

**Water Supply Reserve Fund
Water Activity Summary Sheet
March 11-12, 2020
Agenda Item 23(d)**

Applicant & Grantee: St Charles Mesa Water District

Water Activity Name: St. Charles Mesa Cottonwood Irrigation Ditch #2
Headgate/Augmentation Station Project

Water Activity Purpose: Municipal/Industrial - Implementation

County: Huerfano

Drainage Basin: Arkansas

Water Source: Cucharas

Amount Requested: \$10,040 Arkansas Basin Account
\$100,400 Statewide Account
\$110,440 Total Request

Matching Funds: Basin Account Match = \$10,040

- 10% of statewide request (meets 10% min)
- Applicant & 3rd Parties Match (cash) = \$73,560
- 73% of the statewide request (meets 10% min)
- Total Match (Basin & Applicant) = \$83,560
- 83% of the statewide request (meets 50% min)

Staff Recommendation:
Staff recommends approval of up to \$10,040 from the Arkansas Basin Account and up to \$100,400 from the Statewide Account to help fund the project: St. Charles Mesa Cottonwood Irrigation Ditch #2 Headgate/Augmentation Station Project.

Water Activity Summary: WSRF Funds, if approved will assist the St Charles Mesa Water District repair and replace Cottonwood Irrigating Ditch #2 (CID2) Diversion headgate and Parshall flume. Details of the infrastructure project include re-establishing the headgate in Cottonwood Creek, which requires the setting of a precast headwall and installation of a new gate. To help stabilize and prevent dislodging of the headgate, onsite riprap will be grouted. Replacement of the Parshall flume is necessary, along with installation of a mass concrete foundation to stabilize against movement. Erosion has occurred around the headgate diversion structure on Cottonwood Creek causing it to move and lift during the winter months and resulting in St. Charles Mesa Water District not being able to receive their full decreed diversion during certain months of the year. These infrastructure repairs will allow for more efficient water delivery of their full decreed 3.8 cfs through the flume. The CID2 water right accounts for nearly 50% of their municipal water supply.

Discussion: This effort will assist the Arkansas Basin Roundtable meet the Goals and Measurable Outcomes as described in their Basin Implementation Plan by helping meet the need to “use water efficiently to reduce overall future water needs”, while also assisting Colorado’s Water Plan value of having an “efficient and effective water infrastructure.”

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
St Charles Mesa Water District	\$63,560	\$0	\$63,560	Secured
Upper Arkansas Water Conservancy District	\$10,000	\$0	\$10,000	Secured
Sub-total	\$73,560	\$0	\$73,560	
WSRF Arkansas Basin Account	\$10,040	\$0	\$10,560	Secured
Sub-total	\$83,600	\$0	\$83,600	
WSRF Statewide Account	\$100,400	n/a	\$100,600	
Total Project Costs	\$184,000	\$0	\$184,000	

CWCB Project Manager: Craig Godbout

Arkansas Basin Roundtable

January 28, 2020

Via Electronic Mail: ben.wade@state.co.us

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

Re: Water Supply Reserve Fund Grant Application: St. Charles Mesa Water District – St. Charles Mesa Cottonwood Irrigation Ditch #2 Headgate / Augmentation Station Project

Dear Ben:

At its January 8, 2020 meeting, the Arkansas Basin Roundtable (ABRT) approved support of the St. Charles Mesa Water District – St. Charles Mesa Cottonwood Irrigation Ditch #2 Headgate / Augmentation Station Project grant application for \$10,000 in Basin Funds and \$100,400 in Statewide Funds.

The applicant is providing \$73,600 in matching funds. This project directly supports the goals of the Colorado Water Plan and Arkansas Basin Implementation Plan to use water efficiently to reduce overall future water needs, and to deal with aging infrastructure.

Funds will be used for the Cottonwood Irrigating Ditch #2 Diversion headgate and Parshall flume repair and replacement, along with the addition of a new telemetry station.

The ABRT approved supporting this application by consensus and there were no dissenting views. Should you have any questions or concerns, please feel free to contact me either by telephone, 719-668-8028, or by email, mshea@csu.org.



