

**Water Supply Reserve Fund
Water Activity Summary Sheet
September 16-17, 2020
Agenda Item 19(f)**

Applicant & Grantee: Lookout Mountain Water District

Water Activity Name: Lookout Mountain Water District SCADA Implementation Project

Water Activity Purpose: Env & Rec/M&I-Implementation

County: Clear Creek

Drainage Basin: South Platte

Water Source: Beaver Brook

Amount Requested: \$50,000 Metro Account
\$100,000 Statewide Account
\$150,000 Total Request

Matching Funds: Basin Account Match = \$50,000

- 50% of statewide request (meets 10% min)

Applicant Match (cash) = \$200,000

- 200% of the statewide request (meets 10% min)

Total Match (Basin request & Applicant Match) = \$250,000

- 250% of the statewide request (meets 50% min)

Staff Recommendation:
Staff recommends approval of up to \$50,000 from the Metro Account, and up to \$100,000 from the Statewide Account to help fund the project: Upper Beaver Brook Reservoir SCADA System Project.

Water Activity Summary: WSRF Funds, if approved will assist Lookout Mountain Water District design and install a SCADA system to automate Upper Beaver Brook Reservoir's release gate operation based upon realtime measured flow data and additional user inputs (e.g. current water right priority call date, forecasted water treatment plant demands, etc.). Additional improvements include outlet works engineering, replacement of one outlet pipe, and lining an existing outlet pipe, It is also critical that the District improves the 96-year old outlet infrastructure in order to fully utilize this new SCADA system.

Discussion: This effort will assist the Metro Roundtable achieve several goals as called for in their Basin Implementation Plan, such as: Municipal Water Conservation, Reuse and Efficiency and South Platte Storage (SPBIP Section 1.9.2 and 1.9.4), and Recreational and Water Quantity Enhancements (SPBIP Sections 1.9.3, 1.9.5, and 1.9.7), while also assisting Colorado achieve the goal of Meeting Municipal and Industrial Water Needs Throughout Colorado (CWP, Section 6.5) as called for in Colorado's Water Plan.

Issues/Additional Needs: None.

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Sources/Match	Cash	In-kind	Total	Status
Lookout Mountain Water District	\$200,000	\$0	\$200,000	Secured
Sub-total	\$200,000	\$0	\$200,000	
WSRF Metro Account	\$50,000	\$0	\$50,000	Secured
Sub-total	\$250,000	\$0	\$250,000	
WSRF Statewide Account	\$100,000	\$0	\$100,000	
Total Project Costs	\$350,000	\$0	\$350,000	

CWCB Project Manager: Matt Stearns

August 18, 2020

Colorado Water Conservation Board
1313 Sherman Street, Suite 721
Denver, CO 80203

RE: Lookout Mountain Water District SCADA Implementation Project

Dear Honorable Board Members,

At its July 9, 2020, meeting, the Metro Roundtable unanimously voted to support a grant application from the Lookout Mountain Water District (LMWD) for \$50,000 in WSRF Basin Account and support a grant application for \$100,000 from Statewide Account.

LMWD is a small (506 taps) Title 32 water district created in 1988 from the City of Golden's former water system infrastructure between the Beaver Brook Basin and Lookout Mountain. LMWD is a unique and complex public water system composed of approximately 12 miles of main pipeline and three reservoirs, including Upper Beaver Brook Reservoir (397 AF capacity), Lower Beaver Brook Reservoir (30.8 AF capacity), and Lookout Mountain Reservoir (101 AF capacity). In addition, there is an instream flow requirement on Beaver Brook below Lower Beaver Brook Reservoir.

As evidenced by recent critical water supply shortages, LMWD has identified an urgent need to increase their resiliency to drought and climate change through improved water management. Fortunately, a recently performed study has found that there are significant non-beneficial water storage releases from their largest reservoir and that improved operational efficiency will increase their ability to meet both M&I and instream flow demands.

