



Last Updated: July 2017

Colorado Water Conservation Board

Water Plan Grant Application

Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as “project”) funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Supply and Demand Gap Projects: Rebecca.Mitchell@state.co.us

Water Storage Projects: Anna.Mauss@state.co.us

Conservation, Land Use Planning: Kevin.Reidy@state.co.us

Education & Innovation Activities: Mara.MacKillop@state.co.us

Agricultural Projects: Gregory.Johnson@state.co.us

Environmental & Recreation Projects: Linda.Bassi@state.co.us

Applicants interested in submitting an 'Intent to Apply' in the future are encouraged to check here ☐ and fill in all sections with the best information available at the time. Exhibits excluded.

This “Intent to Apply” will help CWCB prioritize Projects that are not ready for fully completed Water Plan Grant Application due to the initial timeframe and deadlines required.

Water Project Summary

Name of Applicant	City of Walsenburg	
Name of Water Project	Walsenburg City Lake Dam Rehabilitation and Enlargement	
CWP Grant Request Amount		\$804,000
Other Funding Sources <u>CWCB Construction Loan Program</u>		\$6,017,000
Other Funding Sources _____		\$
Applicant Funding Contribution		\$
Total Project Cost		\$6,821,000

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Applicant & Grantee Information	
Name of Grantee(s)	City of Walsenburg
Mailing Address	525 S. Albert Avenue, Walsenburg, CO 81089
FEIN	84-6000-627
Organization Contact	James P. Eccher
Position/Title	Mayor
Email	jimmere@hotmail.com
Phone	(719) 569-5816
Grant Management Contact	Mark Ellis
Position/Title	Finance Director
Email	mellis@cityofwalsenburg.com
Phone	(719) 695-1036
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

Last Updated: July 2017

Description of Grantee/Applicant
Provide a brief description of the grantee's organization (100 words or less).
<p>Walsenburg is a full service statutory city that is the county seat and the most populous city of Huerfano County. The city population was 3,068 at the 2010 census, down from 4,182 in 2000. Walsenburg is located in east-central Huerfano County, on the north side of the Cucharas River at the eastern edge of the foothills of the Sangre de Cristo Mountains. Interstate 25 runs along the eastern edge of the city with Pueblo 48 miles to the north and Trinidad 36 miles to the south. Walsenburg has a total area of 3.2 square miles, all of it land.</p>



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Type of Eligible Entity (check one)	
X	Public (Government): Municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
	Public (Districts): Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.
	Non-governmental organizations (NGO): Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes .

Type of Water Project (check all that apply)	
	Study
X	Construction
	Identified Process or Program
	Other

Category of Water Project (check all that apply)		
X	Supply and Demand Gap Projects - Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap. (Applicable Exhibit A Task(s) <i>see attached</i>)	
X	Water Storage Projects - Projects that facilitate the development of additional storage, artificial recharge into aquifers, and dredging existing reservoirs to restore the reservoirs' full decreed storage capacity. (Applicable Exhibit A Task(s) <i>see attached</i>)	
	Conservation and Land Use Planning Projects - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. (Applicable Exhibit A Task(s) _____)	
	Engagement & Innovation Projects - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application available on the website. (Applicable Exhibit A Task(s) _____)	
	Agricultural Projects - Projects that provide technical assistance and improve agricultural efficiency. (Applicable Exhibit A Task(s) _____)	
	Environmental & Recreation Projects – Projects that promote watershed health, environmental health, and recreation. (Applicable Exhibit A Task(s) _____)	
	Other	Explain:



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Location of Water Project

Please provide the general county and coordinates of the proposed project below in **decimal degrees**. The Applicant shall also provide, in Exhibit C, a site map if applicable.

County/Countries	Huerfano
Latitude	N 37 ⁰ -35'-45"
Longitude	W 105 ⁰ -51"-11"

Water Project Overview

Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. 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, and area of habitat improvements, where applicable. 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, Other Funding Sources/Amounts and Schedule.

