas Basin Account
Matching Funds: Applicant & 3rd Party Match (cash) = \$53,072
• 303% of the Basin Account request (meets 25% min)

Staff Recommendation:
Staff recommends approval of up to \$17,500 from the Arkansas Basin Account to help fund the project: Maria Stevens Reservoir 50% Design.

Water Activity Summary: WSRF Funds, if approved will assist Huerfano County Water Conservancy District develop a 50% design development package for Maria Stevens Reservoir Project which will include: geotechnical analyses typical of 50% designs for small dams in Colorado; hydrologic analysis of the dam site per DWR Dam Safety Rules & Regulations; developing 50% design drawings for Bruce Canyon dam; working with Colorado Dam Safety Branch to address their informal input on dam design; and presentation of 50% design to the Cucharas Basin Storage Collaborative group.

Discussion: This effort will assist the Arkansas Basin Roundtable meet the Goals and Measurable Outcomes as described in their Basin Implementation Plan by providing 1,406 acre feet of new storage and will also assist the State of Colorado achieve additional; storage goals as called for in Colorado's Water Plan.

Issues/Additional Needs: The applicant shall submit all outstanding letters of matching commitment prior to entering into a grant contract with the state, otherwise there are no issues or additional needs.

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
Huerfano County Water Conservancy District	\$4,375	\$0	\$4,375	Pending
Maria Lake Grazing Association	\$5,411	\$0	\$5,411	Secured
Huerfano County	\$4,000	\$0	\$4,000	Secured
Colorado Water Plan Grant	\$39,286	\$0	\$39,286	Pending
Sub-total	\$53,072	\$0	\$53,072	
WSRF Arkansas Basin Account	\$17,500	\$0	\$17,500	Secured
Total Project Costs	\$70,572	\$0	\$70,572	

CWCB Project Manager: Craig Godbout

Arkansas Basin Roundtable

January 28, 2020

Via Electronic Mail: ben.wade@state.co.us

Mr. Ben Wade
Colorado Water Conservation
Board 1313 Sherman Street,
Room 721
Denver, CO 80203

Re: Water Supply Reserve Fund Grant Application: Huerfano County Water Conservancy District (HCWCD) Partial Match for CWP Grant for 50 Percent Design of Maria Stevens Reservoir Enlargement


Dear Ben:

At its January 8, 2020 meeting, the Arkansas Basin Roundtable (ABRT) approved support of a grant for \$17,500 in Basin funds for the Huerfano County Water Conservancy District (HCWCD) CWP Grant for 50 Percent Design of Maria Stevens Reservoir Enlargement. The applicant is providing \$4,375 in matching funds.

This project directly supports the shared Colorado Water Plan and the Arkansas Basin Implementation Plan objective of developing additional water storage to meet Basin and Statewide water needs.

This project develops 642 a.f. of new storage by increasing storage at the existing dam for the Maria Stevens Reservoir to minimize environmental impacts and associated permitting hurdles. The storage generated will provide opportunities for multiple entities within the Cucharas Basin Storage Collaborative, including storage for agriculture, municipal and industrial use for a basin population of approximately 5,300 people, plus non-consumptive needs including fishing and non-motorized boating. The ABRT approved supporting this application by consensus and there were no dissenting views.

Should you have any questions or concerns, please feel free to contact me either by telephone, 719-668- 8028, or by email, mshea@csu.org.



Mark Shea
Chair

Copy via email: Applicant; Abby Ortega, Needs Assessment Chair



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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

Ben Wade
ben.wade@state.co.us
303-866-3441 x3238

Gunnison | North Platte | South Platte | Yampa/White

Craig Godbout
craig.godbout@state.co.us
303-866-3441 x3210

Colorado | Metro | Rio Grande | Southwest

Megan Holcomb
megan.holcomb@state.co.us
303-866-3441 x3222

WSRF Submittal Checklist (Required)

pending	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

(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.