LMWD is proposing a project to design and install a supervisory control and data acquisition (SCADA) system to automate Upper Beaver Brook Reservoir's release gate operation to reduce non-beneficial storage releases and ensure that downstream instream flow requirements are met when required. In addition, the 96-year old outlet infrastructure at Upper Beaver Brook Reservoir has been identified as having a significant chance of failure under the frequent adjustments by the new SCADA system. It is therefore critical that the District also improves the outlet infrastructure in order to fully utilize this new SCADA system. The estimated cost of this effort is approximately \$350,000.

LMWD is requesting \$100,000 from the WSRF Statewide Account and \$50,000 from the Metro Roundtable Basin Account to support this project. LMWD and its partners would provide a matching amount of \$200,000.

After discussion, the Metro Roundtable (MRT) unanimously agreed this project could facilitate a significant improvement in LMWD's water storage supply, better management of Beaver Brook diversions and instream flow water rights, and meets MRT's guidelines in multiple ways:

- SCADA implementation will significantly reduce non-beneficial water releases from Upper Beaver Brook Reservoir, thereby maximizing the use of existing South Platte Basin water supplies.
- Improved water management operations will ensure better real-time consideration of the

decreed instream flow water rights for Beaver Brook and could therefore enhance environmental impact and recreational attributes.

- Increased water storage reserves from this project will directly improve drought tolerance for the entire community and help LMWD to manage the risks of climate change.

Therefore, the MRT approved the WSRF grant application for WSRF funding including \$50,000 from the MRT Basin Account and supports approval of a \$100,000 grant from the Statewide Account to support Lookout Mountain Water District's SCADA Implementation Project.

Yours Truly,



Barbara J. Biggs
Metro Roundtable Chairperson



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:

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)

	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.

(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:	September
Desired Notice to Proceed Date:	ASAP

Water Activity Summary	
Name of Applicant	Lookout Mountain Water District
Name of Water Activity	Lookout Mountain Water District SCADA Implementation Project
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾
Metro Round Table	\$50,000
Basin Account Request Subtotal	\$50,000
Statewide Account Request ⁽¹⁾	\$100,000
Total WSRF Funds Requested (Basin & Statewide)	\$150,000
Total Project Costs	\$350,000

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



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Grantee and Applicant Information	
Name of Grantee(s)	Lookout Mountain Water District
Mailing Address	10200 West 44th Avenue, Wheat Ridge, CO 80033
FEIN	84-1090570
Grantee's Organization Contact ⁽¹⁾	Barb Nevins
Position/Title	Board President
Email	bbnevins@yahoo.com
Phone	303-526-0938
Grant Management Contact ⁽²⁾	Nickie Holder
Position/Title	LMWD Adminstrator
Email	nmholderbiz@gmail.com
Phone	303-526-2025
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).
Lookout Mountain Water District (LMWD) is a small (506 taps) Title 32 water district created in 1988 from the City of Golden's former water system infrastructure and water rights between the Beaver Brook Basin and Lookout Mountain. LMWD is a unique and complex public water system composed of approximately 12 miles of main pipeline and three reservoirs, including Upper Beaver Brook Reservoir (397 AF capacity), Lower Beaver Brook Reservoir (30.8 AF capacity), and Lookout Mountain Reservoir (101 AF capacity). In addition, there is an instream flow requirement on Beaver Brook below Lower Beaver Brook Reservoir.



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Type of Eligible Entity (check one)	
	Public (Government): municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
✓	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
✓	Implementation

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

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	Clear Creek County
Latitude	39°41'38.47"N
Longitude	105°25'54.84"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.

As evidenced by recent critical water supply shortages, LMWD has identified an urgent need to increase our resiliency to drought and climate change through improved water management to continue to serve our 506 taps. A recently performed study has found that there are significant non-beneficial water storage releases from the 397 AF capacity Upper Beaver Brook Reservoir and that large water supply gains (20-30 AF per year) can be realized through increased operational efficiency.