The Walsenburg City Lake Dam is currently under a reservoir storage restriction and a mandatory dam safety compliance plan imposed by the State Engineers Office for identified dam safety deficiencies. RJH Consultants, Inc, an engineering firm specializing in the rehabilitation, design and construction of dams has determined, through a number of previously completed investigations and analyses, that the most cost-effective rehabilitation option is to completely remove the existing dam and build a new state-of-the-art dam, that meets all current dam safety design criteria, in the same location as the existing dam. The City, in conjunction with other local water users and entities who will have shared access to the new storage, has the desire to raise the existing dam height by three (3) vertical feet and create approximately 120 acre-feet of new and additional storage in the reservoir. The CWP grant funding will be used for the design, permitting and construction of the three (3) foot dam height raise and the resulting new reservoir storage will be approximately 120 acre-feet.



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Measurable Results		
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:		
120-140	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
460	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)	
	Quantity of Water Shared through Alternative Transfer Mechanisms	
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning	
	Other	Explain:

Water Project Justification
<p>Provide a description of how this water project supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. 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).</p> <p>The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)</p>
<p>Commitment to collaboration – Project is endorsed by the Huerfano County Water Conservancy District (see attached) which has conditioned its support on a portion of the enlarged capacity being made available to the members of the Cucharas Storage Collaborative, as well as others, which is currently being negotiated at this time.</p> <p>Does the project proponent address an identified water gap – The project is included in the Master Needs List of the Arkansas Basin Implementation Plan (#2015-0011) which states that this project provides an important component to meeting the statewide storage gap of 400,000 acre-feet. Additionally, the project is also included in the Master Needs List for the Cucharas Storage Collaborative Study (#2015-0007) with approximately 120 acre-feet potential new storage being made available for the region.</p> <p>Does the project proponent demonstrate local investment or contribution – The City has just recently (July 2017) secured a loan of up to \$6.8 from CWCB for purposes of completing the project. Project is ready to proceed upon the notice of the award of grant funds.</p>



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Related Studies

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

Walsenburg's project is included in the Master Needs List of the Arkansas Basin Implementation Plan (#2015-0011) and the Master Needs List of the Cucharas Storage Collaborative Study (#2015-0007).

Previous CWCB Grants, Loans or Other Funding

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; 6) Percentage of other CWCB funding for your overall project.

City of Walsenburg
POGG1PDAA 201700000736
PDAA6000 grant funds for feasibility study
\$49,900.00
Less than 1%

Taxpayer Bill of Rights

The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application.

The City can accept the full value of the grant request in 2018 without effecting its annual revenue limit calculation since it is fully de-Bruce. Any award in excess of \$220k⁺ will result in the loss of enterprise status of the Water Fund in 2019, meaning that the City will need to establish a one-year 3% TABOR reserve in that Fund and must refrain from entering into any multi-fiscal debt arrangements in that year without prior approval from the citizens. All grant dollars awarded to this project will need to be spent, to the extent possible, in 2018 with any carry-over grant expenditures in subsequent years being held to under \$220k⁺ in order to assure that enterprise status is not jeopardized over multiple years.



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Submittal Checklist	
X	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract .
Exhibit A	
X	Statement of Work ⁽¹⁾
X	Budget & Schedule ⁽¹⁾
	Letters of Matching and/or Pending 3 rd Party Commitments ⁽¹⁾
Exhibit C	
X	Map ⁽¹⁾
X	Photos/Drawings/Reports
X	Letter of Support
	Certificate of Insurance (General, Auto, & Workers' Comp.)
	Certificate of Good Standing with Colorado Secretary of State ⁽²⁾
	W-9 ⁽²⁾
	Independent Contractor Form ⁽²⁾ (If applicant is individual, not company/organization)
Engagement & Innovation Grant Applicants ONLY	
	Engagement & Innovation Supplemental Application ⁽¹⁾

(1) Required with application.

(2) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

Colorado Water Conservation Board Water Plan Grant Application –
Exhibit A

SECTION 1 - PROJECT DESCRIPTION AND STATEMENT OF WORK

1.1 Background and Location

City Lake Dam is located in Huerfano County, about 4 miles southwest of Walsenburg, Colorado along a small drainage tributary to the Cucharas River. Water is conveyed to the reservoir from a supply pipeline from upstream reservoirs. The dam and reservoir were originally constructed circa 1910 and are currently operated to provide raw water to the Walsenburg Water Treatment Plant (WTP) located near the downstream toe of the dam. City Lake Dam is currently a small-size, high hazard dam. The hazard classification is documented in a letter from the SEO to the City dated September 22, 2015.

