

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
March 21, 2019
Agenda Item 24(u)

Applicant & Program Sponsor: Huerfano County Water Conservancy District
Water Activity Name: Cucharas Collaborative Storage Phase 3
Water Activity Purpose: Study – Nonconsumptive, Agricultural, M/I
County: Huerfano
Drainage Basin: Arkansas
Water Source: South Baker Creek
Amount Requested/Source of Funds: \$4,000 Arkansas River Basin Account
\$40,000 Statewide Account
\$44,000 Total Request
Matching Funds: Basin Account Match (\$4,000) = 10% of Statewide Account request (Meets 10% min);
Applicant’s Cash Match (\$16,045) = 40% of Statewide Account request (Meets 25% min.);
Total Match (Basin & Applicant Match of \$20,045 = 50.1% of Statewide Account request (meets 50% min). (refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$4,000 from the Arkansas Basin Account and \$40,000 from the Statewide account to help fund the project/study titled: Cucharas Collaborative Storage Phase 3

Water Activity Summary: This proposed project is Phase 3 of the Cucharas Collaborative Storage Study, which is listed as Project #2015-0007 on the Master Needs List of the Arkansas Basin Implementation Plan.

In Phase 2, five "preferred joint storage sites" underwent geotechnical investigation. Using that report, the Cucharas Basin Storage Collaborative group selected three sites of primary interest – South Baker Creek in the upper basin, Bruce Canyon in mid-basin, and Maria-Stevens Reservoir enlargement in the lower basin.

Of those three sites, South Baker Creek (SBC) and Bruce Canyon, had inaccessibility issues in Phase 2, which interfered with feasibility level designs of the dam abutments. The SBC site also requires engineering design for an alternative dam, most likely concrete gravity. This project will perform coring and permeability testing of foundation bedrock material at the two sites to evaluate the geologic and geotechnical properties of abutments so 30 percent design recommendations can be made. The Phase 2 geotechnical report will be supplemented with the Phase 3 results. In addition, 30 percent design work on the alternative dam will be completed on the SBC site.

Discussion: This project is consistent with the measurable objectives set forth in the Colorado Water Plan and the Arkansas Basin Implementation Plan. The Cucharas Collaborative Storage Study supports the needs of the Basin Plan through the investigation of potential new storage, meeting the supply-demand gap, and developing multi-purposed projects.

The proposed supports Objective A – Supply-Demand Gap in the Water Plan by “*Using a grassroots approached to formulate projects and methods that avoid some of the undesirable outcomes of the supply-demand gaps*”; supports Objective E – Storage by “*Assess and promote opportunities for multipurpose and multi-partner storage projects that address strategic needs.*”

Issues/Additional Needs: None.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and staff has determined it satisfies the Evaluation Criteria outlined in Colorado’s Water Plan, Section 9.4. Please refer to Basin Roundtable Chair’s Recommendation Letter and the Application for a detailed response.

<u>Funding Summary/</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Huerfano County Water Conservancy District	\$5,045	\$0	\$5,045
Cucharas Water & Sanitation District	\$3,000	\$0	\$3,000
Town of La Veta	\$5,000	\$0	\$5,000
Huerfano County	\$3,000	\$0	\$3,000
WSRF Arkansas Basin_Account	\$4,000	n/a	\$4,000
WSRF Statewide Account	\$40,000	n/a	\$40,000
Total Project Costs	\$60,045	\$0	\$60,045

CWCB Project Manager: Ben Wade

ARKANSAS BASIN ROUNDTABLE

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

January 22, 2019

Re: Arkansas Basin Roundtable Letter of Support- WSRA: Cucharas Collaborative Storage Study – Geotechnical Investigation

Dear Mr. Ben Wade:

At its January 9, 2019 meeting, the Arkansas Basin Roundtable approved the above referenced project for \$4,000 in Basin funds and consideration of \$40,000 in State funds through the Water Supply Reserve Account. There were no dissenting opinions expressed in the consensus decision.

The Arkansas Basin Roundtable supports the efforts of the Cucharas Basin Storage Collaborative to complete the geotechnical work on the Bruce Canyon and South Baker Creek sites. The Cucharas Collaborative Storage Study supports the needs of the BIP through the investigation of potential new storage, meeting the supply-demand gap, and developing multipurposed projects. Regarding the Colorado Water Plan, this project supports the following objectives:

Objective A- Supply-Demand Gap: Use a grassroots approach to formulate projects and methods that avoid some of the undesirable outcomes of the supply-demand gaps.

Objective E- Storage- Assess and promote opportunities for multipurpose and multi-partner storage projects that address strategic needs.

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

With warm regards,



Mark Shea
ABRT Chair



Last Update: July 31, 2018

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:

<p>Arkansas</p> <p>Ben Wade ben.wade@state.co.us 303-866-3441 x3238</p>	<p>Gunnison North Platte South Platte Yampa/White</p> <p>Craig Godbout craig.godbout@state.co.us 303-866-3441 x3210</p>	<p>Colorado Metro Rio Grande Southwest</p> <p>Megan Holcomb megan.holcomb@state.co.us 303-866-3441 x3222</p>
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WSRF Submittal Checklist (Required)
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√	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 (links)
√	Letters of Support (Arkansas Basin Roundtable; HCWCD commitment)
Contracting Documents ⁽³⁾	
√	Detailed/Itemized Budget ⁽³⁾ (<i>Excel Spreadsheet – see Template</i>)
√	Certificate of Insurance ⁽⁴⁾ (<i>General, Auto, & Workers' Comp.</i>)
n/a	Certificate of Good Standing ⁽⁴⁾
√	W-9 Form ⁽⁴⁾
n/a	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.