The proposed project will design and install a SCADA system to automate Upper Beaver Brook Reservoir's release gate operation based upon realtime measured flow data and additional user inputs (e.g. current water right priority call date, forecasted water treatment plant demands, etc.). It is also critical that the District improves the 96-year old outlet infrastructure in order to fully utilize this new SCADA system.

This effort will:

1. Maximize the use of existing South Platte Basin water supplies by reducing non-beneficial water releases from Upper Beaver Brook Reservoir.
2. Protect and enhance environmental and recreational attributes by helping to ensure that existing Beaver Brook instream flow requirements for 17,405 feet of stream in times of drought.

Measurable Results

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

0	New Storage Created (acre-feet)	
0	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
427.8	Existing Storage Preserved or Enhanced (acre-feet)	
17,405	Length of Stream Restored or Protected (linear feet)	
20-30 AF/yr	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
0	Area of Restored or Preserved Habitat (acres)	
0	Length of Pipe/Canal Built or Improved	
506	Other	Households/Businesses protected from water shortage

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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](#)).

Colorado's Water Plan identified deficits in the state's water supplies relative to future demands. As demonstrated by our recent water supply shortages, LMWD is keenly aware of this fact and would greatly benefit from the assurance of having increased water storage. In addition, this project would increase the overall water resources available in the South Platte Basin by reducing LMWD's reliance on leased water and reducing non-beneficial storage releases. Finally, this project will protect and enhance environmental and recreational attributes by helping to ensure that the existing Beaver Brook instream flow requirements below Upper Beaver Brook Reservoir are met in times of drought.

This project's goals are in alignment with the State Water Plan and the South Platte Basin Implementation Plan as summarized below:

Meeting Municipal and Industrial Water Needs Throughout Colorado (CWP, Section 6.5) – Colorado's Water Plan encourages the use of grassroots efforts to identify and implement projects and methods to meet community and agricultural water needs throughout Colorado. A key related long-term goal is to use water efficiently to reduce overall future water needs (CWP, pg. 6-127). Without this project, LMWD faces the real possibility of not having adequate water to serve its customers. Through the reduction of non-beneficial storage releases from Upper Beaver Brook Reservoir, this project will increase system efficiency to provide significant water storage resources for LMWD to deliver municipal water to the public in times of water scarcity.

Municipal Water Conservation, Reuse and Efficiency and South Platte Storage (SPBIP Section 1.9.2 and 1.9.4) – This project will implement a SCADA system to conserve storage in Upper Beaver Brook Reservoir through automated release gate operation based upon realtime measured flow data and user inputs, such as current priority date and forecasted water treatment plant demands.

IPP Implementation and Recreational and Water Quantity Enhancements (SPBIP Sections 1.9.3, 1.9.5, and 1.9.7) – Beaver Brook has a decreed instream flow requirement (Case Number = 1-87CW272) varying between 0.25 and 0.5 cfs depending on time of year. This project encourages a multi-purpose project that protects and enhances environmental and recreational attributes by helping to ensure that these existing Beaver Brook instream flow requirements below Upper Beaver Brook Reservoir are met in times of drought.

(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 3 rd 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 3 rd party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3 rd 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):
Metro Basin Account	\$50,000 (cash)
Lookout Mountain Water District	\$200,000 (cash)
Total Match	\$250,000
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.

Lookout Mountain Water District was recently funded by Colorado Water Resources and Power Development Authority (CWRPDA) to conduct a hydropower pre-feasibility study on LMWD's water supply system. During this effort water flow rates for various improvement options were modeled in order to quantify hydropower energy generation potential. Momentum Engineering, LMWD's consultant for this effort, also performed additional pro-bono work to further quantify and document water savings and increased storage for each water supply alternative.

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

Lookout Mountain Water District has not received any previous CWCB grants.

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.

Lookout Mountain Water District does not have any TABOR issues that would limit the amount of grant money receivable.



