



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources  
1313 Sherman Street, Room 718  
Denver, CO 80203

WSRF Grant – Arkansas – Bruce Canyon Reservoir  
Project  
POGG1 2020-2982

April 2, 2020

Huerfano County Water Conservancy  
District  
Attn: Scott King, President  
P.O. Box 442  
La Veta, CO 81055

Dear Grantee:

We are pleased to inform you that the Colorado Department of Natural Resources, Colorado Water Conservation Board (CWCB) has approved your request for funding for your project pursuant to the WSRF Grant Program (“Program”). This letter authorizes you to proceed with the project in accordance with the terms of this Grant Award Letter.

Attached to this letter are the terms and conditions of your Grant. Please review these terms and conditions, as they are requirements of this Grant to which you, Huerfano County Water Conservancy District, agree by accepting the Grant Funds.

If you have any questions or concerns regarding the project, please contact Craig Godbout, Project Manager at 303-866-3441 or at [Craig.Godbout@state.co.us](mailto:Craig.Godbout@state.co.us). Please send all grant correspondence directly to the project manager and cc me on your invoice billing requests.

Thank you.

Sincerely,

//s//

**Doriann Vigil**  
**Program Assistant II**  
O 303-866-3441 ext. 3250  
1313 Sherman Street, Rm. 719, Denver, CO 80203  
[Dori.vigil@state.co.us](mailto:Dori.vigil@state.co.us) / [cwcb.state.co.us](http://cwcb.state.co.us)

Cc: Carol Dunn, Administrator





**STATE OF COLORADO**  
Department of Natural Resources

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<b>ORDER</b>		<b>*****IMPORTANT*****</b>				
<b>Number:</b>	POGG1,PDAA,202000002982	The order number and line number must appear on all invoices, packing slips, cartons, and correspondence.				
<b>Date:</b>	4/1/20	<b>BILL TO</b>				
<b>Description:</b>	WSRF Huerfano WCD Bruce Canyon Res 50% Design	COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
<b>Effective Date:</b>	06/01/20	<b>SHIP TO</b> COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
<b>Expiration Date:</b>	09/30/21					
<b>BUYER</b>		<b>SHIPPING INSTRUCTIONS</b>				
<b>Buyer:</b>		<b>Delivery/Install Date:</b> -				
<b>Email:</b>		<b>FOB:</b> FOB Dest, Freight Allowed				
<b>VENDOR</b>						
HUERFANO COUNTY WATER PO BOX 442 LA VETA, CO 81055-0442						
<b>Contact:</b>	Carol Dunn					
<b>Phone:</b>	719-742-5581					
<b>VENDOR INSTRUCTIONS</b>						
<b>EXTENDED DESCRIPTION</b>						
<b>Line Item</b>	<b>Commodity/Item Code</b>	<b>UOM</b>	<b>QTY</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>MSDS Req.</b>
1	G1000		0	0.00	\$17,643.00	<input type="checkbox"/>
Description: WSRF Huerfano WCD Bruce Canyon Res 50% Design						
Service From: 06/01/20		Service To: 09/30/21				
<b>Line Item</b>	<b>Commodity/Item Code</b>	<b>UOM</b>	<b>QTY</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>MSDS Req.</b>
2	G1000		0	0.00	\$35,286.00	<input type="checkbox"/>
Description: WSRF Huerfano WCD Bruce Canyon Res 50% Design						
Service From: 06/01/20		Service To: 09/30/21				
<b>TERMS AND CONDITIONS</b>						
<a href="https://www.colorado.gov/pacific/osc/small-dollar-grant-award-terms-conditions">https://www.colorado.gov/pacific/osc/small-dollar-grant-award-terms-conditions</a>						
<b>DOCUMENT TOTAL = \$52,929.00</b>						