(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
Desired Notice to Proceed Date:	May

Water Activity Summary	
Name of Applicant	Huerfano County Water Conservancy District
Name of Water Activity	Cucharas Collaborative Storage Phase 3
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾
Arkansas	\$4,000.00
Basin Account Request Subtotal	\$4,000.00
Statewide Account Request ⁽¹⁾	\$40,000.00
Total WSRF Funds Requested (Basin & Statewide)	\$44,000.00
Total Project Costs	\$60,045.00

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



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Grantee and Applicant Information	
Name of Grantee(s)	Huerfano County Water Conservancy District
Mailing Address	P.O. Box 442, La Veta, CO 81055
FEIN	84-0935026
Grantee's Organization Contact ⁽¹⁾	Scott King
Position/Title	District President
Email	slking@centurylink.net
Phone	719-742-3124; 719-680-0784 [M]
Grant Management Contact ⁽²⁾	Carol Dunn
Position/Title	District Administrator
Email	hcwcdistrict@gmail.com
Phone	719-742-3597 (home office)
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 pursuant to the Water Conservancy Act, responds to local and regional needs by protecting and stabilizing the county's water resources, including the Huerfano and Cucharas Rivers, tributary streams and groundwater. Active in several county-wide collaboratives, the District also participates in the Arkansas River Watershed Collaborative (ARWC), and is an active participant in the Arkansas Basin Roundtable (ABRT) itself where, since the District has been de-Bruced, it has acted as applicant or fiscal agent for grants funding ABRT's BIP Coordinator as well as other members' projects.</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.
√	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)	
√	Study (geotechnical investigation)
	Implementation

Category of Water Activity (check all that apply)		
	Nonconsumptive (Environmental)	
√	Nonconsumptive (Recreational)	
√	Agricultural	
√	Municipal/Industrial	
	Needs Assessment	
	Education & Outreach	
√	Other	Explain: Storage

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	Huerfano
Latitude	37.62° N
Longitude	- 104.78° W



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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.

This is a Phase 3 continuation of the Cucharas Collaborative Storage Study, Project #2015-0007 on the Master Needs List of the Arkansas Basin Implementation Plan. The final report of Phase 1 is available online at <https://applegategroup.sharefile.com/d-s61404cc1e41461a8>.

In Phase 2, five "preferred joint storage sites" underwent geotechnical investigation, the results of which were published in a December 2018 report by Applegate Group and Cesare. Using that report, the Cucharas Basin Storage Collaborative selected three sites of primary interest – South Baker Creek in the upper basin, Bruce Canyon in mid-basin, and Maria-Stevens Reservoir enlargement in the lower basin.

Of those three sites, South Baker Creek (SBC) and Bruce Canyon, had inaccessibility issues in Phase 2, which interfered with feasibility level designs of the dam abutments. The SBC site also requires engineering design for an alternative dam, most likely concrete gravity (RCC). This project will perform coring and permeability testing of foundation bedrock material at the two sites to evaluate the geologic and geotechnical properties of abutments so 30 percent design recommendations can be made. The December 2018 geotechnical report will be supplemented with the results. In addition, 30 percent design work on the alternative dam will be completed on the SBC site.

Measurable Results

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

2314	New Storage Created (acre-feet)	
3103	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	
	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 project is aligned with Colorado's water values, described at pp 9-43 and 9-44 of the Colorado Water Plan, as follows:

- **The project proponent, HCWCD, has a commitment to collaboration.** This project is directed by a collaborative of some twenty members, formed in 2015 at the suggestion of the Division 2 Engineer, to meet the storage needs in the Cucharas River Basin and incorporating a variety of needs – municipal, agricultural, recreational, drought protection, and wildfire suppression. This broad set of stakeholders has provided input at noticed public meetings to which they were individually invited.
- **The project addresses an identified water gap.** A statewide shortage of storage is called out as a primary gap by the Colorado Water Plan § 1.6 and the Arkansas BIP in which increased storage is listed as a “goal,” § 1.6.1, p. 10, a “critical element,” § 6.2, p. 251, a “priority,” p. 5, and a “theme,” § 1.2.1, p. 6. Indeed this storage project is listed on the BIP's Master Need List (IPP) as Project #2015-0007.
- **The project proponent demonstrates sustainability.** Huerfano County, through which the Cucharas River arises and flows enroute to the Arkansas, is one of the poorest and driest counties in the state. For example, over 23% of the population (v. 11.5% statewide) lives below the federal poverty level, and over 30% of families are on food stamps. This project to restore storage to the basin will contribute to improved prosperity in a depressed rural area. In addition, the collaborative which co-sponsors this project has representation from all appropriate local governments.
- **The project is fiscally and technically feasible.** As demonstrated by the related storage study and the geotechnical study, described in the “related studies” section below, this phase of the project (geotechnical data collection) is necessary and feasible.

(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)
Total Match	
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):
Huerfano County Water Conservancy District (Applicant)	\$ 5,045
Cucharas Sanitation & Water District	3,000
Town of La Veta	5,000
Huerfano County	3,000
Roundtable Basin Account	4,000
Total Match	\$20,045
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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Related Studies

Related studies include:

- Cuchara Basin Collaborative Storage Study, Task 1, Storage Needs Assessment, prepared for Huerfano County Water Conservancy District (Cucharas River Storage Collaborative) by ParsonsWater and Applegate Group, Inc., July 2016, 28 pp.
- Cuchara Basin Collaborative Storage Study, Task 2 Screening and Cost-Benefit Analysis, prepared for Huerfano County Water Conservancy District (Cucharas River Storage Collaborative) by ParsonsWater and Applegate Group, Inc., June 2017, 255 pp.
- Cucharas Collaborative Storage Study Geotechnical Investigation completed in December 2018 – see the following link for the executive summary.
<https://applegategroup.sharefile.com/d-sc6fc1751c594aaf9>

The overall water project is complementary to the CWCB’s Decision Support System:

- Completed “a water budget for the Cucharas River, including an inventory of all municipal, irrigation, industrial, recreational and environmental demands and consumptive uses by means of StateWB (available from CWCB) or a compatible model approved by CWCB, using inflow, outflow, and change-in-storage information to generate an overall water budget or water balance summary, current and future (2050), for the Cucharas basin”; and
- Conducted “water resources planning modeling using StateMod covering the Cucharas mainstem and those tributaries from which the Collaborators’ storage facilities derive their supplies.”

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

CWCB WSRF grants were awarded for two previous phases of this project:

- 1) Applicant: Huerfano County Water Conservancy District
- 2) Activity Name: Cucharas Basin Collaborative Storage Study
- 3) Approving RT: Arkansas
- 4) CWCB board meeting date: September, 2015
- 5) Contract number CTGG1 2016-1053; PO date: 12/7/2015

- 1) Applicant: Huerfano County Water Conservancy District
- 2) Activity Name: Cucharas Basin Collaborative Storage Geotechnical Investigation
- 3) Approving RT: Arkansas
- 4) CWCB board meeting date: March, 2018
- 5) Contract number POGG1 2018-917; PO date: 5/8/2018

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.