1.2 Existing Facilities

The existing maximum normal pool of the reservoir is maintained at elevation (El.) 6519.5. At this elevation, the existing reservoir has a storage capacity of 465 ac-ft.

The existing embankment is approximately 19 feet high and has a crest that is approximately 3,000 feet long. The embankment has an approximate upstream slope that varies between about 0.75 horizontal to 1 vertical (H:V) to 10H:1V, a crest width that varies between about 15 and 30 feet, and a downstream slope that varies between about 1H:1V and 6H:1V. The embankment contains light to moderately dense grasses and weeds on the crest and downstream slope. Slope protection consisting of loose-placed concrete rubble is located along a majority of the upstream slope. Surface seepage is present and was observed at the toe and a few feet above the toe on the downstream slope along approximately 1,000 feet of the dam. In 1998, earthfill was placed without moisture-density controls on the downstream slope along approximately 1,000 feet of the embankment.

An overhead electric line extends generally parallel to Highway 160 on the south side of the highway. A portion of the overhead electric line is suspended above the embankment and several poles are located in the embankment.

The reservoir is filled primarily by flows from Wahatoya Reservoir and Daigre Reservoir through two supply pipelines that discharge to the reservoir along its southwest rim. A short distance upstream of the reservoir, the two supply pipelines combine into a single 20-inch-diameter asbestos-cement pipe. Flows through the pipeline are controlled by valves at each upstream reservoir.

The existing outlet works consists of two parallel pipes (18-inch-diameter cast iron pipe (CIP) and 12-inch-diameter CIP) that discharge directly to the WTP. A secondary 12-inch-diameter CIP is located south of the existing outlet pipes and can also be used to

convey flows to the WTP. Reinforced concrete inlet structures are located at the inlets of the parallel pipes and secondary 12-inch CIP along the bottom of the reservoir. Control gates are not located at the upstream end of these three pipes so the outlet pipes are pressurized through the dam embankment. The parallel 18-inch and 12-inch-diameter outlet pipes are heavily corroded and have been in service approximately 100 years. The existing outlet works pipes, when used in tandem, do not meet the SEO requirements for hydraulic capacity to lower the reservoir 5 feet in 5 days.

An existing Parshall flume along the right abutment of the dam is used to control the maximum normal pool level of the reservoir. The flume consists of a 2.75-foot-wide steel flume with concrete wingwalls at both ends. The flume discharges to an open ditch located along the downstream toe of the dam. The ditch subsequently discharges to the Coler Ditch near the WTP.

The existing emergency spillway consists of an unlined earthen channel located along the right abutment of the dam. The control section is trapezoidal with a bottom width of about 80 feet and side slopes of about 6H:1V. Flows from the spillway discharge into a small drainage located about 750 feet south of the WTP that eventually discharge to the Cucharas River about 1 mile downstream of the dam. The existing spillway has a hydraulic capacity of approximately 500 cubic feet per second (cfs), which corresponds to about one-half of the routed IDF.

1.3 Primary Rehabilitation Project Components

1.3.1 General

Rehabilitation will consist of demolishing most of the existing dam and constructing a new earthen embankment dam with outlet works, spillway, and other ancillary facilities. The intent of the Project is to re-construct the dam to address previously identified dam safety deficiencies and increase storage volume. The new dam will be 3 feet higher than the existing dam. The primary components of the rehabilitation are described below. The general plan of modifications is presented in the Drawings in Appendix G.

1.3.2 Demolition

Portions of the existing dam and appurtenant facilities will be completely or partially demolished or abandoned-in-place. A general summary of the facilities that will be demolished is provided below.

- Complete demolition:
 - Outlet works intake structures.
 - 18-inch-diameter outlet works pipe.

- Parshall flumes.
- Auxiliary spillway.
- Miscellaneous seepage measurement weirs.
- Partial demolition:
 - Dam embankment. The existing dam embankment will be excavated except for a portion near the existing overhead lines at the north part of the reservoir.
 - 8-inch- and 12-inch-diameter pipes through the embankment.
- Abandoned:
 - 8-inch- and 12-inch-diameter pipes downstream of the dam.