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Colorado Water Conservation Board	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	July 1, 2020
Water Activity Name:	Lookout Mountain Water District SCADA Implementation Project
Grant Recipient:	Lookout Mountain Water District
Funding Source:	Metro Basin Account, Statewide 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.)	
As evidenced by recent critical water supply shortages, LMWD has identified an urgent need to increase our resiliency to drought and climate change through improved water management to continue to serve our 506 taps. A recently performed study has found that there are significant non-beneficial water storage releases from the 397 AF capacity Upper Beaver Brook Reservoir and that large water supply gains (20-30 AF per year) can be realized through increased operational efficiency. The proposed project will design and install a SCADA system to automate Upper Beaver Brook Reservoir's release gate operation based upon realtime measured flow data and additional user inputs (e.g. current water right priority call date, forecasted water treatment plant demands, etc.). It is also critical that the District improves the 96-year old outlet infrastructure in order to fully utilize this new SCADA system. This effort will: 1. Maximize the use of existing South Platte Basin water supplies by reducing non-beneficial water releases from Upper Beaver Brook Reservoir. 2. Protect and enhance environmental and recreational attributes by helping to ensure that existing Beaver Brook instream flow requirements for 17,405 feet of stream in times of drought.	
Objectives: (List the objectives of the project)	
This project's objectives are in alignment with the State Water Plan and the South Platte Basin Implementation Plan as summarized below: Objective #1 - Meeting Municipal and Industrial Water Needs Throughout Colorado (CWP, Section 6.5) – Colorado's Water Plan encourages the use of grassroots efforts to identify and implement projects and methods to meet community and agricultural water needs throughout Colorado. A key related long-term goal is to use water efficiently to reduce overall future water needs (CWP, pg. 6-127). Without this project, LMWD faces the real possibility of not having adequate water to serve its customers. Through the reduction of non-beneficial storage releases from Upper Beaver Brook Reservoir, this project will increase system efficiency to provide significant water storage resources for LMWD to deliver municipal water to the public in times of water scarcity. Objective #2 - Municipal Water Conservation, Reuse and Efficiency and South Platte Storage (SPBIP Section 1.9.2 and 1.9.4) – This project will implement a SCADA system to conserve storage in Upper Beaver Brook Reservoir through automated release gate operation based upon realtime measured flow	

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data and user inputs, such as current priority date and forecasted water treatment plant demands.

Objective #3 - IPP Implementation and Recreational and Water Quantity Enhancements (SPBIP Sections 1.9.3, 1.9.5, and 1.9.7) – Beaver Brook has a decreed instream flow requirement (Case Number = 1-87CW272) varying between 0.25 and 0.5 cfs depending on time of year. This project encourages a multi-purpose project that protects and enhances environmental and recreational attributes by helping to ensure that these existing Beaver Brook instream flow requirements below Upper Beaver Brook Reservoir are met in times of drought.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 - Improve Outlet to Allow SCADA</u>
Description of Task:
The 96-year old outlet infrastructure at Upper Beaver Brook Reservoir has been identified by the District's Dam Construction Engineer as having a significant chance of failure under the frequent adjustments by the new SCADA system. It is therefore critical that the District improves the outlet infrastructure in order to utilize this new SCADA system.
Method/Procedure:
The improvements to Upper Beaver Brook's outlet works will likely consist of the replacement of one gate, the lining of the outlet pipe, and work on the intake and outlet structure. LMWD has hired Inland Marine Services to perform an underwater evaluation of the outlet works at Upper Beaver Brook Reservoir. The results of this investigation will clarify the District's final decision regarding how best to improve the outlet to allow for SCADA.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
At the completion of this task, LMWD will be provided with improved outlet infrastructure and supporting engineering drawings.