NONE



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Colorado Water Conservation Board	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	January 30, 2019
Water Activity Name:	Cucharas Collaborative Storage Study Phase 3
Grant Recipient:	Huerfano County Water Conservancy District (HCWCD)
Funding Source:	Water Supply Reserve Fund
<p>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> <p>The goal of this project will be to further evaluate the geotechnical and engineering properties at two of the three final proposed dam sites for construction of reservoirs that will provide collaborative storage in the Cucharas River Basin and complete 30 percent design work on the third site. The additional geotechnical work will be completed on the Bruce Canyon and South Baker Creek sites. Geological and geotechnical properties of abutments at two of the inaccessible sites are required before 30 percent design recommendations can be made. The three final sites were chosen by the Cucharas Basin Storage Collaborative based on the results of the previous phase of the study (Cucharas Collaborative Storage Study Geotechnical Investigation) completed in December 2018 – see the following link for the executive summary. https://applegategroup.sharefile.com/d-sc6fc1751c594aaf9</p> <p>The project will focus on collecting additional geotechnical data needed to determine site feasibility in preparation for 30 percent design and final geotechnical investigation needed post-30 percent design. It is noted that 30 percent design of two sites is not included in this scope of work, but will be completed at a later date under a separate scope of work. The additional geotechnical work will include collecting additional site-specific geotechnical data, based on recommendations from the initial geotechnical investigation. This sub-task will involve drilling at the two previously inaccessible abutment locations, coring and permeability testing of foundation bedrock material at the two locations, and supplementing the December 2018 geotechnical report with results and recommendations for 30 percent design of the remaining two sites.</p> <p>Grant money from the WSRF will be used to perform the additional geotechnical investigation on the proposed abutments and engineering for an alternative dam (probably concrete gravity) at one location.</p>	



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<p>Objectives: (List the objectives of the project)</p> <p>The primary objective of the project is to get additional geotechnical data needed to make geotechnical recommendations that will help determine feasibility of constructing two of the final reservoir sites, complete 30 percent design for a specialized dam at one site, and to begin design discussions with the Dam Safety Branch of the State Engineer’s Office on 30 percent design.</p>
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Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 – Site Access</u>
Description of Task:
<p>Construct site access to the two necessary drilling locations at the South Baker Creek and Bruce Canyon sites.</p> <ul style="list-style-type: none"> • Task 2a South Baker Creek <ul style="list-style-type: none"> ○ Construct access for a track mounted drill rig to access the abutment location not drilled during the initial geotechnical investigation. • Task 2b Bruce Canyon <ul style="list-style-type: none"> ○ Construct access for a track mounted drill rig to access the abutment location not drilled during the initial geotechnical investigation. • Permitting: a stormwater management permit will be obtained for the site access work.
Method/Procedure:
<p>Access for the dam sites has been identified, as well as water sources for drilling. Access will be constructed for abutment locations at the South Baker Creek and Bruce Canyon reservoir sites. Property owners of the sites support the study and have been informed of planned activities related to this investigation.</p>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<p>Site access will be constructed. A stormwater management permit will be obtained. Site access will be reclaimed by seeding at the conclusion of the work.</p>
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<p>HCWCD will provide photographs of site access to document completion of this task.</p>



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Tasks
<p><u>Task 2 – Geotechnical Investigation</u></p>
<p>Description of Task:</p> <p>Collect the remaining geotechnical data needed to more fully assess the viability of two sites, and to develop recommendations that will impact 30 percent level engineering design. The site-specific scope of work for this task shall include the following.</p> <ul style="list-style-type: none"> • Task 2a South Baker Creek <ul style="list-style-type: none"> ○ Drill at the abutment location not drilled during the initial geotechnical investigation, and identification of geological and geotechnical properties. We will also core the bedrock at the abutment location and complete packer testing to determine its hydraulic conductivity. • Task 2b Bruce Canyon <ul style="list-style-type: none"> ○ Drill at the abutment location not drilled during the initial geotechnical investigation, and identification of geological and geotechnical properties. We will also core the bedrock at the abutment location and complete packer testing to determine its hydraulic conductivity. • Task 2c Geotechnical Report <ul style="list-style-type: none"> ○ The methods and results of this phase of the geotechnical investigation will be added to the December 2018 geotechnical report for a complete picture on foundation bedrock material. This will provide adequate information to make 30 percent design recommendations. No meetings with the Cucharas Collaborative Storage stakeholder group have been included in this Statement of Work.
<p>Method/Procedure:</p> <p>Property owners of the sites support the study and have been informed of planned activities related to this investigation. The drilling program is anticipated to be completed in spring of 2019, pending weather and site access conditions. All drilling and testing will follow applicable ASTM standards. Results will be used to supplement the December 2018 geotechnical summary report and will be the basis for evaluating site suitability and making the final recommendation for 30 percent engineering design.</p>
<p>Grantee Deliverable: (Describe the deliverable the grantee expects from this task)</p> <p>Final deliverables for the HCWCD will be supplementation of the December 2018 geotechnical summary report with results of the additional geotechnical investigation and recommendations that will impact engineering design.</p>
<p>CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)</p> <p>HCWCD will provide CWCB the final geotechnical report (same as above), which will include a list of recommendations to design revisions to incorporate into 30 percent design in a subsequent project.</p>



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Tasks	
<u>Task 3 – South Baker Creek 30 Percent Design</u>	
Description of Task:	
Complete 30 percent design for a concrete gravity dam at the South Baker Creek site. Coordinate with the Dam Safety Branch local dam engineer to get the State Engineer’s feedback on the 30 percent design.	
Method/Procedure:	
<ul style="list-style-type: none"> ○ Complete 30 percent design drawings based on recommended dam type from Task 1a above (likely to be roller compacted concrete, RCC, dam). It is anticipated that the South Baker Creek dam will need to be founded on the underlying sandstone bedrock, requiring over-excavation of up to 15 feet of granular soils. ○ Meet with the Dam Safety Engineer for input on 30 percent design and make necessary modifications to address Dam Safety Engineer input. ○ Provide Engineer’s Opinion of Probable Cost (EOPC) based on revised 30 percent design plans. 	
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)	
Final deliverable to the HCWCD will be 30 percent design drawings for the South Baker Creek site, including revisions based on input from the Dam Safety Branch of the State Engineer’s Office.	
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)	
HCWCD will provide CWCB copies of the 30 percent drawings for South Baker Creek site.	
<u>Task 4 – Administration</u>	
Description of Task:	
Using a qualified person, insure the timely accomplishment of contract tasks and the submission of required reports under the grant contract.	
Method/Procedure:	
Contract administration will be primarily handled by the regular part-time Administrator of the Huerfano County Water Conservancy District, who has successfully administered other CWCB grants and loans for the District. The time requirements of administration for this grant exceed the District Administrator’s time, for which she is now compensated or her availability to spend additional time. The amount budgeted for this task will be used either to compensate the Administrator for additional time spent on this grant or to employ an assistant to handle other matters, freeing up time for the Administrator to administer 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.	