The demolition plan is presented in the Drawings in Appendix G.

1.3.3 Dam Embankment

The new dam embankment will include:

- Excavating a core trench at least 3 feet into bedrock.
- Founding embankment shells on firm alluvial or bedrock foundations.
- Installing a filter on the downstream side of the core trench connected to a chimney and toe drain in the downstream portion of the embankment.
- Reconstructing the embankment with 2H:1V slopes and a 14.5-foot-wide crest to El. 6528.3.

The primary source of fill materials for the embankment will be from the existing embankment. Additional borrow material will be required and could be obtained from the reservoir bottom (more than 200 feet from the toe of the embankment) or from a borrow area in Lathrop State Park. A plan and sections of the dam embankment are presented in the Drawings in Appendix G.

1.3.4 Reservoir

A reservoir elevation-capacity curve was developed using topography collected by Wachob and Wachob, Inc. between 2014 and 2017. Elevation-capacity data is provided in Appendix A. Based on this data, the decreed storage capacity of 412 ac-ft will be at El. 6518.17 and the total capacity of the reservoir will be 600 ac-ft at the new maximum normal pool El. 6522.5, which is about 135 ac-ft more storage than at the previous maximum normal pool El. 6519.5. After about 41,000 cubic yards of material is removed

from the reservoir basin, the decreed storage capacity of 412 ac-ft would occur at about El. 6517.5.

1.3.5 Outlet Works

The new outlet works and service spillway will be combined into a single structure. The outlet works will consist of the following components:

- Excavated approach channel.
- Reinforced concrete intake structure with trash rack at the upstream toe of the dam.
- 24-inch-diameter, steel intake pipe between the intake structure and gate tower. The inlet pipe will be encased in reinforced concrete.
- Reinforced concrete, dual-chamber gate tower at the crest of the dam.
- Five-foot-wide service spillway weir in the gate tower with invert at El. 6522.5. A 32-inch-wide slide gate will be used to convey service spillway flows for reservoir levels between El. 6516.5 and El. 6522.5. Service spillway flows will discharge to the outlet works pipe.
- Two 18-inch-diameter steel pipelines. The north pipeline (i.e., outlet works pipe) will discharge into the Coler Ditch and be used for reservoir evacuation and service spillway releases. The south pipeline (i.e., supply pipeline) will supply flows to the WTP. Both pipes will be encased in reinforced concrete through the dam embankment.
- An 18-inch, manually actuated slide gate in the gate tower will be used to control flows from the intake pipe.
- Two 18-inch, manually-actuated slide gates in the gate tower. One gate will be used to control flow to the outlet works pipe and the other to control flow into the supply pipe to the WTP.
- Reinforced concrete, baffled outlet structure at the downstream end of the outlet works pipe.
- Long-throated flume and riprap-lined discharge channel extending from the outlet structure to Coler Ditch.

A plan, profile, sections, and details of the outlet works are presented in the Drawings in Appendix G.

1.3.6 Auxiliary Spillway

The new auxiliary spillway will include the following components:

- 40-foot-wide, riprap-lined approach channel.

- 40-foot-wide, reinforced concrete control structure at the crest of the dam.
- 40-foot-wide, 305-foot-long, riprap-lined discharge channel with concrete cutoff wall at the downstream end. The initial 43 feet of the riprap lining at the dam will be grouted. The discharge channel will include earthen berms along the sides of the channel to contain spillway flows.

The concrete control structure will impound about the top 10 vertical feet of the reservoir pool (measured from the top of bedrock). A plan, profile, sections, and details of the auxiliary spillway are presented in the Drawings.

1.3.7 Temporary Bypass Pipeline

Inflows to the reservoir during construction will be conveyed to the WTP through a temporary bypass pipeline to accommodate continuous operation of the WTP. The temporary bypass pipeline will consist of a 12-inch-diameter high-density polyethylene (HDPE) pipe connecting the existing 20-inch-diameter reservoir supply pipe to the existing 12-inch-diameter outlet works pipe. The temporary bypass pipeline will be installed after the reservoir is drained and will be removed prior to reservoir filling. The bypass pipeline will include facilities for a contractor to obtain construction water. A plan of the temporary bypass pipeline is presented in the Drawings.