Mark Shea
Chair

Copy via email: Applicant; Abby Ortega, Needs Assessment Chair



Last Update: July 31, 2018

Colorado Water Conservation Board
Water Supply Reserve Fund Grant Application

Instructions

All WSRF grant applications shall conform to the current [2016 WSRF Criteria and Guidelines](#).

To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) **AND** the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application.

If you have questions, please contact the current CWCB staff Roundtable liaison:

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)
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X	I acknowledge this request was recommended for CWCB approval by the sponsoring roundtable.
X	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines .
X	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract . ⁽¹⁾
Application Documents	
X	Exhibit A: Statement of Work ⁽²⁾ (<i>Word – see Template</i>)
X	Exhibit B: Budget & Schedule ⁽²⁾ (<i>Excel Spreadsheet – see Template</i>)
X	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾
X	Map ⁽²⁾
X	Photos/Drawings/Reports
X	Letters of Support
Contracting Documents ⁽³⁾	
X	Detailed/Itemized Budget ⁽³⁾ (<i>Excel Spreadsheet – see Template</i>)
X	Certificate of Insurance ⁽⁴⁾ (<i>General, Auto, & Workers' Comp.</i>)
	Certificate of Good Standing ⁽⁴⁾
X	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:	March 2020
Desired Notice to Proceed Date:	June 2020

Water Activity Summary	
Name of Applicant	St. Charles Mesa Water District
Name of Water Activity	St. Charles Mesa Cottonwood Irrigation Ditch #2 Headgate/Augmentation Station Project
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾
Arkansas Basin Roundtable	\$10,040.00
Basin Account Request Subtotal	\$10,040.00
Statewide Account Request ⁽¹⁾	\$100,400.00
Total WSRF Funds Requested (Basin & Statewide)	\$110,400.00
Total Project Costs	\$184,000.00

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



Last Update: July 31, 2018

Grantee and Applicant Information	
Name of Grantee(s)	St. Charles Mesa Water District
Mailing Address	1397 S. Aspen Rd, Pueblo, CO. 81006
FEIN	84-0530580
Grantee's Organization Contact ⁽¹⁾	David Simpson
Position/Title	District Manager
Email	David.simpson@scmwd-pueblo.org
Phone	719-542-4380
Grant Management Contact ⁽²⁾	Gracy Goodwin
Position/Title	Projects Manager
Email	projects@uawcd.com
Phone	719-539-5425
Name of Applicant (if different than grantee)	Upper Arkansas Water Conservancy District
Mailing Address	PO Box 1090 Salida, CO 81201
Position/Title	Ralph "Terry" Scanga – Manager
Email	manager@uawcd.com
Phone	719-539-5425

(1) Person with signatory authority

(2) Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

Description of Grantee
Provide a brief description of the grantee's organization (100 words or less).
<p>The St. Charles Mesa Water District is a quasi-municipal corporation and a political subdivision of the State created pursuant to the Special District Act for the purpose of providing a complete domestic water system for the District and its inhabitants. The District was formed in 1988 pursuant to an order and decree entered by the District Court in and for Pueblo County. The District currently encompasses approximately 64 square miles located in east-central Pueblo County, adjacent to the eastern boundary of the City, and it serves a population of approximately 10,978 people.</p>



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

Category of Water Activity (check all that apply)		
	Nonconsumptive (Environmental)	
	Nonconsumptive (Recreational)	
	Agricultural	
X	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/Countries	Chaffee County
Latitude	38.8324
Longitude	-106.1715

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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.

The WSRF funds would be used for the Cottonwood Irrigating Ditch #2 (CID2) Diversion headgate and Parshall flume repair/replacement, along with the addition of a new telemetry station. Erosion has occurred around the headgate diversion structure on Cottonwood Creek causing it to move and lift during the winter months and resulting in St. Charles Mesa Water District not being able to receive their full decreed diversion during certain months of the year. These infrastructure repairs will allow for more efficient water delivery of their full decreed 3.8 cfs through the flume. The CID2 water right accounts for nearly 50% of their municipal water supply.