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Tasks

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

Six month progress report(s) and final report.

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



Last Update: January 9, 2018

Reporting Requirements

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.

Last Update: December 4, 2018



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: December 4, 2018

Water Activity Name: Cucharas Collaborative Storage Geotechnical Phase 3

Grantee Name: Huerfano County Water Conservancy District

<u>Task No.</u> ⁽²⁾	<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	Site Access/rehabilitation	5/1/2019	11/1/2019	\$10,445	\$0	\$10,445
2a	South Baker Creek drilling	6/1/2019	9/1/2019	\$1,000	\$12,300	\$13,300
2b	Bruce Canyon drilling	6/1/2019	9/1/2019	\$600	\$12,700	\$13,300
2c	GeoTech Report	--	11/15/2019	\$0	\$3,500	\$3,500
3	South Baker 30% Design	6/1/2019	12/31/2019	\$4,000	\$11,000	\$15,000
4	Administration 7.5%	5/1/2019	3/31/2020	\$0	\$4,500	\$4,500
Total				\$16,045	\$44,000	\$60,045

(2) Start Date for funding under \$100K - 45 Days from Board Approval; Start Date for funding over \$100K - 90 Days from Board Approval.

(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.

• Reimbursement eligibility commences upon the grantee's receipt of a Notice to Proceed (NTP)

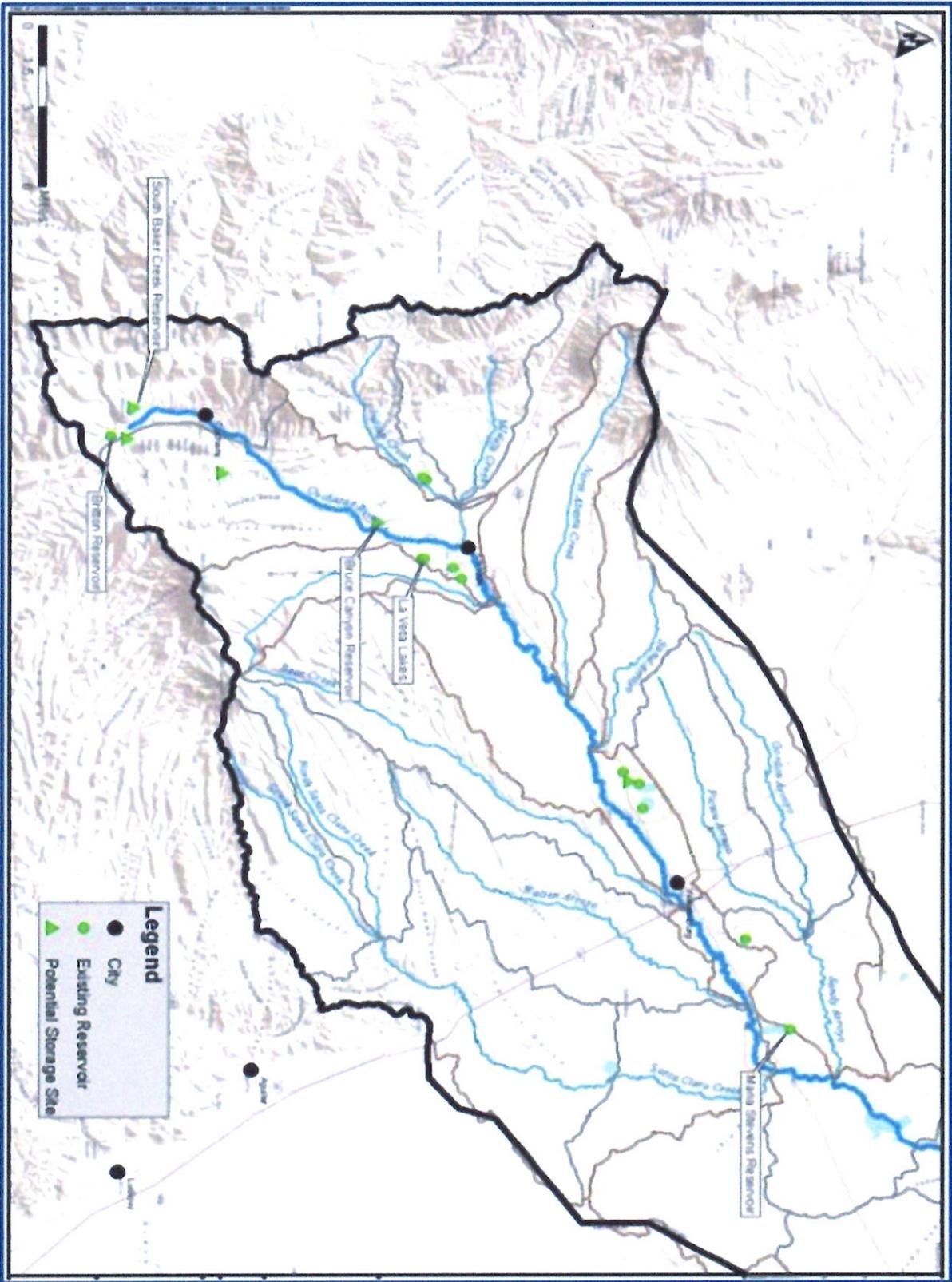
• NTP will not be accepted as a start date. Project activities may commence as soon as the grantee enters contract and receives formal signed State Agreement.