SECTION 2 – BUDGET AND SCHEDULE

2.1 Schedule

The engineered designs, plans and specifications for constructing the dam rehabilitation and enlargement will be submitted to the State Engineers Office (SEO) for review and approval on August 1, 2017. Based on discussions with the SEO, they expect to have design review comments completed and will provide approval of the project by January 1, 2018. All required project permits are expected to be completed and obtained by this date as well. Bidding and procurement will occur in March of 2018 with an expected construction start date of May 1, 2018

2.2 Budget

The overall project budget including the dam rehabilitation and enlargement is \$6,821,000 (to be updated with final cost estimate). The cost estimate for the dam enlargement and additional reservoir storage is \$804,000. Detailed spreadsheets of both cost estimates are on the following pages.



(To be updated with most recent cost estimate)

Item No.	Item	Unit	Quantity	Unit Price (\$)	Total Cost (\$)
General Site					
1	Stripping and Stockpiling Topsoil	CY	8100	\$ 2.60	\$ 21,100
2	Clearing and Grubbing	Acre	12	\$ 4,200	\$ 50,400
3	Erosion Protection and Sediment Control	LS	1	\$ 12,000	\$ 12,000
4	Stream Diversion	LS	1	\$ 60,000	\$ 60,000
5	Reservoir Dewatering	LS	1	\$ 26,000	\$ 26,000
6	Demolition	LS	1	\$ 55,000	\$ 55,000
7	Abandon/Grout 8" Drain Pipe	LS	1	\$ 8,000	\$ 8,000
8	Supply Flow Bypass to WTP	LS	1	\$ 115,000	\$ 115,000
9	Access Road	LS	1	\$ 80,000	\$ 80,000
10	Boat Ramp	LS	1	\$ 15,000	\$ 15,000
11	Relocate Wetlands	LS	1	\$ 25,000	\$ 25,000
12	Traffic Control	Day	32	\$ 1,000.00	\$ 32,000
13	Property Easement/Purchase	LS	1	\$ 50,000	\$ 50,000
14	Site Reclamation	Acre	11	\$ 2,500	\$ 27,500
Embankment					
15	Dewatering for Embankment	LS	1	\$ 225,000	\$ 225,000
16	Excavation to Stockpile	CY	120,200	\$ 3.40	\$ 408,700
17	Remove Existing Slope Protection	CY	6,500	\$ 5.80	\$ 37,700
18	Foundation Preparation	SY	7,500	\$ 10.80	\$ 81,000
19	Earthfill from Stockpile	CY	122,200	\$ 4.25	\$ 519,400
20	Import to Stockpile	CY	32,000	\$ 13.00	\$ 416,000
21	Filter Sand	CY	12,300	\$ 60.00	\$ 738,000
22	Filter Gravel	CY	1,200	\$ 97.00	\$ 116,400
23	PVC Slotted Drain Pipe	LF	3,250	\$ 47.50	\$ 154,400
24	PVC Solid Drain Pipe	LF	65	\$ 30.25	\$ 2,000
25	Riprap	CY	6,100	\$ 73.50	\$ 448,400
26	Riprap Bedding	CY	3,300	\$ 59.00	\$ 194,700
27	Class 6 Base Course on Crest and Access Roads	CY	2,200	\$ 40.00	\$ 88,000
					\$ -
Outlet Works					
28	Dewatering for Outlet Works	LS	1	\$ 35,000	\$ 35,000
29	Intake Structure	LS	1	\$ 5,500	\$ 5,500
30	24" Concrete Encased Conduit	LF	40	\$ 370.00	\$ 14,800
31	Gate Tower	LS	1	\$ 60,700	\$ 60,700
32	18" Gate and Operator	Each	2	\$ 7,700	\$ 15,400
33	18" and 8" Concrete Encased Conduit	LF	80	\$ 725.00	\$ 58,000
34	18" and 8" Buried Conduit (incl pumpback line)	LF	351	\$ 325.00	\$ 114,100
35	Outlet Structure	LS	1	\$ 8,500	\$ 8,500
36	Diversion Structure	LS	1	\$ 8,500	\$ 8,500
37	48" Buried Culvert	LS	1	\$ 5,900	\$ 5,900
38	48" Gate and Operator	Each	1	\$ 17,600	\$ 17,600
39	Riprap	CY	33	\$ 73.50	\$ 2,400
40	Riprap Bedding	CY	1	\$ 59.00	\$ 100
41	Regrade Ditch	LS	1	\$ 2,500	\$ 2,500
					\$ -
Auxiliary Spillway					
42	Earthfill from Stockpile	CY	510	\$ 4.25	\$ 2,200
43	Concrete Control Structure	LS	1	\$ 44,000	\$ 44,000
44	Concrete Cutoff Wall	LS	1	\$ 16,500	\$ 16,500
45	Grouted Riprap	CY	220	\$ 195.00	\$ 42,900
46	Riprap	CY	780	\$ 73.50	\$ 57,300
47	Riprap Bedding	CY	470	\$ 59.00	\$ 27,700
48	Geotextile	SY	330	\$ 3.00	\$ 1,000
					\$ -
Base Construction Subtotal (BCS)					\$ 4,547,000
Mob/Demob (5% of BCS)					\$ 227,350
Bonds/Insurance (2% of BCS)					\$ 90,940
Unscheduled Items (2.5% of BCS)					\$ 113,675
Direct Construction Subtotal (DCS)					\$ 4,979,000
Construction Contingencies (15% of DCS)					\$ 747,000
Design Engineering (10% of DCS)					\$ 498,000
Construction Engineering and Testing (12% of DCS)					\$ 597,000
Opinion of Probable Construction Cost (OPCC, 2017)					\$ 6,821,000

