

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
Water Storage Projects
Conservation, Land Use Planning
Engagement & Innovation Activities
Agricultural Projects
Environmental & Recreation Projects

Gregory.Johnson@state.co.us
Anna.Mauss@state.co.us
Kevin.Reidy@state.co.us
Mara.MacKillop@state.co.us
Brent.Newman@state.co.us
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 may be 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 required deadlines.

FINAL SUBMISSION: Submit all application materials to waterplan.grants@state.co.us in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents.

Water Project Summary

Name of Applicant	Colorado Springs Utilities	
Name of Water Project	Homestake Arkansas River Diversion Improvements	
CWP Grant Request Amount		\$300,000
Other Funding Sources <u>Colorado Parks and Wildlife</u>		\$500,000
Other Funding Sources _____		\$
Applicant Funding Contribution		\$6,850,000
Total Project Cost		\$7,650,000

Last Updated: July 2017

Applicant & Grantee Information	
Name of Grantee(s)	Colorado Springs Utilities
Mailing Address	1521 Hancock Expressway, MC 1821 Colorado Springs, CO 80947-1821
FEIN	84-6000574
Organization Contact	Ron Sanchez
Position/Title	Managing Engineer, Water Planning and Design
Email	rjsanchez@csu.org
Phone	719-668-8611
Grant Management Contact	<u>Ron Sanchez</u>
Position/Title	Managing Engineer, Water Planning and Design
Email	rjsanchez@csu.org
Phone	719-668-8611
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>The Aurora-Colorado Springs Joint Water Authority (Authority) is an authority formed as a water authority, a body corporate and politic, a separate governmental entity, a political subdivision and a public corporation of the State of Colorado, pursuant to Section 18(2) (a) and 2(b) of Article XIV, Constitution of the State, and to Section 29-1-204.2, Colorado Revised Statutes 1973, as amended (the "Act").</p> <p>The Authority is authorized under CRS to own, operate and maintain real and personal property and facilities in common with others, and to conduct joint, partnership, cooperative, or other operations with others, and to exercise all of the powers granted herein in joint, partnership, or cooperative efforts and operations with others.</p> <p>Colorado Springs Utilities is an enterprise of the City of Colorado Springs, a Colorado home rule city and municipal corporation. Colorado Springs Utilities owns and operates a municipal water and sewer system for the provision of water and sewer service to and for the benefit of the citizens of Colorado Springs, and for the provision of water and sewer service to such extra-territorial customers as it may serve from time to time pursuant to the Colorado Springs City Charter, City Code, and contracts. As equal partners, the Cities of Aurora, Colorado, and Colorado Springs own and operate the Homestake Project; a trans-mountain diversion project to deliver water from the western slope to the cities.</p>

Last Updated: July 2017

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
X	Identified Projects and Processes (IPP)
	Other

Category of Water Project (check all that apply and include relevant tasks)	
	Supply and Demand Gap Projects - Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap. <i>Applicable Exhibit A Task(s):</i>
	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. <i>Applicable Exhibit A Task(s):</i>
	Conservation and Land Use Planning Projects - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. <i>Applicable Exhibit A Task(s):</i>
	Engagement & Innovation Projects - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application available on the website. <i>Applicable Exhibit A Task(s):</i>
	Agricultural Projects - Projects that provide technical assistance and improve agricultural efficiency. <i>Applicable Exhibit A Task(s):</i>
X	Environmental & Recreation Projects – Projects that promote watershed health, environmental health, and recreation. <i>Applicable Exhibit A Task(s): TASK 4 Construction</i>

Last Updated: July 2017

	Other	Explain:
--	-------	----------

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	Chafee County
Latitude	39.026548
Longitude	-106.234907

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 Homestake Arkansas River Diversion (ARD) below the town of Granite, Colorado on the Upper Arkansas River was constructed in 1965 as the original point of diversion for the Homestake Project. The ARD is a rockfill diversion dam with steel sheet pile and articulated concrete mat armoring at the crest. In the 1980s, the intake pipeline was extended to Twin Lakes and the ARD was retained as a backup facility. Since the 1980s, the diversion dam and intake have deteriorated including failure of portions of the articulated concrete armoring and erosion of the rockfill. In its current condition, the ARD presents a hazard to navigation due to exposed rebar and sheet pile and powerful hydraulic conditions on the downstream face. The current condition of this structure requires that recreational whitewater users portage to continue downriver.