Details of the infrastructure project include re-establishing the headgate in Cottonwood Creek, which requires the setting of a precast headwall and installation of a new gate. To help stabilize and prevent dislodging of the headgate, onsite riprap will be grouted. Replacement of the Parshall flume is necessary, along with installation of a mass concrete foundation to stabilize against movement.

To effectively measure and quantify diversions being ushered to the Bessemer Ditch for use in the St. Charles Mesa water treatment facility, a remote telemetry station will be installed. This final element of the proposed water activity will help maintain the diversion and account for available beneficial uses on Cottonwood Creek. In an effort of efficiency savings UAWCD will also utilize the telemetry station to measure UAWCD's Cottonwood Irrigating Ditch water for augmentation of structures on Cottonwood Creek and will not have to build their own augmentation station in a similar area on that reach. The collaboration of UAWCD with SCMWD will increase the beneficial uses of water on Cottonwood Creek through the utilization of the water districts augmentation plan.

Measurable Results

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

	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
	Existing Storage Preserved or Enhanced (acre-feet)	
	Length of Stream Restored or Protected (linear feet)	
- Eliminate \$3000 yearly repair cost for St. Charles Mesa. - \$50k installation and \$3k annual maintenance savings in UAWCD being able to use this augmentation station and not having to build their own in a similar area of that reach.	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	Area of Restored or Preserved Habitat (acres)	
200ft of ditch diversion	Length of Pipe/Canal Built or Improved	
X	Other	Explain: Infrastructure Upgrade and Improvement

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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](#)).

The essential infrastructure replacement for the St Charles Mesa Water District Headgate and augmentation station supports the goals of the Colorado Water Plan and Arkansas Basin Implementation Plan in multiple ways.

The Colorado Water Plan defines what Colorado's main water values are, one of which is having an "efficient and effective water infrastructure." (CWP1-6) Currently, the CID2 diversion cannot be properly used, leading to water loss in the system. Headgate/ flume and telemetry infrastructure will create more efficient water delivery and measurement. Also, as stated in the Arkansas BIP, improved data collection is another major outcome of local and regional water conservation efforts. (ABIP p183)

According to the BIP process one of the statewide long-term goals to meet M&I water needs is to "use water efficiently to reduce overall future water needs." (CWP 6-18) Currently the CID2 diversion is not efficiently able to divert the full water right that is allowed for the St Charles Mesa Water District's operations. The new infrastructure upgrade of the headgate and Parshall flume will allow for SCMWD to be able to divert all their decreed water when needed without any waste. These repairs will increase efficiency of the diversion to maximize the use of an existing water resource.

Another one of the goals outlined in the CWP is "establishing a plan with stakeholders and water managers statewide to finance the daunting cost of water infrastructure projects (municipal, industrial, and environmental)." (CWP 1-4) The Basin and State funding available through this WSRF grant, with matching funds from entities like UAWCD and SCMWD, make infrastructure improvement projects possible. This goes hand in hand with the objective to "support regional infrastructure development for cost-effective solutions to local water supply gaps." (CWP, Section 6.2 p. 6-21)

This water activity also meets the WSRF Criteria in the following areas:

Commitment to Collaboration:

- UAWCD is working in collaboration with SCMWD to increase the beneficial use of water on Cottonwood Creek through the water districts augmentation plan.

Demonstrate Sustainability:

- Maximize the use of water resources by improving and modernizing aging infrastructure.

Establishing fiscal and technical feasibility:

- Leveraging a state grant with matching contributions from UAWCD and SCMWD.

(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):
Basin Account	\$10,040.00 (Cash)
Upper Arkansas Water Conservancy District	\$10,000.00 (In-Kind)
St. Charles Mesa Water District	\$63,560.00 (Cash)
Total Match	\$83,6000.00
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.