Last Update: January 9, 2018

<b>Colorado Water Conservation Board</b>	
<b>Water Supply Reserve Fund</b>	
<b><u>Exhibit A - Statement of Work</u></b>	
<b>Date:</b>	<b>November 22, 2019</b>
<b>Water Activity Name:</b>	<b>Bruce Canyon Reservoir 50% Design</b>
<b>Grant Recipient:</b>	<b>Huerfano County Water Conservancy District (HCWCD)</b>
<b>Funding Source:</b>	<b>WSRF Arkansas Basin Roundtable Account</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.)	
<p>Major Cucharas River water users formed 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 for three of the preferred sites. Two will be advanced to 50% design: 642 a.f. enlargement of existing Maria Stevens Reservoir (seeking 2020 WPG funding), and the subject of this application, new 1,406 a.f. Bruce Canyon Reservoir.</p> <p>For this WSRF project phase, the in-progress 30% design will be advanced to 50% design for Bruce Canyon Reservoir. 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 &amp; Regulations; developing 50% design drawings for Bruce Canyon dam; working with Colorado Dam Safety Branch to address their informal input on dam design; presentation of 50% design to the Collaborative group.</p>	
<b>Objectives:</b> (List the objectives of the project)	
<p>The objectives of the project are as follows:</p> <ol style="list-style-type: none"><li>1. Complete 50% design and geotechnical analysis for the proposed Bruce Canyon Reservoir. The in-progress 30% design will be utilized as a starting point.</li><li>2. Create a list of construction specifications that will be needed in the final design.</li><li>3. Identify the need for any additional geotechnical field work that would be needed between 50% and final design.</li><li>4. Determine the required spillway dimensions based on DWR Dam Safety Rules and Regulations to be effective January 1, 2020.</li><li>5. Meet with and obtain input from the Colorado Dam Safety Branch on the 50% design prior to initiating final design.</li></ol>	



Last Update: January 9, 2018

Tasks
Provide a detailed description of each task using the following format:
<b><u>Task 1 – Geotechnical Analysis</u></b>
Description of Task:  Complete detailed geotechnical analyses to determine soil mechanics parameters that will impact design of the proposed dam. The stability of design embankment slopes will also be evaluated.
Method/Procedure:  <ol style="list-style-type: none"><li>1. 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.</li><li>2. Model embankment stability for the 50 percent design using geotechnical engineering software.</li></ol>
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.



Last Update: January 9, 2018

Tasks
Provide a detailed description of each task using the following format:
<b><u>Task 2 – Hydrologic Analysis</u></b>
Description of Task:  A hydrologic evaluation of the drainage basin for the reservoir site is needed to determine the inflow design flood (IDF) and how that IDF is routed through the proposed 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.
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.



Last Update: January 9, 2018

Tasks
Provide a detailed description of each task using the following format:
<b><u>Task 3 – 50% Design Bruce Canyon Reservoir</u></b>
Description of Task:
<p>Design drawings will be advanced to the 50% design level, which generally means that more construction details will be provided for the primary design components. The 30% design will be used as the starting point for this task, and will be updated to 50%. Construction specifications to be used in the final design will be listed. A 50% 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% design level.</p>
Method/Procedure:
<ol style="list-style-type: none"><li>1. Incorporate additional geotechnical data collected in summer 2019 into the 30% design (i.e. depth to and permeability of bedrock at the abutment locations).</li><li>2. Modify 30% designs based on input received from the State Engineer's Office during the 30% design process.</li><li>3. 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.</li><li>4. Draft construction specifications (i.e., table of contents) that will be completed during 90% 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.</li><li>5. Develop a 50% design level cost estimate.</li></ol>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<p>The final deliverable for this task will be 50% design drawings, a list of construction specifications to be fully developed at 90%, and a 50% 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% design.</p>
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<p>Copy of the 50% design drawings, construction specifications list, and 50% design level cost estimate included in the Grantee Deliverable above.</p>



Last Update: January 9, 2018

Tasks
Provide a detailed description of each task using the following format:
<b><u>Task 4 – Present Results at Collaborative Meeting</u></b>
Description of Task:  Results of the 50% 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% design will be prepared for CWCB.



Last Update: January 9, 2018

Tasks
Provide a detailed description of each task using the following format:
<b><u>Task 5 – HCWCD Grant Administration</u></b>
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 at a package rate that includes computer and software usage, internet connectivity, insurance, utilities, and landline and cell phone connections.
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.





Last Update: January 9, 2018

### 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: March 31, 2020****Water Activity Name: Bruce Canyon Reservoir 50% Design****Grantee Name: Huerfano County Water Conservancy District**

<b>Task No.</b> <sup>(1)</sup>	<b>Description</b>	<b>Start Date</b> <sup>(2)</sup>	<b>End Date</b>	<b>Matching Funds</b> (cash & in-kind) <sup>(3)</sup>	<b>WSRF Funds</b> (Basin & Statewide combined) <sup>(3)</sup>	<b>Total</b>
1	Geotechnical Analysis	6/1/2020	9/30/2021	\$132.00	\$35,418.00	\$35,550
2	Hydrologic Analysis	6/1/2020	9/30/2021	\$2,902.00	\$2,903.00	\$5,805
3	50% Design Bruce Canyon Reservoir	6/1/2020	9/30/2021	\$11,188.00	\$11,187.00	\$22,375
4	Present Results at Collaborative Meeting	6/1/2020	9/30/2021	\$1,112.00	\$1,113.00	\$2,225
5	HCWCD Grant Administration	6/1/2020	9/30/2021	\$2,309.00	\$2,308.00	\$4,617
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
<b>Total</b>				\$17,643	\$52,929	\$70,572
<b>Percent of Total Project Costs (CWCB Pro rata Reimbursement Rate)</b>				25%	75%	100%

(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.