The ARD Improvements Project (Project) will reconstruct the diversion and intake to provide a robust and reliable river intake, provide fish passage for Brown and Rainbow Trout, and reduce risk to recreational users by minimizing entrapment risk and reducing retentive hydraulic conditions. In its current configuration, the Project includes a reconstructed lateral intake, diversion dam, spillway, an engineered fish passage, and appurtenant structures. The project will improve approximately 600 LF of river frontage, restore approximately 1.37 acres.

The CWCB Grant funding is specifically for **a multi-objective project that includes a boat chute** that allows for improved navigability through this reach of the Arkansas River. **Colorado Springs Utilities** has worked with CPW and AHRA to evaluate their desire for improved navigability of the ARD. To that end **Colorado Springs Utilities** has invested significant funding to validate the results of typical engineering design and numerical modeling and commissioned a scaled physical model of the ARD with a boat chute to validate the technical feasibility of the project prior to requesting grant funding. To meet our fiduciary responsibility to our rate payers we are requesting on behalf of all stakeholders for grant funding to fund the difference in cost of an ARD with the minimum requirements of a fish passage and spillway and the cost of adding the boat chute. The boat chute comprises approximately 20% of the total project cost. The requested grant funding is less than 5% of the entire project cost that will be

Last Updated: July 2017

Water Project Overview

covered by the **Applicant**.

Measurable Results

To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:

	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
	Existing Storage Preserved or Enhanced (acre-feet)
600 LF	Length of Stream Restored or Protected (linear feet)
	Efficiency Savings (indicate acre-feet/year OR dollars/year)
1.37	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
X	Other Explain: River Restoration will incorporate fish passage, improved river intake and spillway structure, portage, and navigable boat passage improvements

Water Project Justification

Provide a description of how this water project supports the goals of [Colorado's Water Plan](#), the most

Last Updated: July 2017

Water Project Justification

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).

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;)

The proposed project supports 4 of the 5 goals of the [Colorado Water Plan Section 6.6: Environmental and Recreational Projects and Methods](#). As proposed, the project will rehabilitate a deteriorated river diversion structure used by the Homestake Water Project. The project will incorporate multi-objective improvements that reconstruct the original river intake and diversion structure and improves river navigability for fish and recreational boaters. A description of how the project meets the CWP goals are summarized below.

- **Promote restoration, recovery, sustainability, and resiliency of endangered, threatened, and imperiled aquatic- and riparian-dependent species and plant communities.**

In collaboration with Colorado Parks and Wildlife, the proposed project will restore a 600 foot section below the town of Granite and Clear Lake that provides for brown and rainbow trout passage along this stretch of the Arkansas River.

- **Protect and enhance economic values to local and statewide economies that rely on environmental and recreational water uses, such as fishing, boating, waterfowl hunting, wildlife watching, camping, and hiking.**

The proposed project enhances recreational opportunities at the site that include boat navigability and fish passage at the project site. This improvement will allow navigability along this reach of the Arkansas River between the towns of Granite and Buena Vista without having to portage around the project site during reasonable recreational flows. Implementing the fish passage will enhance fishing recreation upstream and downstream of the project with improved fish migration habitat in this reach of the Arkansas River. The project enhances economic opportunities for commercial rafting and fishing guide companies and fishing habitat that contributes to the economies of the region.

- **Support the development of multipurpose projects and methods that benefit environmental and recreational water needs as well as water needs for communities or agriculture.**

The multi-objective project improves operation of the intake and diversion which is owned and operated by ~~Authority for the benefit of~~ the Cities of Colorado Springs and Aurora. The incorporation of fish and boat passages benefits both the environmental and recreational needs of the Arkansas River basin communities. As a project that meets these needs, it was recognized in the Arkansas Basin Roundtable Basin Implementation Plan (April 2015) under Identified Projects & Processes in Chaffee County (ARK-2015-0024).

- **Understand, protect, maintain, and improve conditions of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries and functional riparian and wetland habitat to promote long-term sustainability and resiliency.**

The proposed project restores approximately 600 LF and 1.37 acres along the river as well as improves the overall condition of the river. The improvements will incorporate a fish passage, a boat passage, spillway diversion structure, and intake.

Last Updated: July 2017

Water Project Justification

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.