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

April 2017- June 2020 - Groundwater and Surface Water Interactions and Potential for Underground Storage in the Arkansas River Basin

Applicant- Upper Arkansas Water Conservancy District
Approving RT- Arkansas Basin Roundtable
WSRF Grant – CTGG1 2017-1733

Sept 2016- Feb 2019 - Lake Ranch Multi-Use Pilot Project Feasibility Study- Alluvial Aquifer Storage

Applicant- Upper Arkansas Water Conservancy District
Approving RT- Arkansas Basin Roundtable
CTGG1 2017-112

Sept 2017- Dec 2019 -Long-Term Potable Water Supply to the Zinno Subdivision

Applicant- St. Charles Mesa Water District
Approving RT- Arkansas Basin Roundtable
POGG1 2018-370

2011, 2012, 2013 – Water Conservation Implementation Grant

Applicant- St. Charles Mesa Water District
Approving RT- Arkansas Basin Roundtable

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 the applicant.

Funding will not trigger any TABOR limitations



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Colorado Water Conservation Board	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	November 20, 2019
Water Activity Name:	St. Charles Mesa Cottonwood Irrigation Ditch #2 Headgate/ Augmentation Station Project
Grant Recipient:	St. Charles Mesa Water District
Funding Source:	WSRF- State and Basin Funding
Water Activity Overview: (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for.)	
<p>The WSRF funds would be used for the Cottonwood Irrigating Ditch #2 (CID2) Diversion headgate and Parshall flume repair/replacement, along with the addition of a new telemetry station. Erosion has occurred around the headgate diversion structure on Cottonwood Creek causing it to move and lift during the winter months and resulting in St. Charles Mesa Water District not being able to receive their full decreed diversion during certain months of the year. These infrastructure repairs will allow for more efficient water delivery of their full decreed 3.8 cfs through the flume. The CID2 water right accounts for nearly 50% of their municipal water supply.</p> <p>Details of the infrastructure project include re-establishing the headgate in Cottonwood Creek, which requires the setting of a precast headwall and installation of a new gate. To help stabilize and prevent dislodging of the headgate, onsite riprap will be grouted. Replacement of the Parshall flume is necessary, along with installation of a mass concrete foundation to stabilize against movement.</p> <p>To effectively measure and quantify diversions being ushered to the Bessemer Ditch for use in the St. Charles Mesa water treatment facility, a remote telemetry station will be installed. This final element of the proposed water activity will help maintain the diversion and account for available beneficial uses on Cottonwood Creek. In an effort of efficiency savings UAWCD will also utilize the telemetry station to measure UAWCD's Cottonwood Irrigating Ditch water for augmentation of structures on Cottonwood Creek and will not have to build their own augmentation station in a similar area on that reach. The collaboration of UAWCD with SCMWD will increase the beneficial uses of water on Cottonwood Creek through the utilization of the water districts augmentation plan.</p>	
Objectives: (List the objectives of the project)	
<p>The objectives of this project would be:</p> <ul style="list-style-type: none">• Replacement and upgrade of aging infrastructure• Improving the overall engineering soundness, stability, and efficiency of the structures• More efficient and better water delivery for M&I and Augmentation• The telemetry station will more accurately measure and quantify the diversion• Safer fish passage by reducing the unstable rip rap	



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Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 – Mobilization of the equipment/materials and site preparation</u>
Description of Task: The purpose of this task is to finalize the engineering/ design and survey the creek and flume. Before construction begins the area needs to be cleared of all debris and have a clear point of access so all the equipment and materials can to be mobilized and staged at the site.
Method/Procedure: <ul style="list-style-type: none">- Design the headwall and flume- Survey the stream and flume- Clearing of debris and site preparation- Mobilize all equipment and materials that will be needed for this stage of the project
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
All materials and equipment needed to do the channel work on the south side of the stream will be onsite. There will be a clear access point removed of all debris.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
This task will be documented in a progress report and final report. This task will be reflected in the WSRF State/Basin budget and invoices will be submitted to CWCB for reimbursement.