CITY LAKE DAM REHABILITATION



Estimated cost to raise pool 3 feet from El 6519.5 to El 6522.5 (elevations shown on SEO submittal dwgs)

Item No.	Item	Unit	Quantity	Unit Price (\$)	Total Cost (\$)
14	Site Reclamation	AC	0.56	\$ 2,500.00	\$ 1,400
19	Earthfill from Stockpile	CY	38,068	\$ 4.25	\$ 161,800
20	Import to Stockpile	CY	9,969	\$ 13.00	\$ 129,600
21	Filter Sand	CY	1,600	\$ 60.00	\$ 96,000
25	Riprap	CY	1,397	\$ 73.50	\$ 102,700
26	Riprap Bedding	CY	732	\$ 59.00	\$ 43,200
31	Gate Tower	LS	1	\$ 4,200.00	\$ 4,200
43	Concrete Control Structure	LS	1	\$ 24,050.00	\$ 24,100
Base Construction Subtotal (BCS)					\$ 563,000
Mob/Demob (5% of BCS)					\$ 28,150
Bonds/Insurance (2% of BCS)					\$ 11,260
Unscheduled Items (10% of BCS)					\$ 56,300
Direct Construction Subtotal (DCS)					\$ 659,000
Construction Contingencies (10% of DCS)					\$ 66,000
Construction Engineering and Testing (12% of DCS)					\$ 79,000
Opinion of Probable Construction Cost (OPCC, July 2017)					\$ 804,000

Note: Unit prices obtained from 30-percent design

Colorado Water Conservation Board Water Plan Grant Application –
Exhibit C

SECTION 1 – PROJECT MAP, REPORTS AND DRAWINGS

1.1 The Project Map is located on the following page.

1.2 Reports and Drawings

Please reference the CWCB Water Project Construction Loan Program RJH Feasibility Report for the Walsenburg City Lake Dam Rehabilitation and Enlargement dated March 2017 previously submitted to the CWCB with the project loan application and the recently completed State Engineer review and approval package for the design, plans and specifications necessary to construct the project available on the following download link.