Recent Studies include the following:

Homestake System Condition Assessment Project – Condition Assessment and Improvement Report for Transmission System Arkansas River Diversion, CH2M HILL, 2007

Homestake System Condition Assessment Project – Feasibility Study and Report: Rehabilitation Alternatives for Arkansas River Diversion Facility, CH2M HILL, 2008

Preliminary Design Report: Homestake System Arkansas River Diversion, Recreational Engineering and Planning, 2009

Homestake System Condition Assessment Project – Review of the Arkansas Headwaters Recreation Association Preliminary Design Report – Arkansas River Diversion, CH2M HILL, 2010

Arkansas River Diversion– Pre-Alternative Refinement Evaluation, Merrick & Company, 2014

Arkansas Basin Roundtable Basin Implementation Plan, 2015 April

ARD Hydro-technical Design Review Report (Technical Review of previous studies), SG1 Water Consulting Ltd., 2016

*** ARD Basis of Design Report, SG1 Water Consulting Ltd., 2016**

*** Basis of Design Report for Homestake Arkansas River Diversion Improvements (30% DRAFT), Deere and Ault Consultants, Inc., 2017**

*** Assists in the implementation of Arkansas Basin Roundtable Basin Implementation Plan (April 2015), Identified Projects & Processes in Chaffee County (ARK-2015-0024)**



Last Updated: July 2017

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.

Colorado Springs Utilities

2014 The Species Grant CWCB Contract# C154224: \$500,000

1. Colorado Springs Utilities
2. 2014 The Species Grant CWCB, \$500,000
3. N/A
4. N/A
5. CWCB Contract No. C154224
6. 0%

2016 The North to North NRCS (75%) CWCB (12 ½%) grant Contract# CTGG12016-22: \$945,000

1. Colorado Springs Utilities
2. 2016 The North to North Wellington Gulch NRCS/CWCB Grant
3. N/A
4. N/A
5. CWCB Contract No. CTGG12016-22
6. 12.5%

Aurora Water

Prairie Waters:

1. City of Aurora
2. Prairie Waters Conveyance System
Construction Fund Loan for \$75,750,000 at 3.75% interest
Paid off in 2016 by the 2016 Water Revenue Refunding bonds issue
3. N/A
4. November 20, 2007
5. Loan Contract No.: C150243
6. 0%

Lost Creek ASR Pilot Project:

1. City of Aurora
2. Lost Creek Underground Storage Pilot Project
\$100,000 CWCB Construction Fund Non-reimbursable Project Investment Grant
3. N/A
4. May 18, 2017
5. POGG1 PDAA 201700001081
6. 0%

Last Updated: July 2017

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.

None

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⁾ (<i>Spreadsheet</i>)
X	Letters of Matching and/or Pending 3 rd Party Commitments ⁽¹⁾
Exhibit C	
X	Map (if applicable) ⁽¹⁾
X	Photos/Drawings/Reports
X	Letters of Support (Support letter from Basin Roundtable encouraged)
X	Certificate of Insurance (General, Auto, & Workers' Comp.) ⁽²⁾
	Certificate of Good Standing with Colorado Secretary of State ⁽²⁾
X	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 - Exhibit A Environmental and Recreation Program Grant

Statement Of Work

Prepared Date:	March 8, 2018
Name of Applicant:	Colorado Springs Utilities (CSU)
Name of Water Project:	Homestake Arkansas River Diversion (ARD) Boat Chute Project
Funding Source:	Environmental and Recreation Program Grant

Water Project Overview:

The Homestake Arkansas River Diversion (ARD) Boat Chute Project below the town of Granite, Colorado on the Upper Arkansas River was constructed in 1965 as the original point of diversion. The Homestake Arkansas River Diversion (ARD) Boat Chute Project is a rockfill diversion dam with steel sheet pile and articulated concrete mat armoring at the crest. In the 1980's, the intake pipeline was extended to Twin Lakes and this was retained as a backup facility. Since the 1980's, the diversion dam and intake have deteriorated including failure of portions of the articulated concrete armoring and erosion of the rockfill. In its current condition, the Homestake Arkansas River Diversion (ARD) Boat Chute Project presents a hazard to navigation due to exposed rebar and sheet pile and powerful hydraulic conditions on the downstream face. The current condition of this structure requires that recreational whitewater users portage to continue downriver.

The Homestake Arkansas River Diversion (ARD) Boat Chute Project will reduce risk to recreational users by minimizing entrapment risk and reducing retentive hydraulic conditions.