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Tasks
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
At the completion of this task, the CWCB will be provided with a report with a description of accomplishments and showing pictures of the completed installation of the new infrastructure.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 - Design and Install SCADA System</u>
Description of Task:
LMWD will contract the design and installation of a supervisory control and data acquisition (SCADA) system to automate Upper Beaver Brook Reservoir's release gate operations based upon realtime measured flow data and additional user inputs (e.g. current water right priority call date, forecasted water treatment plant demands, etc.).
Method/Procedure:
This effort will be coordinated between several entities. The SCADA equipment supplier/installer will first visit the site to discuss the components and requirements of the desired system with District's water engineer, Board members, and supporting consultants. The SCADA equipment supplier/installer will then provide LMWD with a detailed Scope of Work and Budget describing their role in the project and the programming logic of how the components will be integrated. Upon receipt, the District's water engineer, Board members, and supporting consultants will review this SOW and provide suggestions. The SCADA equipment supplier/installer will then install and program the components, perform quality control testing, and train the water system's operator to use the system. Finally, the District's water engineer, Board members, and supporting consultants will develop a supporting operation and maintenance plan for sustainable long-term use.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)



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Tasks

At the completion of this task, LMWD will be provided with a robust SCADA system to optimize their operations at Upper Beaver Brook Reservoir.

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

At the completion of this task, the CWCB will be provided with a report with a description of accomplishments and showing pictures of the completed SCADA installation.

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-



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Reporting Requirements

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: July 1, 2020

Water Activity Name: Lookout Mountain Water District SCADA Implementation Project

Grantee Name: Lookout Mountain Water District

<u>Task No.</u> ⁽¹⁾	<u>Description</u>	<u>Start Date</u> ⁽²⁾	<u>End Date</u>	<u>Matching Funds</u> (cash & in-kind) ⁽³⁾	<u>WSRF Funds</u> (Basin & Statewide combined) ⁽³⁾	<u>Total</u>
1	Outlet Works Engineering	Oct 1, 2020	Oct 31, 2020	\$30,000	\$20,000	\$50,000
1	Replacement of one outlet gate	Nov 1, 2020	Jan 31, 2021	\$36,000	\$24,000	\$60,000
1	Lining of the outlet pipe	Nov 1, 2020	Jan 31, 2021	\$42,000	\$28,000	\$70,000
1	Demo and concrete work on outlet works	Nov 1, 2020	Jan 31, 2021	\$42,000	\$28,000	\$70,000
2	Supplier Site Visit	Oct 1, 2020	Oct 31, 2020	\$750	\$750	\$1,500
2	Actuator Hardware	Nov 1, 2020	Jan 31, 2021	\$5,000	\$5,000	\$10,000
2	Actuator Install	Nov 1, 2020	Jan 31, 2021	\$7,500	\$7,500	\$15,000
2	Gage Hardware	Nov 1, 2020	Jan 31, 2021	\$12,000	\$12,000	\$24,000
2	Gage Install	Nov 1, 2020	Jan 31, 2021	\$3,000	\$3,000	\$6,000
2	Celluar Service Plan	Oct 1, 2020	Sep 30, 2021	\$250	\$250	\$500
2	Supplier Programming	Jan 31, 2021	Mar 31, 2021	\$1,500	\$1,500	\$3,000
2	Water Rights Consulting	Oct 1, 2020	Mar 31, 2021	\$7,500	\$7,500	\$15,000
2	Operational/Contingency Plan Development	Oct 1, 2020	Mar 31, 2021	\$4,000	\$4,000	\$8,000
2	Project Management and Reporting	Oct 1, 2020	Sep 30, 2021	\$8,500	\$8,500	\$17,000
Total				\$200,000	\$150,000	\$350,000

(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.