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(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:	March
Desired Notice to Proceed Date:	May

Water Activity Summary	
Name of Applicant	Huerfano County Water Conservancy District
Name of Water Activity	Partial match for CWP grant for 50% Design of Maria Stevens Reservoir Enlargement (MSRE), a Cucharas Basin Storage Collaborative facility
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾
Arkansas Basin	17,500
Basin Account Request Subtotal	\$ 17,500
Statewide Account Request ⁽¹⁾	\$ 0
Total WSRF Funds Requested (Basin & Statewide)	\$ 17,500
Total Project Costs	\$ 21,875



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

Grantee and Applicant Information	
Name of Grantee(s)	Huerfano County Water Conservancy District
Mailing Address	PO Box 442 La Veta, CO 81055
FEIN	84-0935026
Grantee's Organization Contact ⁽¹⁾	Scott King
Position/Title	President
Email	slking@centurylink.net
Phone	719-742-3124
Grant Management Contact ⁽²⁾	Carol Dunn
Position/Title	Administrator
Email	hcwcdistrict@gmail.com
Phone	719-742-5581
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).
<p>The Huerfano County Water Conservancy District (HCWCD or District), formed by court decree in 1971, responds to local and regional needs by protecting and stabilizing the Huerfano County water resources, including the Huerfano and Cucharas Rivers, tributary streams and groundwater. The District participates in the Cucharas Basin Storage Collaborative, including federal, state and local agencies and water users. The purpose of the Collaborative is to identify the most effective manner of meeting storage needs within the basin, including the construction of new storage or the rehabilitation/enlargement of existing storage structures.</p>



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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)		
X	Nonconsumptive (Environmental)	
X	Nonconsumptive (Recreational)	
X	Agricultural	
X	Municipal/Industrial	
	Needs Assessment	
	Education & Outreach	
X	Other	Explain: The water rights sought for this reservoir and associated exchanges seek the following uses: municipal; irrigation; stock watering; fire protection and suppression; domestic; commercial; industrial; recreation; fish and wildlife preservation and propagation; support and creation of wetlands.

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	Huerfano
Latitude	37.6682
Longitude	-104.6787



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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.

Major Cucharas River water users formed Cucharas Basin Storage Collaborative to identify and construct cost-effective water storage. With assistance of WSRF and WPG funding plus local matches, the Collaborative has quantified basin storage needs, conducted a yield analysis with DSS-consistent modeling, evaluated 50+ potential storage sites, reduced those to 15, selected five preferred sites, and completed their feasibility level design. In 2017, a water court application for storage and exchange rights was filed (March 2020 trial).

At the end of 2019, 30% design was completed for three sites. Two will be advanced to 50% design. They are a new 1,406 a.f. Bruce Canyon Reservoir (seeking 2020 WSRF funding) and the 642 a.f. enlargement of existing Maria Stevens Reservoir (MSRE).

For 50% design of MSRE, costing \$70,572, the Collaborative seeks 2020 CWP funding of \$35,286. This application seeks WSRF basin funding of \$17,500 to be used as part of the match for that CWP grant.

MSRE 50% design project includes: geotechnical analyses typical of 50% designs for small Colorado dams; hydrologic analysis of dam site per DWR Dam Safety Regulations; developing 50% design drawings for MSRE; working with Colorado Dam Safety Branch to address informal input on dam design; presenting 50% design to the Collaborative.

Measurable Results

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

642	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
2,101	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	
	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](#)⁽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 application is all about storage – enlargement of the existing Maria Stevens Reservoir. Storage has been a major theme in local, regional (Roundtable) and State (Colorado Water Plan) water planning.

Local. In 2013 the Division Engineer recommended that a shortage of storage in the Cucharas River basin could be resolved by collaborative storage projects. Leading up to the formation of the Cucharas Basin Storage Collaborative in 2015, an investigation by HCWCD concluded that, since WWII, the basin had lost 70% of its storage capacity. Further study by the Collaborative demonstrated in 2017 that the storage gap in the Cucharas basin was about 2,000 a.f. for municipal uses and about 15,000 a.f. for agriculture.

Roundtable. In April 2015, the Arkansas Basin Implementation Plan concluded, "Increasing available storage is seen as fundamental to all solutions to the Arkansas Basin's needs." *Executive Summary, p. 9.* Its first priority was, "Increasing available storage." *Sec. 1, p. 5.* Its primary theme was "Increased water storage ... capacity is critical to all solutions." *Sec. 1, p. 6.* Finally, its storage goal was to "Increase surface storage available within the basin by 70,000 acre-feet by the year 2020." *Sec. 1, p. 10.*

Statewide. The Colorado Water Plan (2015) contains similar goals:

- Key measurable objective of "attaining 400,000 ac-ft of water storage to manage and share conserved water and the yield of IPPs by 2050." *Section 10.2 (Measurable Objectives and Adaptive Management), p. 10-6.*
- Storage is a critical goal identified in Section 10.3 (Critical Goals and Actions), p. 10-11. It stresses prioritizing grants to support implementation of BIP-identified multipurpose storage projects."