Project Objectives:

1. Improve river user safety; and
2. Provide recreational boat passage.

Tasks
Task 1 – Construction
<p>Description of Task:</p> <p>The majority of construction of the boat chute is expected to span 2018 through 2021. Major work items for this task are defined as follows:</p> <p>Excavation, Off haul and dispose of material Prepare and process excavated area for riprap bedding Install riprap filter blanket Grout riprap Construct divide wall with grouted stone Place concrete boat chute (cast-in-place)</p> <p>Construction is anticipated to start July 2018 with in-river construction occurring over two seasons: September 2018 through April 2019, and September 2019 through March 2020. Project completion is anticipated April 2021.</p>
<p>Method/Procedure:</p> <p>Construction of the concrete and grouted boulder boat chute passage will be monitored for the duration of the project by the design engineer. Quality assurance and quality control will be ensured by the Owner's staff and oversight by an independent expert in recreational hydraulics so the boat chute hydraulic characteristics under various flow conditions meet project objectives related to structure stability and fish passage.</p> <p>Work will be invoiced to CSU as a percentage of work completed for the duration of the project. Completion of work described in the schedule of values will be summarized as a percentage of work completed and invoiced to CSU. Grantee expects monthly payment applications from the selected contractor to reflect percent complete progress of the project.</p> <p>The selected contractor will determine methods and procedures of construction and they will construct the proposed facility per the contract documents. The work is anticipated to occur over two, fall - winter construction seasons to facilitate in-river construction of half the structure per season. Construction of the boat chute is planned for the second construction season.</p>
<p>Deliverable:</p> <p>Monthly construction progress updates will be provided to CWCB documenting construction progress and associated portion of the grant funding will be highlighted as part of the update and pay request.</p> <p>Monthly Progress report Review of monthly pay application Construction completion report As-Built drawings Final pay request for Construction of the Boat Chute</p>

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.

Reporting Requirements

Progress Reports: The applicant 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.

Final Report: At completion of the project, the grantee shall provide the CWCB a Final Report on the applicant'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.

The CWCB will pay out the last 10% of the 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 purchase order or grant will be closed without any further payment.

Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. 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.

Project costs not covered by this or other grants are the responsibility of the grantee. Project costs that are eligible for CWCB funds will be disbursed at the following percentages: 15% Water Plan Grant funds to 85% matching funds.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to CWCB in hard copy and electronic format as part of the project documentation.

Performance Measures

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 Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the 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 purchase order or grant will be closed without any further payment.

(b) Accountability: Per Water Plan 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 Water Plan Grant Guidelines, Progress Reports must be

Performance Measures

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 Water Conservation Board

Water Plan Grant - Exhibit A Supply and Demand Gap Program Grant

Statement Of Work

Prepared Date:	March 8, 2018
Name of Applicant:	Colorado Springs Utilities (CSU)
Name of Water Project:	Homestake Arkansas River Diversion (ARD) Improvements Project
Funding Source:	Supply and Demand Gap Program Grant

Water Project Overview:

The Homestake Arkansas River Diversion (ARD) Improvements Project below the town of Granite, Colorado on the Upper Arkansas River was constructed in 1965 as the original point of diversion. The Homestake ARD Improvements Project is a rockfill diversion dam with steel sheet pile and articulated concrete mat armoring at the crest. In the 1980's, the intake pipeline was extended to Twin Lakes and this was retained as a backup facility. Since the 1980's, the diversion dam and intake have deteriorated including failure of portions of the articulated concrete armoring and erosion of the rockfill. In its current condition, the Homestake ARD Improvements Project presents a hazard to navigation due to exposed rebar and sheet pile and powerful hydraulic conditions on the downstream face. The current condition of this structure requires that recreational whitewater users portage to continue downriver.

The Homestake ARD Improvements Project will reconstruct the diversion and intake to provide a robust and reliable river intake, provide fish passage for Brown and Rainbow Trout, and reduce risk to recreational users by minimizing entrapment risk and reducing retentive hydraulic conditions.

Project Objectives:

1. Improve river user safety;
2. Improve the reliability of the diversion facility;
3. Improve structural stability of intake and diversion;
4. Manage sediment and debris at intake; and
5. Provide upstream fish passage.