(2) 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

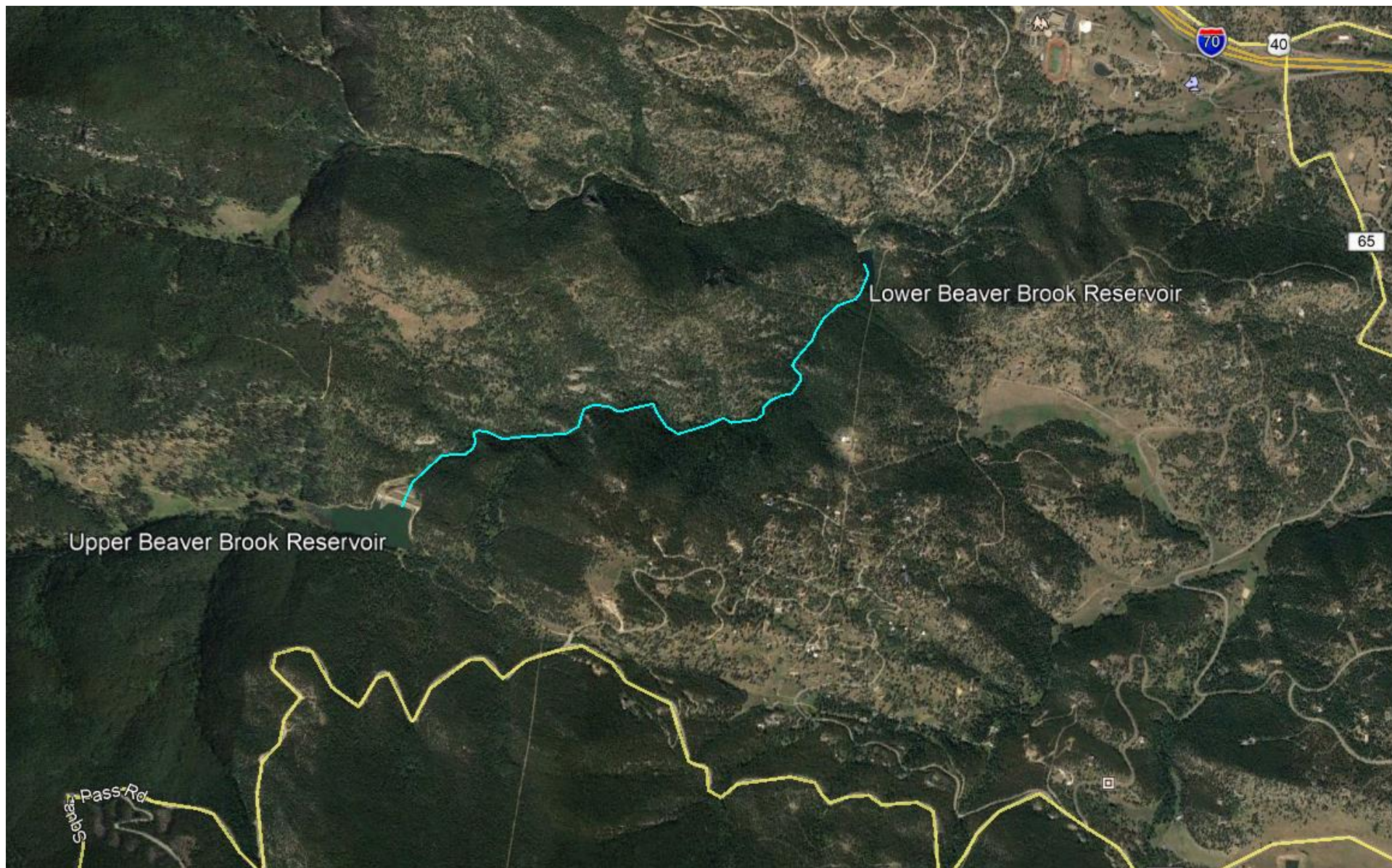


Figure 1: Overview Map



Figure 2: Upper Beaver Brook Reservoir