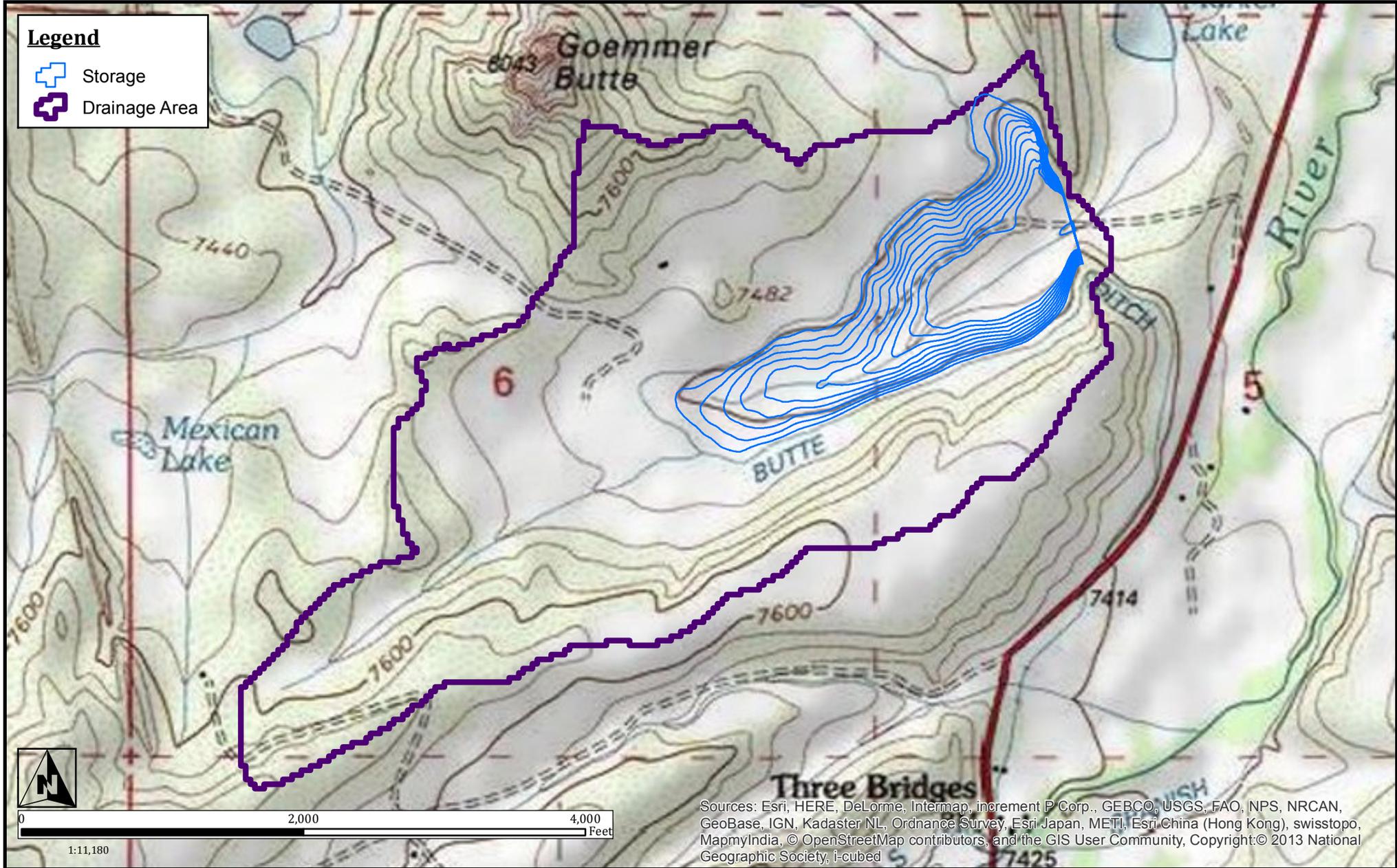
The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of the CWCB staff project manager. Once the Final Report has been accepted, the final payment has been issued, the water activity and purchase order (PO) or contract will be closed 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.

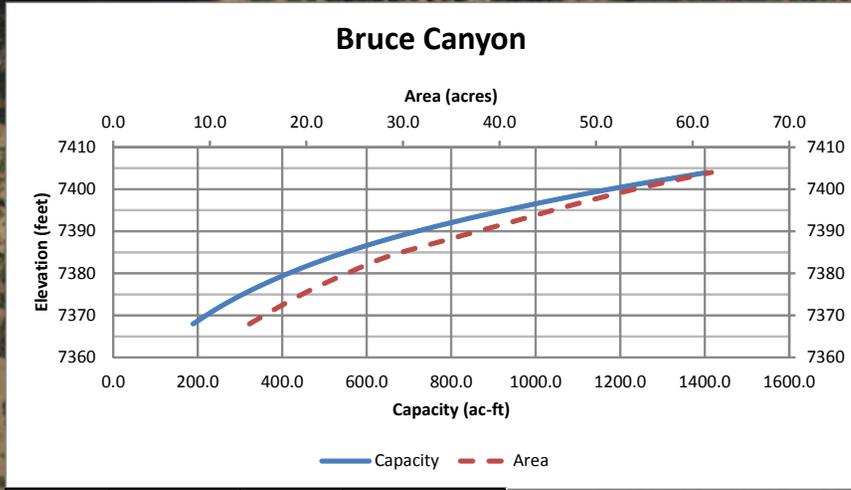
• Additionally, the applicant shall provide a progress report every 6 months, beginning from the date of contract execution

• Standard contracting procedures dictate that the Expiration Date of the contract shall be 5 years from the Effective Date.