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Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 – Right (South)- Channel Work Including Grouted Riprap, New Headwall, and Flume Stabilization</u>
Description of Task:
<p>This task will focus on the channel work on the south side of the creek. It will entail redirecting the water away from the south side with bulk bags to dry up the construction area, followed by excavation and removal of the existing headgate and flume. Concrete foundations will be poured and finished for the new headwall/headgate/flume which will stabilize against movement. The final step is the installation and grouting of the riprap thereby ensuring the diversion as a whole is more secure.</p>
Method/Procedure:
<ul style="list-style-type: none">- Furnish and fill bulk bags- Set bulk bags on south side to dewater the area and move the flow to the north side of the creek- Excavation and the removal of the existing headgate- Excavation and removal of the existing flume and measuring equipment- Furnish and delivery of the concrete to the site- Installation of the rebar and formwork- Re-install flume and measuring equipment- Furnish/form/place/finish/install headwall and headgate- Excavation and sorting of riprap- Installation and grouting of riprap and tying it into the bank
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<p>A new cast-in-place headwall and new headgate installed with surrounding grouted riprap for overall stabilization, as well as a new concrete foundation for the Parshall flume.</p>
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<p>This task will be documented in a progress report and final report with accompanying photos of successful installation. This task will be reflected in the WSRF State/Basin budget and invoices will be submitted to CWCB for reimbursement.</p>



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Tasks
Provide a detailed description of each task using the following format:
<u>Task 3 – Left (North) Channel Work Including Grouted Riprap</u>
Description of Task: Task 3 will focus on the channel work on the north side of the creek. It will require bulk bags to redirect the water to the south side. Some excavation work will need to be done for sorting and clearing riprap before grouting it and tying the riprap into the bank.
Method/Procedure: <ul style="list-style-type: none">- Furnish and fill bulk bags- Excavation of the stream bed and sorting riprap- Installation and grouting of riprap- Tying the riprap into the bank- Preservation of floodwall and protection of fish passage
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
A more stable channel with grouted riprap to keep the boulders in place.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
This task will be documented in a progress report and final report with accompanying photos of successful installation. This task will be reflected in the WSRF State/Basin budget and invoices will be submitted to CWCB for reimbursement.



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Tasks
Provide a detailed description of each task using the following format:
<u>Task 4 –Site Restoration and demobilization</u>
Description of Task: After construction is complete the site needs to be restored to its natural state and all equipment and materials removed.
Method/Procedure: <ul style="list-style-type: none">- Site restoration- Removal of any construction debris- Removal of equipment, bulk bags, materials from the area
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
The creek access restored to its natural state without any commercial debris left behind.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
This task will be documented in a progress report and final report. This task will be reflected in the WSRF State/Basin budget and invoices will be submitted to CWCB for reimbursement.



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Tasks
Provide a detailed description of each task using the following format:
<u>Task 5 – Telemetry Station- Equipment & Installation</u>
Description of Task:
Data collection equipment is needed to properly monitor and measure the diversion on a consistent and reliable basis. A telemetry station will be constructed and programmed to deliver automated measurements to determine the appropriate diversion. This station will provide efficiency and reliability to properly administer St. Charles Mesa's water requirements.
Method/Procedure:
<ul style="list-style-type: none">- Order all needed equipment- Installation & Verification of all equipment and programing<ul style="list-style-type: none">o DCP Equipment Verification and Programingo Masto Grounding Equipmento Housingo Solar Power systemo Staff Gageo Relay Station- Verification of telemetry station properly reporting to UAWCD database
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<ul style="list-style-type: none">- Successful installation, verification, and programming complete- Off-site data backup at multiple locations, UAWCD, NOAA DCS, USGS EDDN, NESDIS- Prevention of data gaps from debris interference or tampering of gaging and diversion systems
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
This task will be documented in a progress report and final report with accompanying photos of successful installation. This task will be reflected in the WSRF State/Basin budget and invoices will be submitted to CWCB for reimbursement.