Tasks
Task 1 – Construction
<p>Description of Task:</p> <p>The majority of construction of the diversion improvements is expected to span 2018 through 2021. Major work items for this task are defined as follows:</p> <ul style="list-style-type: none"> Mobilization Demobilization Dewatering and Temporary Structures Construction Diversion Intake Facility and Pipeline Spillway, Fish Passage, Divider Wall <p>Construction is anticipated to start July 2018 with in-river construction occurring over two seasons: September 2018 through April 2019, and September 2019 through March 2020. Project completion is anticipated April 2021.</p>
<p>Method/Procedure:</p> <p>Construction of the diversion improvements will be monitored for the duration of the project by the design engineer. Quality assurance and quality control will be ensured by the Owner's staff and oversight by an independent expert in recreational hydraulics so the hydraulic characteristics under various flow conditions meet project objectives related to structure stability and fish passage. The use of temporary cofferdams is anticipated to facilitate phased construction. During the first construction season, it is anticipated the main spillway, divider wall, diversion weir and fish passage will be constructed. The second construction season will include the intake structure and pipeline.</p> <p>Work will be invoiced to CSU as a percentage of work completed for the duration of the project. Completion of work described in the schedule of values will be summarized as a percentage of work completed and invoiced to CSU. Grantee expects monthly payment applications from the selected contractor to reflect percent complete progress of the project.</p> <p>The selected contractor will determine methods and procedures of construction and they will construct the proposed facility per the contract documents. The work is anticipated to occur over two, fall - winter construction seasons to facilitate in-river construction of half the structure per season.</p>
<p>Deliverable:</p> <p>Monthly construction progress updates will be provided to CWCB documenting construction progress and associated portion of the grant funding will be highlighted as part of the update and pay request.</p> <ul style="list-style-type: none"> Monthly Progress report Review of monthly pay application Construction completion report As-Built drawings Final pay request for Construction of the Diversion Improvements

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.

Reporting Requirements

Progress Reports: The applicant 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.

Final Report: At completion of the project, the grantee shall provide the CWCB a Final Report on the applicant'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.

The CWCB will pay out the last 10% of the 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 purchase order or grant will be closed without any further payment.

Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. 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.

Project costs not covered by this or other grants are the responsibility of the grantee. Project costs that are eligible for CWCB funds will be disbursed at the following percentages: 13% Water Plan Grant funds to 87% matching funds.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to CWCB in hard copy and electronic format as part of the project documentation.

Performance Measures

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 Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the 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 purchase order or grant will be closed without any further payment.

Performance Measures

(b) Accountability: Per Water Plan 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 Water Plan 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 Water Conservation Board

Supply and Demand Gap Program

Water Plan Grant - Detailed Budget Estimate

Prepared Date: 8-Mar-18
Name of Applicant: Colorado Springs Utilities
Name of Water Project: Homestake Arkansas River Diversion (ARD) Improvements Project

Construction

Task 1 - Construction				Estimated Cost per Task				
	Units	Quantity	Unit Cost	Total Cost	CWCB Funds	Other Matching Funds	Subtotal	
Upstream Riprap	Riprap	CY	820	\$ 100.00	\$ 82,000.00	\$ 10,856.78	\$ 71,143.22	
							\$ 82,000.00	
Weir								
Excavation and Storage of Material	CY	300	\$ 12	\$ 3,600.00	\$ 476.64	\$ 3,123.36		
Weir Subgrade	CY	6	\$ 25	\$ 150.00	\$ 19.86	\$ 130.14		
Cutoff Trench Mass Concrete	CY	40	\$ 250	\$ 10,000.00	\$ 1,324.00	\$ 8,676.00		
Weir Slab	CY	32	\$ 700	\$ 22,400.00	\$ 2,965.75	\$ 19,434.25		
Weir Wall	CY	40	\$ 1,200	\$ 48,000.00	\$ 6,355.19	\$ 41,644.81		
							\$ 84,150.00	
Spillway and Fishway								
Excavation, Off haul & Dispose	CY	4,520	\$ 20	\$ 90,400.00	\$ 11,968.94	\$ 78,431.06		
Process Ex for Riprap Bedding	CY	1,000	\$ 15	\$ 15,000.00	\$ 1,986.00	\$ 13,014.00		
Riprap Filter Blanket	CY	500	\$ 25	\$ 12,500.00	\$ 1,655.00	\$ 10,845.00		
Grouted Rip Rap	SY	2,710	\$ 300	\$ 813,000.00	\$ 107,641.00	\$ 705,359.00		
Fishway Grouted Rip Rap	SY	520	\$ 450	\$ 234,000.00	\$ 30,981.54	\$ 203,018.46		
							\$ 1,164,900.00	
Intake and Pipeline								
Intake Excavation, Off haul & Dispose	CY	1,700	\$ 25	\$ 42,500.00	\$ 5,626.99	\$ 36,873.01		
Structural Backfill	CY	160	\$ 25	\$ 4,000.00	\$ 529.60	\$ 3,470.40		
Intake Concrete Slab	CY	40	\$ 700	\$ 28,000.00	\$ 3,707.19	\$ 24,292.81		
Intake Concrete Walls	CY	105	\$ 1,200	\$ 126,000.00	\$ 16,682.37	\$ 109,317.63		
Intake Elevated Slab	CY	20	\$ 1,200	\$ 24,000.00	\$ 3,177.59	\$ 20,822.41		
Trash Rack	LBS	13,900	\$ 12	\$ 159,850.00	\$ 21,164.10	\$ 138,685.90		
Precast Concrete Bulkhead Gates	CY	9	\$ 1,200	\$ 10,800.00	\$ 1,429.92	\$ 9,370.08		
P-Seals	LF	92	\$ 20	\$ 1,840.00	\$ 243.62	\$ 1,596.38		
Stainless Steel Embeds & Batten Bars	LBS	800	\$ 12	\$ 9,200.00	\$ 1,218.08	\$ 7,981.92		
Gate Slot Liners	LBS	3,360	\$ 12	\$ 38,640.00	\$ 5,115.93	\$ 33,524.07		
Stainless Steel Gate Slot Covers	LBS	670	\$ 12	\$ 7,705.00	\$ 1,020.14	\$ 6,684.86		