COLLABORATIVE STORAGE STUDY PHASE 3 EXHIBIT C MAP and LETTERS



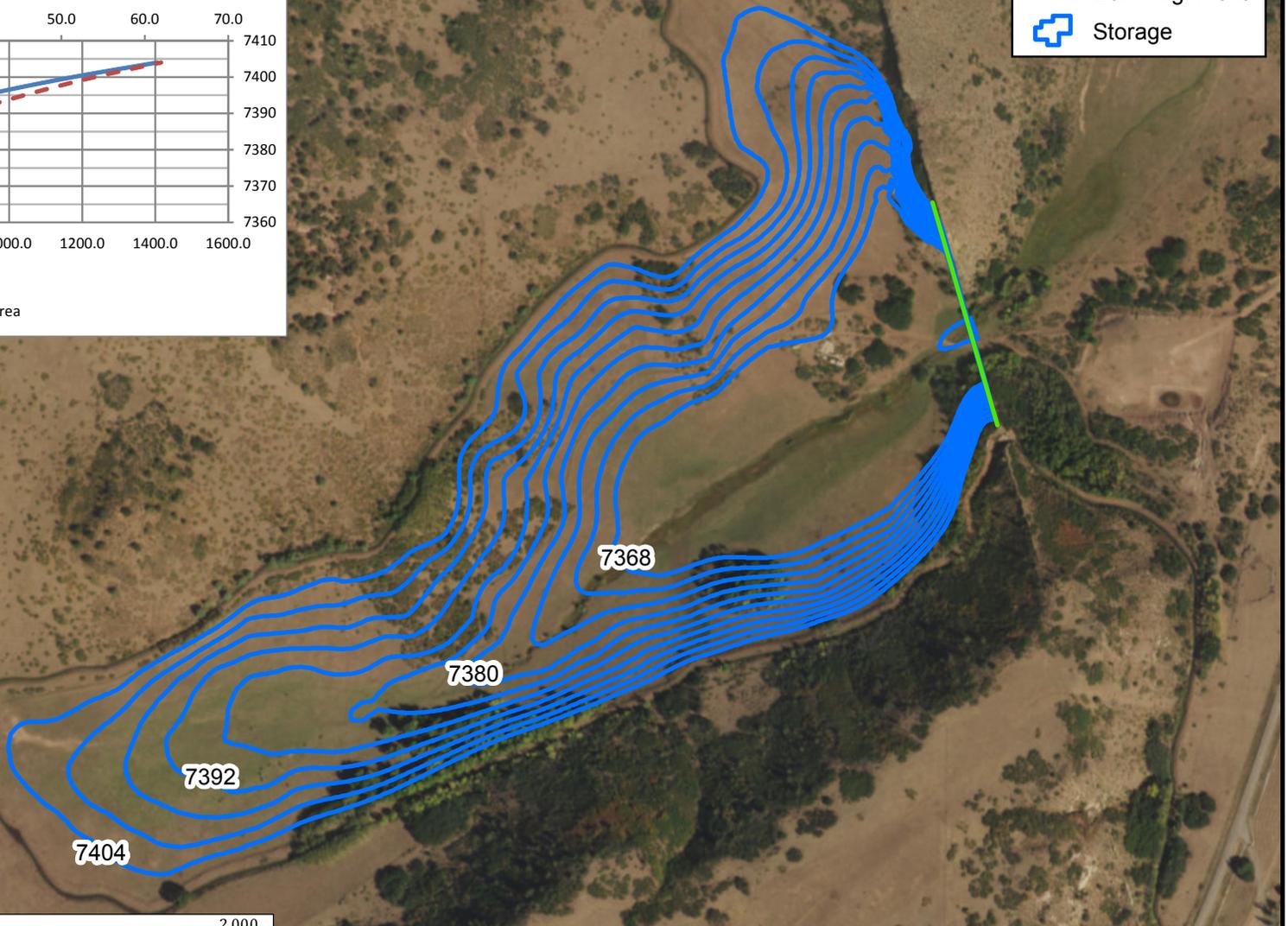




Legend

- Dam Alignment
- Storage

Height (ft)	Elevation (ft)	Area (ac)	Capacity (ac-ft)
1	7328	0.1	0.1
41	7368	14.1	188.9
45	7372	17.1	251.6
49	7376	20.4	326.0
53	7380	24.2	414.6
57	7384	28.4	519.7
61	7388	34.6	645.8
65	7392	40.9	797.7
69	7396	47.1	974.3
73	7400	54.0	1174.9
77	7404	61.9	1406.0



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Applegate Group, Inc.
 Water Resource Advisors for the West
 1490 West 121st Ave., Ste 100 Phone: (303) 452-6611
 Denver, CO 80234-2728 Fax: (303) 452-2759
 www.ApplegateGroup.com e-mail: info@applegategroup.com