This project, identified in the Arkansas BIP (ARK-2015-007), develops 642 a.f. of new storage by increasing storage at the existing dam for the Maria Stevens Reservoir (to minimize environmental impacts and associated permitting hurdles). The storage generated will provide opportunities for multiple entities within the Cucharas Basin Storage Collaborative, including storage for agriculture, municipal and industrial use for a basin population of approximately 5,300 people, plus non-consumptive needs including fishing and non-motorized boating.

(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)
Huerfano County Water Conservancy District	\$ 4,375
Total Match	\$ 4,375
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):
Total Match	\$
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.

- Cucharas Basin Collaborative Storage Study, June 2017, Parsons Water and Applegate Group, Inc. This study describes the modeling used to determine storage needs in the Cucharas Basin and reconnaissance level study and screening of potential storage sites. Final recommendations were to complete a reconnaissance level geotechnical investigation of five potential/enlargement storage projects.
- Geotechnical Evaluation, Cucharas Basin Collaborative Storage, Huerfano County, November 27, 2018, Cesare, Inc. This study describes the reconnaissance level geotechnical investigation results for the five sites recommended in the June 2017 Cucharas Basin Collaborative Storage Study. It included field investigations, site-specific geotechnical drilling, and laboratory analyses.
- Geotechnical Evaluation, Cucharas Basin Collaborative Storage, Huerfano County, November 7, 2019, Cesare, Inc. This study added more detailed geotechnical investigation results for two sites recommended in the June 2017 Cucharas Basin Collaborative Storage Study. It included additional site-specific geotechnical drilling and laboratory analyses.

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

- WSRF 2015 grant. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Cucharas Basin Collaborative Storage Study. Approving RT: Arkansas. CWCB board meeting date: September 2015. Contract #: CTGG1 2016-1053.
- WSRF 2018 grant. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Cucharas Collaborative Storage Study Geotechnical Investigation. Approving RT: Arkansas. CWCB board meeting date: March 2018. Contract #: POGG1,PDAA,201800000917.
- WSRF 2019 grant. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Cucharas Collaborative Storage Phase 3. Approving RT: Arkansas. CWCB board meeting date: March 2019. Contract #: POGG1,PDAA, 201900002916.
- WRP 2019 grant. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Collaborative Storage 30 percent Design. Approving RT: Arkansas. CWCB board meeting date: March 2019. Contract #: POGG1,PDAA,202000000010.

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.

There are no relevant TABOR issues affecting the applicant.



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<u>Colorado Water Conservation Board</u>	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	November 22, 2019
Water Activity Name:	Partial match for CWP Grant for 50% Design of Maria Stevens Reservoir Enlargement
Grant Recipient:	Huerfano County Water Conservancy District
Funding Source:	WSRA account
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.)	
<p>Major Cucharas River water users formed the Cucharas Basin Storage Collaborative to identify and construct cost-effective water storage for their needs. With the assistance of WSRF and WPG funding plus local match, the Collaborative has quantified storage needs, conducted a yield analysis with DSS-consistent modeling, evaluated 50+ potential storage sites, and conducted feasibility level design on five preferred sites. In 2017, a water court application for storage and exchange rights was filed (March 2020 trial).</p> <p>At the end of 2019, 30% design was completed on three of the preferred sites. Two have been selected for 50% design. They are 1,406 a.f. Bruce Canyon Reservoir and the subject of this application, 642 a.f. enlargement of existing Maria Stevens Reservoir (seeking 2020 CWP funding).</p> <p>For this WSRF project phase, 30% design will be advanced to 50% design for Maria Stevens Reservoir enlargement. The 50% design project will include: geotechnical analyses typical of 50% designs for small Colorado dams; hydrologic analysis of the dam site per DWR Dam Safety Rules & Regulations; developing 50% design drawings for Maria Stevens Reservoir enlargement; working with Colorado Dam Safety Branch to address their informal input on dam design; presentation of 50% design to the Collaborative group.</p>	
Objectives: (List the objectives of the project)	



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The objectives of the project are as follows:

- Complete 50% design and geotechnical analysis for the proposed enlargement of Maria Stevens Reservoir. The in-progress 30% design will be utilized as a starting point.
- Create a list of construction specifications that will be needed in the final design.
- Identify the need for any additional geotechnical field work that would be needed between 50% and final design.
- Determine the required spillway dimensions based on DWR Dam Safety Rules and Regulations to be effective January 1, 2020.
- Meet with and obtain input from the Colorado Dam Safety Branch on the 50% design prior to initiating final design.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 – Geotechnical Analyses</u>
Description of Task:
Complete detailed geotechnical analyses to determine soil mechanics parameters that will impact design of the proposed dam enlargement. An analysis of the potential for differential settlement is needed to determine the potential impacts on the enlarged embankment. The stability of design embankment slopes will also be evaluated.
Method/Procedure:
<ul style="list-style-type: none">• Complete laboratory analysis using samples previously collected to determine the following soil mechanics parameters for borrow material at both sites: direct shear strength, tri-axial shear strength, permeability, and dispersion. Additional analysis will be completed for the Maria Stevens Reservoir site based on the existing soft soils and the potential for differential settlement (i.e., consolidation and strength testing). The additional analysis for the Maria Stevens Reservoir will consist of consolidation and strength testing.• Model embankment stability for the 50 percent design using geotechnical engineering software.



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Tasks
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
The final deliverable for HCWCD under this task will consist of a standalone geotechnical report summarizing results of the completed analyses and the related recommendations that impact the 50 percent dam designs.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task).
Copy of the standalone geotechnical report included in the Grantee Deliverable above.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 – Hydrologic Analysis</u>
Description of Task:
A hydrologic evaluation of the drainage basins for the reservoir site is needed to determine the inflow design flood (IDF) and how that IDF is routed through the enlarged reservoir. This information is needed in order to determine the necessary freeboard as well as the emergency spillway dimensions.
Method/Procedure:
The Inflow Design Flood (IDF) will be determined using the latest State guidance, including the recently released Regional Extreme Precipitation Study (REPS) tool. The IDF will be routed through the proposed reservoir and spillway to determine the required spillway capacity in accordance with Dam Safety Rules and Regulations. The Army Corps of Engineers' HEC-HMS model platform will be used to analyze the IDF and route the IDF through the proposed enlarged reservoir.



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Tasks
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
The final deliverable for this task will be the submittal of a hydrology report to the Dam Safety Branch for review and approval. This report will be used to inform the 50% design described in the following task.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Copy of the hydrology report included in the Grantee Deliverable above.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 3 – 50 Percent Design</u>
Description of Task:
Design drawings will be advanced to the 50 percent design level, which generally means that more construction details will be provided for the primary design components. The 30 percent design will be used as the starting point for this task and will be updated to 50 percent. Construction specifications to be used in the final design will be listed. A 50 percent design level Engineer's Opinion of Probable Cost will be developed. This task will also include meeting with the Dam Safety Branch to get their input on project components, which are typically nailed down at this 50 percent design level.
Method/Procedure:
<ul style="list-style-type: none">• Incorporate additional geotechnical data collected in summer 2019 into the 30 percent design (i.e., depth to and permeability of bedrock at the abutment locations).• Modify 30 percent designs based on input received from the State Engineer's Office during the 30 percent design process.• Incorporate construction details for key dam structures (e.g., spillway, low-level control, outlet, and seepage control features), and refine estimates for embankment volume and construction costs.• Draft construction specifications (i.e. table of contents) that will be completed during 90 percent design. Note that this task does not include developing project specifications, but will identify the necessary specifications that will be completed at later design stages.• Develop a 50 percent design level cost estimate.



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Tasks
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
The final deliverable for this task will be 50 percent design drawings, a list of construction specifications to be fully developed at 90 percent, and a 50 percent design level cost estimate. Note that the final deliverable will include resolution of feedback received from the Dam Safety Branch during our informal meetings to discuss the 50 percent design.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Copy of the 50 percent design drawings, construction specifications list, and 50 percent design level cost estimate included in the Grantee Deliverable above.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 4 – Present Results at Cucharas Basin Storage Collaborative Meeting</u>
Description of Task:
Results of the 50 percent geotechnical analyses and design work will be presented at a Cucharas Basin Storage Collaborative meeting in Huerfano County.
Method/Procedure:
A Powerpoint presentation will be given to the Cucharas Collaborative Storage group, and discussion will be held with stakeholders regarding the technical design and cost estimate.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
A Powerpoint presentation will be provided to the Cucharas Basin Storage Collaborative group as the final deliverable.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
An executive summary summarizing the 50 percent design will be prepared for CWCB.



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Tasks
Provide a detailed description of each task using the following format:
<u>Task 5 – HCWCD Administration</u>
Description of Task:
Using a qualified person, ensure the timely accomplishment of contract tasks and the submission of required reports under the grant contract.
Method/Procedure:
In light of the limited resources of the applicant, contract administration will be primarily handled by the regular part-time Administrator, who has successfully administered other CWCB grants and loans for the District. The time requirements of administration of this grant far exceed the District Administrator's time for which she is now compensated. The amount budgeted for this task will be used to compensate the Administrator for additional time spent on this grant.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Timely submission of all reports and deliverables required by the grant contract.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Reporting: The applicant shall provide the CWCB with a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.
Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.