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Tasks
Provide a detailed description of each task using the following format:
<u>Task 6 – Project Management and grant administration</u>
Description of Task:
<p>Project Management will be provided by Gracy Goodwin, Project Manager for the Upper Arkansas Water Conservancy District. The Project Manager will be responsible for task management, communication, and be the project facilitator. The Project Manager will serve as the primary point of contact and will provide coordination between all parties.</p> <p>Gracy Goodwin will also act as the grant administer and will oversee the grant management and documentation of deliverables.</p>
Method/Procedure:
<p>Project Management</p> <ul style="list-style-type: none">- Task Management- Communication & Scheduling- Documenting Project Progress (Photos, Site Visits, etc.)- Project Contact and Facilitator <p>Grant Management</p> <ul style="list-style-type: none">- Progress Reports, Invoicing, Reimbursements
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Successful task management. On time reporting, time management and successful project completion.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<p>Successful project completion on time and on budget. Project Management will be documented in all progress reports and will be reflected in the matching budget.</p> <p>Grant management will provide a final report to the CWCB with all documentation and supporting materials. Invoicing for this task will be reflected in the matching budget.</p>



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Budget and Schedule

Exhibit B - Budget and Schedule: This Statement of Work shall be accompanied by a combined [Budget and Schedule](#) that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format. A separate excel formatted Budget is required for engineering costs to include rate and unit costs.

Reporting Requirements

Progress Reports: The grantee shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.

Final Report: At completion of the project, the grantee shall provide the CWCB a Final Report on the grantee's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

Payments

Payment will be made based on actual expenditures, must include invoices for all work completed and must be on grantee's letterhead. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or contract may be denied consideration for future funding of any type from CWCB.

Performance Requirements

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the final deliverable is completed to the satisfaction of CWCB staff. Once the final deliverable has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per the Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per the Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.

Last Update: May 19, 2017



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Supply Reserve Fund Exhibit A - BUDGET AND SCHEDULE

Date: 11/21/19

Water Activity Name: St. Charles Mesa Cottonwood Irrigation Ditch #2 Headgate/Augmentation Station Project

Grantee Name: St. Charles Mesa Water District

<u>Task No.</u>	<u>Description</u>	<u>Start Date</u> ⁽¹⁾	<u>End Date</u>	<u>Matching Funds</u> (cash & in-kind) ⁽²⁾	<u>WSRF Funds</u> (Basin & Statewide combined) ⁽²⁾	<u>Total</u>
1	Mobilization/Site Prep	May 1, 2020	Dec, 31, 2021	\$4,000	\$4,378	\$8,378
2	Right (South)- Channel Work Including Grouted Riprap, New Headwall, and Flume Stabilization	May 1, 2020	Dec, 31, 2021	\$35,600	\$80,938	\$116,538
3	Left (North) Channel Work Including Grouted Riprap	May 1, 2020	Dec, 31, 2021	\$13,000	\$14,424	\$27,424
4	Site Restoration / Demobilization	May 1, 2020	Dec, 31, 2021	\$4,000	\$3,665	\$7,665
5	Telemetry Station-Equipment/Installation	May 1, 2020	Dec, 31, 2021	\$7,000	\$6,995	\$13,995
6	Project Management	May 1, 2020	Dec, 31, 2021	\$10,000	\$0	\$10,000
						\$0
						\$0
						\$0
						\$0
						\$0
Total				\$73,600	\$110,400	\$184,000

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

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

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

NTP will not be accepted as a start date. Project activities may commence as soon as the grantee enters contract and receives formal NTP if prior to the listed "Start Date"

CWCB will withhold the last 10% of the entire grant budget until the Final Report (Deliverable) is completed and accepted (2016 WSRF Criteria & Guidelines).

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

Structure Ditch COTTONWOC ▾

2 of 3



Structure Ditch COTTONWOOD IRRIGATING 2

Name = COTTONWOOD IRRIGATING 2

WDID = 1100936

Current-in-Use = Active Structure with contemporary diversion records (A)

Water Source = COTTONWOOD CREEK [00189231]