Cucharas Storage Study

Bruce Canyon Reservoir

Date: 14 April 2017
 Job #: 16-106
 Drawn By: KAB

Figure:
3A



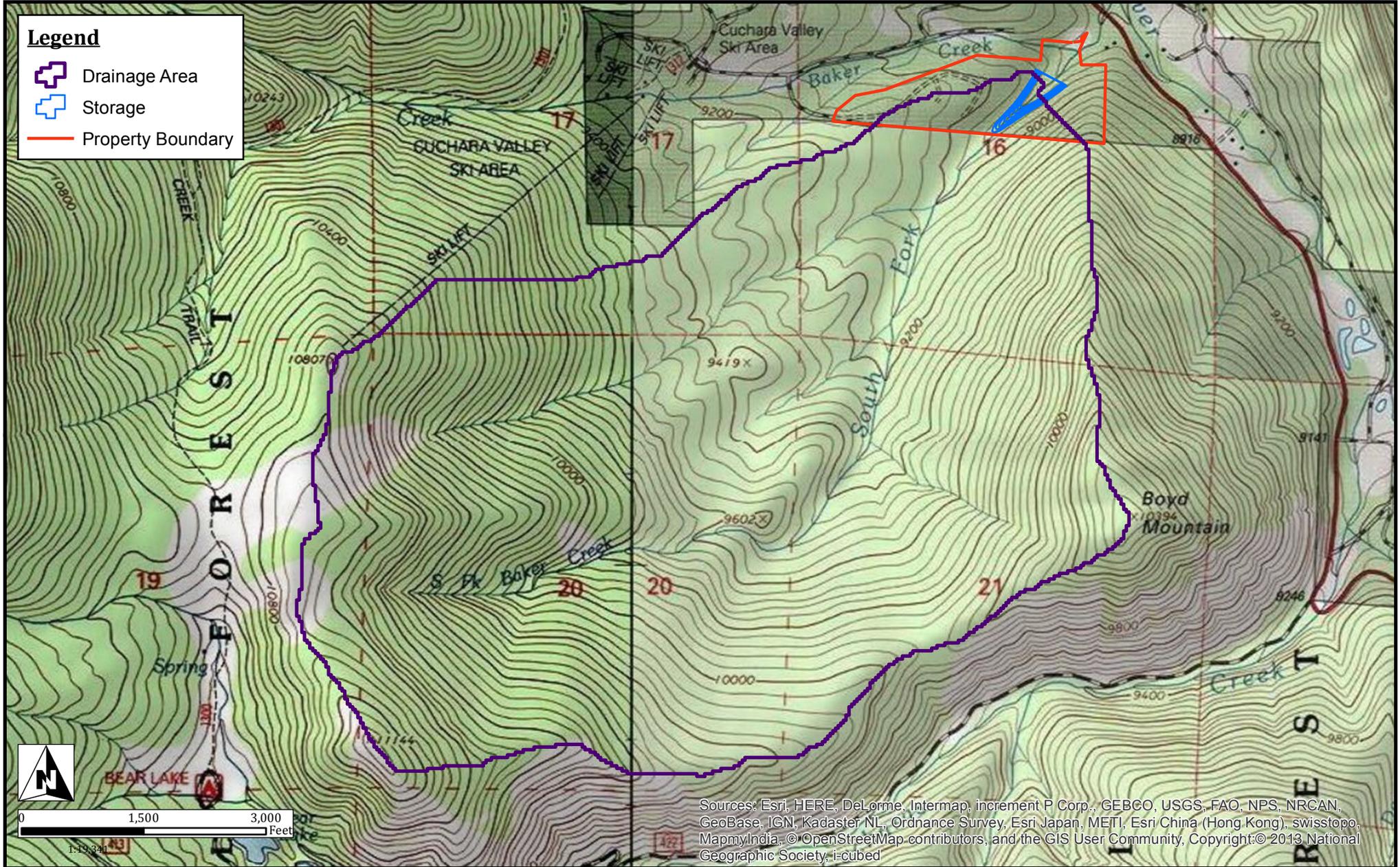






Legend

-  Drainage Area
-  Storage
-  Property Boundary



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community, Copyright: © 2013 National Geographic Society, i-cubed



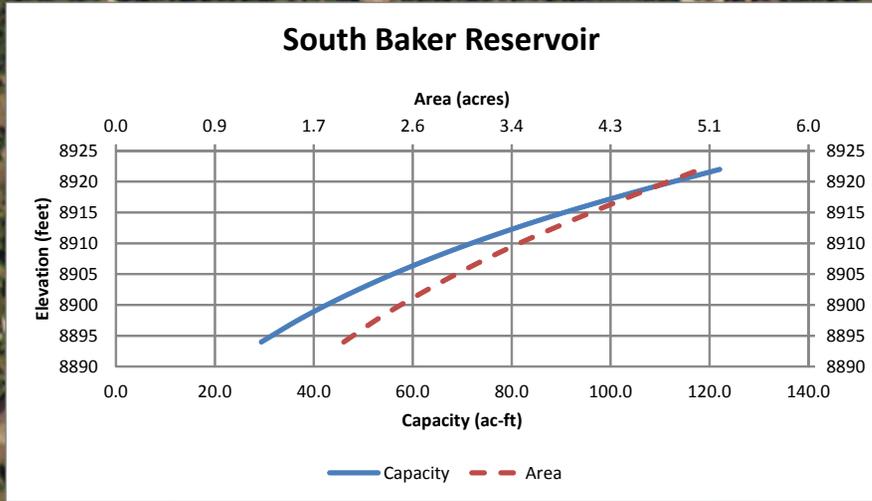
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 Denver, CO 80234-2728 Fax: (303) 452-2759
 www.ApplegateGroup.com e-mail: info@applegategroup.com