(Insert download link)

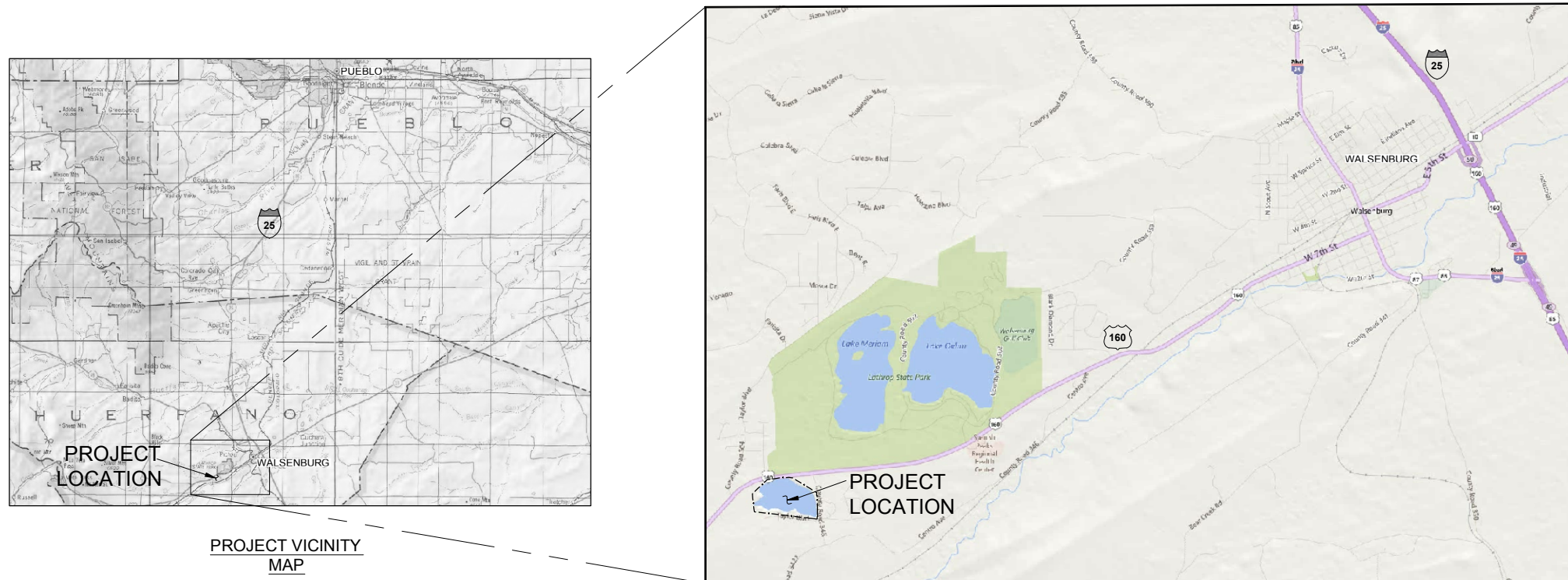
CITY OF WALSENBURG

WALSENBURG CITY LAKE DAM AND RESERVOIR REHABILITATION AND ENLARGEMENT

CONSTRUCTION DRAWINGS

WATER DIVISION 2, WATER DISTRICT 16; DAM ID: 160237

HUERFANO COUNTY, COLORADO



SITE LOCATION MAP
(NOT TO SCALE)

NOT FOR CONSTRUCTION

GENERAL PROJECT INFORMATION

CITY OF WALSENBURG, COLORADO
OWNER

CONTRACTOR

RJH CONSULTANTS, INC., ENGLEWOOD, COLORADO
ENGINEER

CONSTRUCTION STARTED

CONSTRUCTION COMPLETED

PREPARED FOR:

CITY OF WALSENBURG



PREPARED BY:



RJH CONSULTANTS, INC.

ENGLEWOOD • COLORADO
www.rjh-consultants.com

RJH ENGINEER APPROVAL

I HEREBY CERTIFY THAT THESE PLANS FOR THE WALSENBURG CITY LAKE DAM REHABILITATION AND ENLARGEMENT WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) FOR THE OWNERS THEREOF.

MICHAEL L. GRABER, P.E. COLORADO P.E. #19963
REGISTERED ENGINEER
RJH CONSULTANTS, INC.

THESE PLANS REPRESENT THE AS-CONSTRUCTED CONDITION OF THE WALSENBURG CITY LAKE DAM REHABILITATION AND ENLARGEMENT TO THE BEST OF MY KNOWLEDGE AND JUDGMENT, BASED IN PART ON INFORMATION FURNISHED BY OTHERS, AS OF THE _____ DAY OF _____, _____.