Bilco Hatches	EA	3	\$	2,500	\$	7,500.00	\$	993.00	\$	6,507.00
Intake Slide Gates	LS	3	\$	15,000	\$	45,000.00	\$	5,957.99	\$	39,042.01
Junction Box Slide Gates	LS	2	\$	18,000	\$	36,000.00	\$	4,766.39	\$	31,233.61
48" Dia Sleeve Couplings	LS	6	\$	6,500	\$	39,000.00	\$	5,163.59	\$	33,836.41
66" Dia Sleeve Couplings	LS	9	\$	12,000	\$	108,000.00	\$	14,299.17	\$	93,700.83
8" Dia Sleeve Couplings	LS	6	\$	700	\$	4,200.00	\$	556.08	\$	3,643.92
8" Dia Gate Valves	LS	3	\$	3,500	\$	10,500.00	\$	1,390.20	\$	9,109.80
48" Dia Manholes (gate valve access)	LS	3	\$	6,000	\$	18,000.00	\$	2,383.20	\$	15,616.80
8" Dia HDPE Pipe & Fittings	LS	1	\$	10,000	\$	10,000.00	\$	1,324.00	\$	8,676.00
12" Dia HDPE Pipe	LF	450	\$	60	\$	27,000.00	\$	3,574.79	\$	23,425.21
4" Dia Gate Valves & Stem Risers	LS	5	\$	3,500	\$	17,500.00	\$	2,317.00	\$	15,183.00
4" Dia HDPE Pipe & Fittings	LF	500	\$	40	\$	20,000.00	\$	2,648.00	\$	17,352.00
66" Dia Triple Offset BfV	LS	2	\$	189,000	\$	378,000.00	\$	50,047.11	\$	327,952.89
Valve Vault Ex	CY	400	\$	12	\$	4,800.00	\$	635.52	\$	4,164.48
Valve Vault Structural Backfill	CY	18	\$	25	\$	450.00	\$	59.58	\$	390.42
Valve Vault Drain	LF	240	\$	25	\$	6,000.00	\$	794.40	\$	5,205.60
Valve Vault Concrete Slab	CY	14	\$	700	\$	9,800.00	\$	1,297.52	\$	8,502.48
Valve Vault Concrete Walls	CY	40	\$	1,200	\$	48,000.00	\$	6,355.19	\$	41,644.81
Valve Vault Precast Lid	CY	6	\$	1,200	\$	7,200.00	\$	953.28	\$	6,246.72
Bilco Hatches	LS	2	\$	2,500	\$	5,000.00	\$	662.00	\$	4,338.00
66" Dia. Steel Pipe	LF	330	\$	1,200	\$	396,000.00	\$	52,430.30	\$	343,569.70
Intake Steel Pipe Manifold	LBS	13,700	\$	10	\$	137,000.00	\$	18,138.77	\$	118,861.23
Pipeline Cathodic Protection	LS	3	\$	9,500	\$	28,500.00	\$	3,773.39	\$	24,726.61
									\$	1,815,985.00
Overhead and Fee							\$83,333.33	\$546,073.67	\$	629,407.00
Task 1 - Construction									\$	3,776,442.00
TOTAL							\$ 500,000.00	\$ 3,276,442.00	\$	3,776,442.00

100%

100%