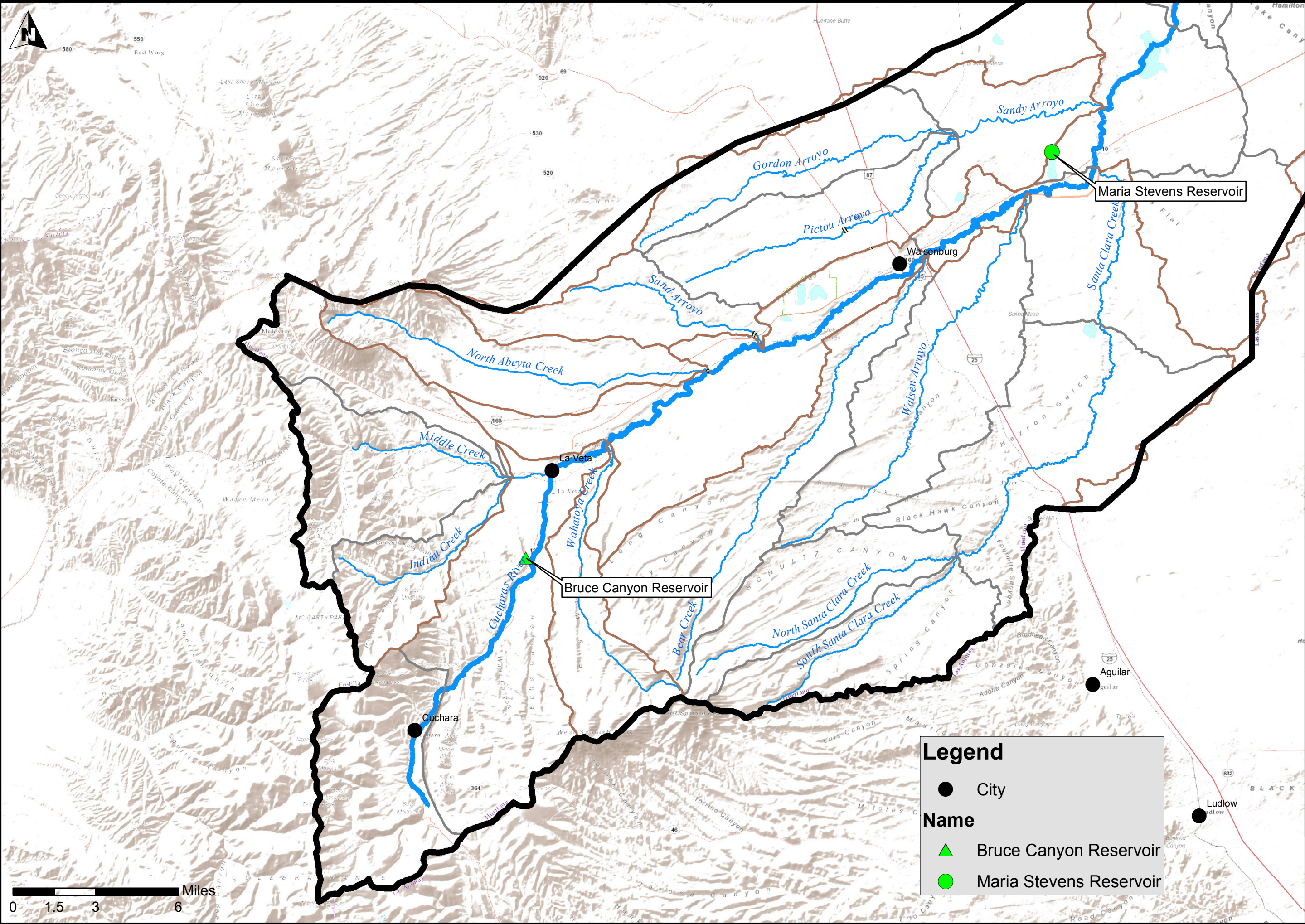
(3) Round values up to the nearest hundred dollars.

• 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





**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**

- Bruce Canyon Reservoir
- Butte Ditch
- Cucharas River
- Highway 12

Bruce Canyon Reservoir 1406 ac-ft

Butte Ditch

Cucharas River

Highway 12