(ENGINEER'S PRINTED NAME) (SIGNATURE)

STATE ENGINEER APPROVAL

APPROVED ON THE _____ DAY OF _____, 20____.

STATE ENGINEER

BY:
WILLIAM T. McCORMICK III, P.E., P.G.
CHIEF, DAM SAFETY BRANCH, COLORADO P.E. #29127

CITY OF WALSENBURG APPROVALS

AS OWNERS THEREOF WE HEREBY ACCEPT AND APPROVE THESE PLANS FOR CONSTRUCTION OF THE WALSENBURG CITY LAKE DAM AND RESERVOIR REHABILITATION AND ENLARGEMENT

MAYOR _____ DATE _____

CITY ADMINISTRATOR _____ DATE _____

PUBLIC WORKS DIRECTOR _____ DATE _____

DWG. NO.
A-01

SHEET NO.
1 of 38

NOTE: SHEET INDEX IS LOCATED ON SHEET NO. 02



COLORADO

Colorado Water Conservation Board

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

July 21, 2017

Mark Ellis, Finance Director
City of Walsenburg
525 S. Albert Ave
Walsenburg, CO 81089

Re: City Lake Dam Rehabilitation & Enlargement

Mr. Ellis:

I am pleased to inform you that on July 21, 2017, the Colorado Water Conservation Board approved your loan request for the City Lake Dam Rehabilitation & Enlargement as described in the application and approved Loan Feasibility Study titled "*Feasibility Evaluation - Walsenburg City Lake Dam Rehabilitation and Enlargement*" dated March 2017. The Board approved a loan not to exceed \$6,889,210.00 (\$6,821,000.00 for project costs and \$68,210.00 for the 1% Loan Service Fee). The loan terms shall be 2.00% per annum for 30 years.

I have attached a copy of the updated Board memo dated July 21, 2017 that includes the Board's approval. After the Board approves a loan there are a few steps that remain in the loan process including:

Contracting: An executed loan contract must be in place before funds can be disbursed for eligible project expenses. Peg Mason, Loan Contracts Manager, will contact you to initiate the loan contracting process. She can be reached at (303) 866-3441 x3227.

Design/Construction: You must adhere to the CWCB Design and Construction Administration Procedures including an invitation to the Prebid, Preconstruction and Bid Opening meetings. Anna Mauss, P.E., will be the Project Manager for this phase of the process and will work with you on the disbursements of your loan funds. She can be reached at (303) 866-3441 x3224.

On behalf of the Board, I would like to thank you for your interest in a loan from the CWCB.

Sincerely,

Kirk Russell, P.E., Chief
Finance Section

Attachment: Updated Board Memo



HUERFANO COUNTY WATER CONSERVANCY DISTRICT

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

July 17, 2017

Anna Mauss
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203

Re: Support letter – Walsenburg's loan and grant applications for the remediation and enlargement of City Lake

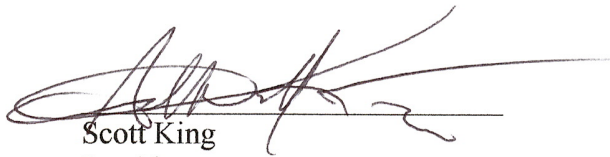
Dear Anna:

At our July regular meeting the Huerfano County Water Conservancy District board agreed to support the City of Walsenburg's loan and grant applications for the remediation and enlargement of City Lake, subject to the condition described below.

Walsenburg's project is included in the Master Needs List of the Arkansas Basin Implementation Plan (#2015-0011) and provides an important component to meeting the storage gap in the basin. Also included in the Master Needs List is the Cucharas Storage Collaborative's study (#2015-0007) which is important for the same purpose.

To avoid and resolve any conflict between the two projects, the District expressly **conditions its support of the Walsenburg project's loan and grant on the enlarged capacity of City Lake, i.e. that capacity in excess of 412 a.f., being made available to the members of the collaborative as well as other users at a reasonable cost and for a reasonable term.**

With warmest regards,



Scott King
President

copy via email:

anna.mauss@state.co.us

jgoble@lowerark.com

slking@centurylink.net

altucker63@gmail.com

jimmere@hotmail.com

sandy@white-jankowski.com