Cucharas Storage Study

South Baker Creek Drainage Area

Date: 13 April 2017
 Job #: 16-106
 Drawn By: KAB

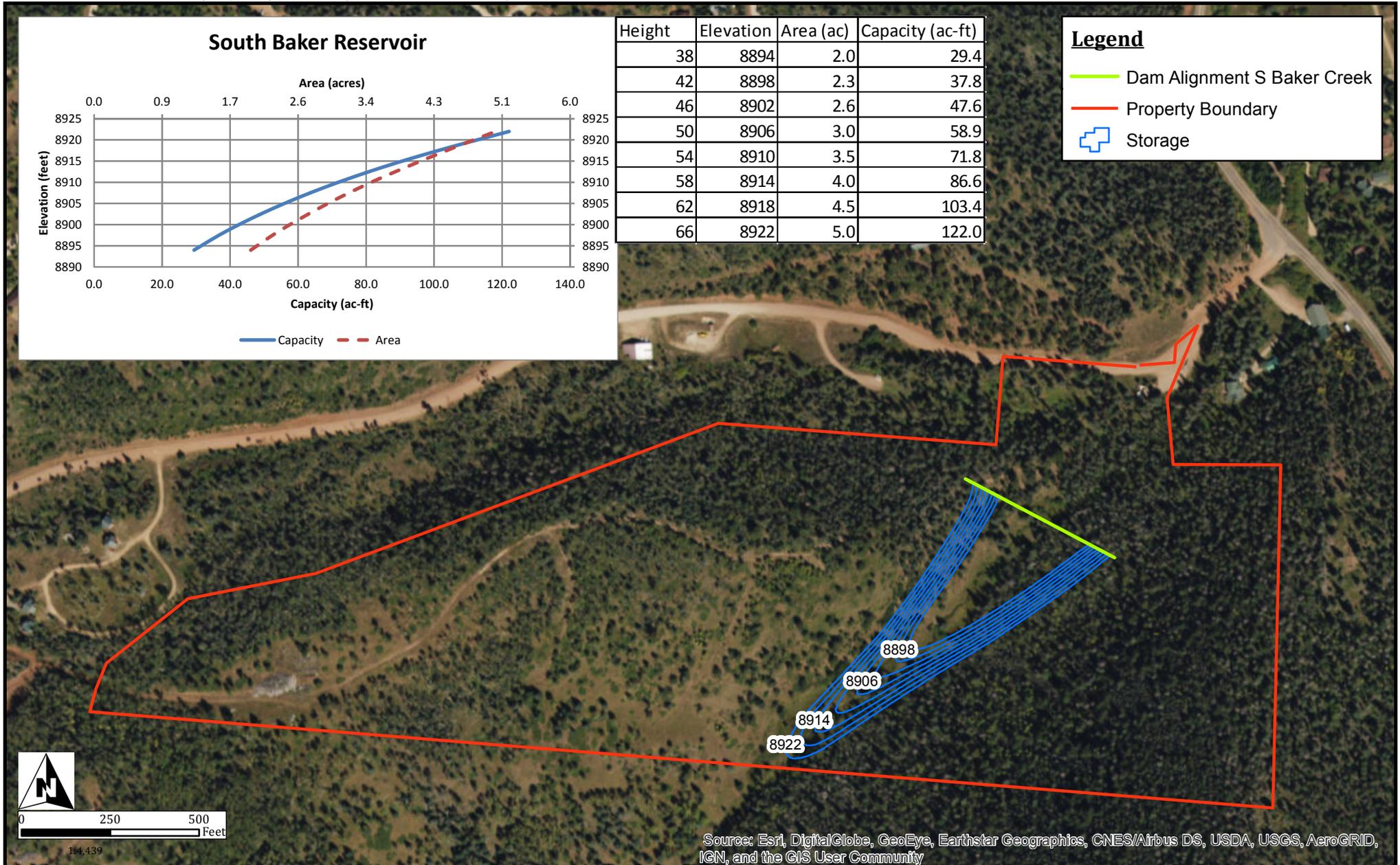
Figure:
1B



Height	Elevation	Area (ac)	Capacity (ac-ft)
38	8894	2.0	29.4
42	8898	2.3	37.8
46	8902	2.6	47.6
50	8906	3.0	58.9
54	8910	3.5	71.8
58	8914	4.0	86.6
62	8918	4.5	103.4
66	8922	5.0	122.0

Legend

- Dam Alignment S Baker Creek
- Property Boundary
- + Storage



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Cucharas Storage Study

South Baker Creek

Date: 13 April 2017
 Job #: 16-106
 Drawn By: KAB

Figure:
1A





HUERFANO COUNTY
WATER CONSERVANCY DISTRICT

PO Box 442, La Veta, Colorado 81055
719-742-3597

January 30, 2019

Colorado Water Conservation Board
1313 Sherman St, Rm 721
Denver, CO 80203

Re: WSRF Application

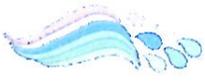
By this letter, the Huerfano County Water Conservancy District makes the commitment to provide \$5,045 toward the local match required for a CWCB Water Supply Reserve Fund grant. The purpose of that funding will be to support additional geotechnical work at two of the three preferred reservoir sites selected by the Cucharas River Storage Collaborative on November 29, 2018 as a result of the Phase 2 geotechnical investigation follow-up of the Collaborative's storage study.

This Phase 3 project has support from the Collaborative members who met at the November 29 meeting of the Collaborative, including the Town of La Veta, Maria Lakes Grazing Association, Huerfano County and Cucharas Sanitation and Water District. Match commitments are in the form of emails.

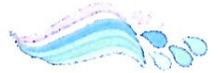
With warm regards,

A handwritten signature in black ink, appearing to read "Scott King", is written over a solid horizontal line.

Scott King
President of the Board



Cucharas Sanitation and Water District



January 9, 2019

Huerfano County Water Conservancy District
PO Box 442
La Veta, CO 81055

HCWCD,

Cucharas Sanitation and Water District will be contributing \$3,000 as match, if the Water Supply Reserve Fund Grant is approved, for further geotechnical investigation of South Baker Creek, Bruce Canyon and a percentage of the engineering design for South Baker Creek.

If you have any questions or concerns please contact James Berg or Leslie Cordova. CSWD contact information is listed below.

James H. Berg, CSWD President

16925 State Highway 12

Cuchara, Colorado 81055-9775

Telephone: (719) 742-3108

Fax: (719) 742-3109

Website: www.cuchara.org

James Berg – President

James Alt - Vice-President

James Littlefield - Treasurer

Ronald Barbee – Secretary
Sheila F. Snider - Director

Shannon Shrout - Operations Superintendent

Leslie Cordova - Administrative Manager

Kristan Lowe - Reception/Billing

Todd Eddleman – Field Operations
Russell Shrout – Field Operations



Carol Dunn <hwcddistrict@gmail.com>

RE: Match for Collaborative Storage grant application

2 messages

Laurie Erwin <TownofLaVeta@centurytel.net>
To: Carol Dunn <hwcddistrict@gmail.com>

Fri, Jan 11, 2019 at 4:23 PM

Carol,

The Town of La Veta placed \$5,000.00 in the 2019 fiscal year budget to continue the Cucharas Basin Storage Study.

Laurie

From: Carol Dunn [mailto:hwcddistrict@gmail.com]
Sent: Friday, January 11, 2019 2:39 PM
To: Doug Brgoch <dougbrgoch@townoflaveta-co.gov>; laurieerwin@townoflaveta-co.gov; townoflaveta@centurytel.net
Subject: Match for Collaborative Storage grant application

Town of La Veta

Storage Collaborative partners:

We're just checking to see if your agency will commit match dollars for the WSRF grant application we will be submitting soon for additional geotechnical investigation at Bruce Canyon and South Baker Creek reservoir sites, plus 30% engineering on South Baker. Sandy White thought perhaps the match had been approved at one of your recent meetings and we just haven't received a letter of commitment yet.

Please let me know.

Many thanks,

--

Carol Dunn

HCWCD Administrator

Carol Dunn <hwcddistrict@gmail.com> Fri, Jan 11, 2019 at 4:35 PM
Draft To: Laurie Erwin <TownofLaVeta@centurytel.net>
Cc: Scott King <slking@centurylink.net>, Sandy White <sandy@white-jankowski.com>, Beaver Edmundson <beranch3@yahoo.com>, Al Tucker <altucker63@gmail.com>, Kent Mace <kentmace@cswoods.com>

That's great news Laurie! Thank you so much.

Carol

[Quoted text hidden]



Carol Dunn <hwcddistrict@gmail.com>

Re: Match for Collaborative Storage grant application

1 message

john galusha <john@huerfano.us>

Sat, Jan 12, 2019 at 9:00 AM

To: Carol Dunn <hwcddistrict@gmail.com>, Max & Sharon Vezzani <vezzani28co@aol.com>, ergarcia69@hotmail.com, Gerald Cisneros <gcisneros.1989@gmail.com>

I have it in the budget.

John Galusha
Huerfano County Administrator
719-738-3000 x110

On 1/11/2019 2:44 PM, Carol Dunn wrote:

Huerfano County
Storage Collaborative Partners:

We're just checking to see if your agency is planning to commit \$3,000 local match for the WSRF grant application we will be submitting soon for additional geotechnical investigation at Bruce Canyon and South Baker Creek reservoir sites, plus 30% engineering on South Baker. Sandy White thought perhaps the match had been approved at one of your recent meetings and we just haven't received a letter of commitment yet.

Please let me know.

Many thanks,

Carol Dunn
HCWCD Administrator