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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.

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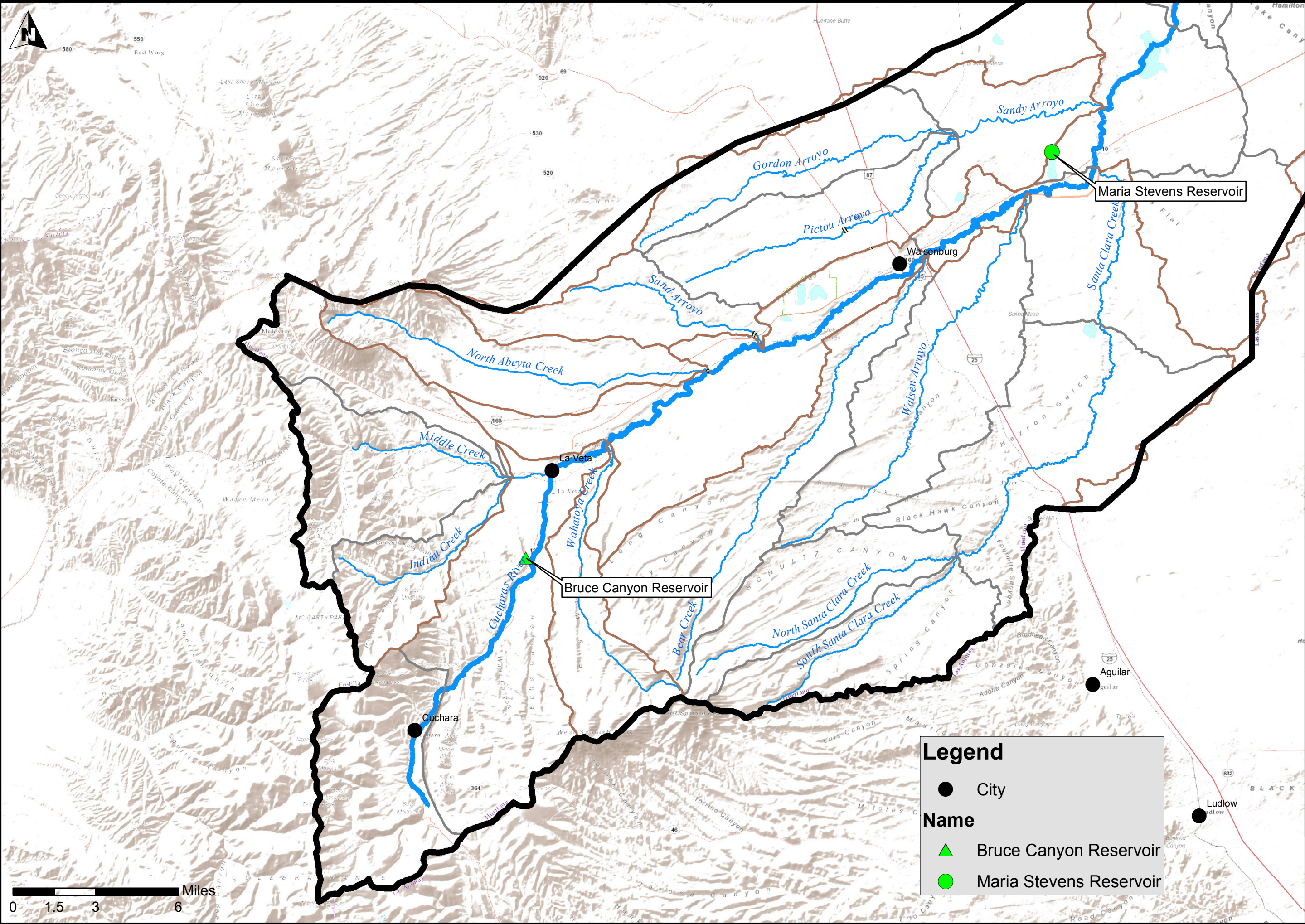


Exhibit C
MAP: 50% Design of Bruce Canyon Reservoir and Maria Stevens Reservoir Enlargement

	Date: 19Nov2019			
	Job #: 18-117			
	Drawn By: SAS			
		No.	Rev. Date	Revision Description

Legend

- Cucharas River
- Duran Ditch
- Highway 10 and County Road 120
- Maria Stevens Reservoir

Maria Stevens Reservoir, 2743 ac-ft (642 ac-ft Enlargement)