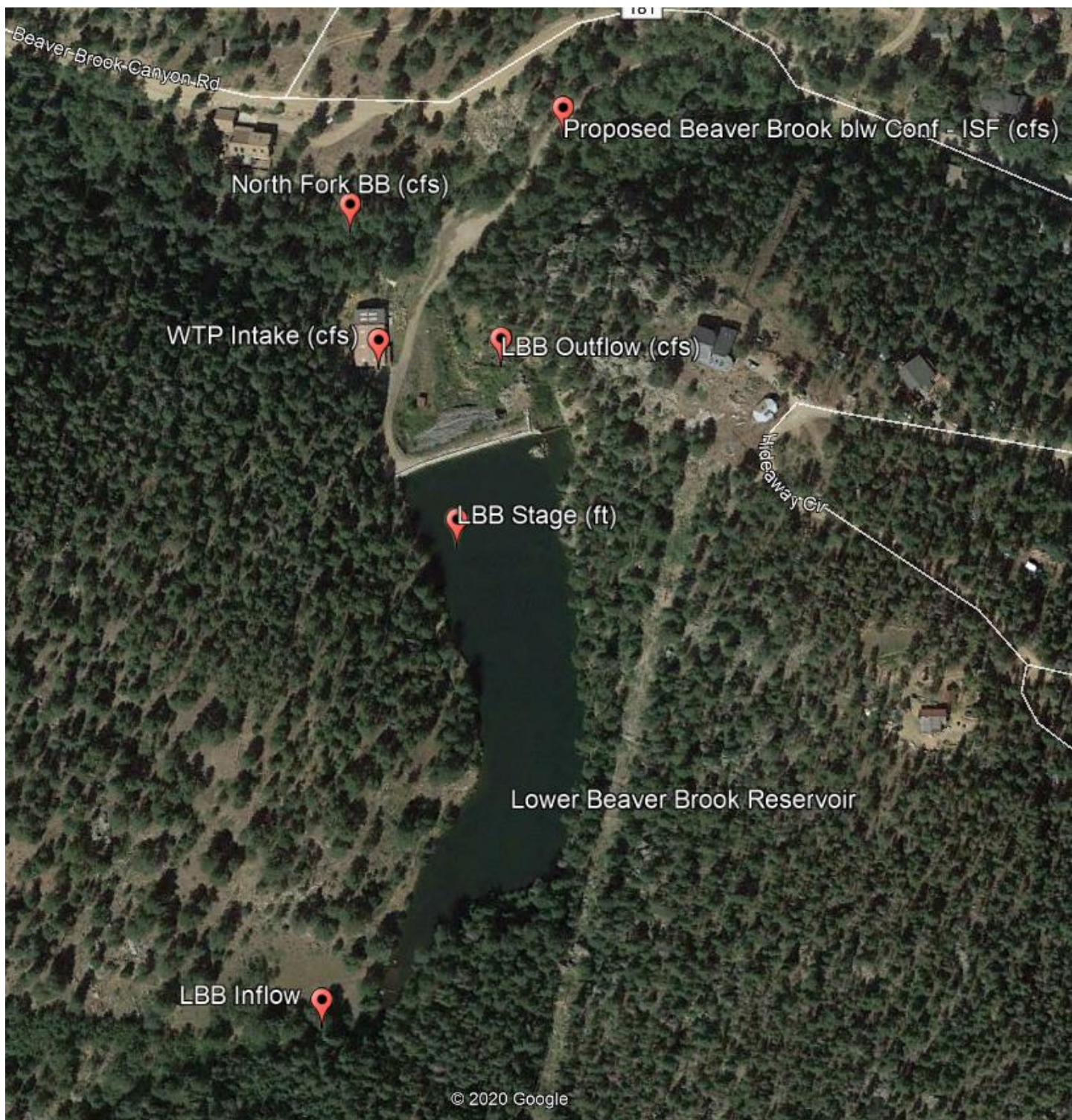


Figure 3: Lower Beaver Brook Reservoir



Figure 4: Aerial photo of Upper Beaver Brook Reservoir



Figure 5: Photo of Upper Beaver Brook Reservoir Gate Controls