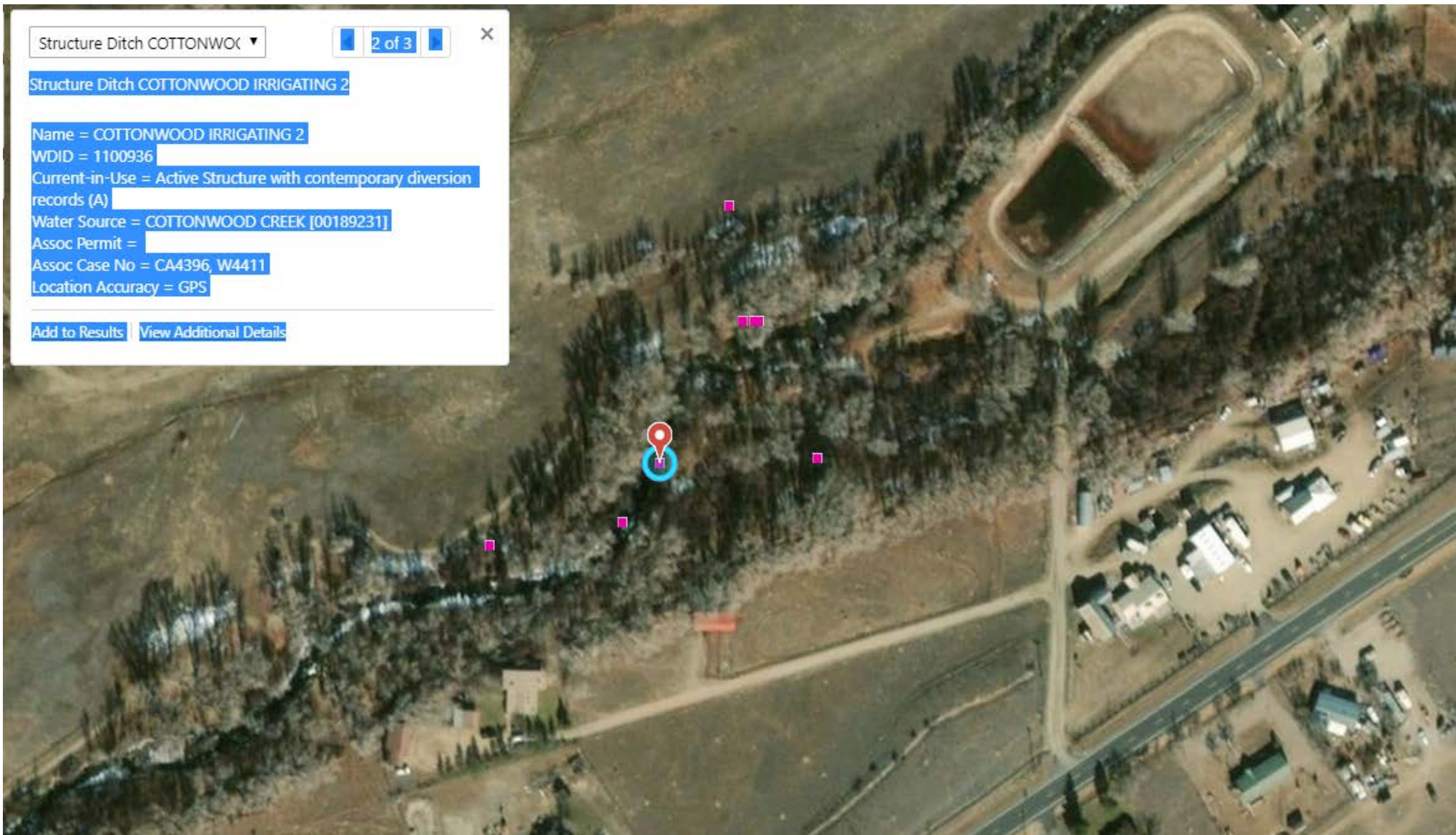
Assoc Permit =

Assoc Case No = CA4396, W4411

Location Accuracy = GPS

[Add to Results](#)

[View Additional Details](#)





Task 1: Mobilization / Site Prep
Includes Debris Cleanup

Task 2: Flume Stabilization Work Behind
New Headwall Structure (not in view)

Task 2: New Cast-In-Place
Concrete Headwall with
New Slide Gate

Task 2 Creek Flows

Task 2: Right (South) Bulk-Bags Installed
to Dewater and Divert Flows Around Left
(North) Side of Creek

Task 2: Parshall Flume and
Measuring Equipment to be
Removed and Re-Installed
with Concrete Foundation





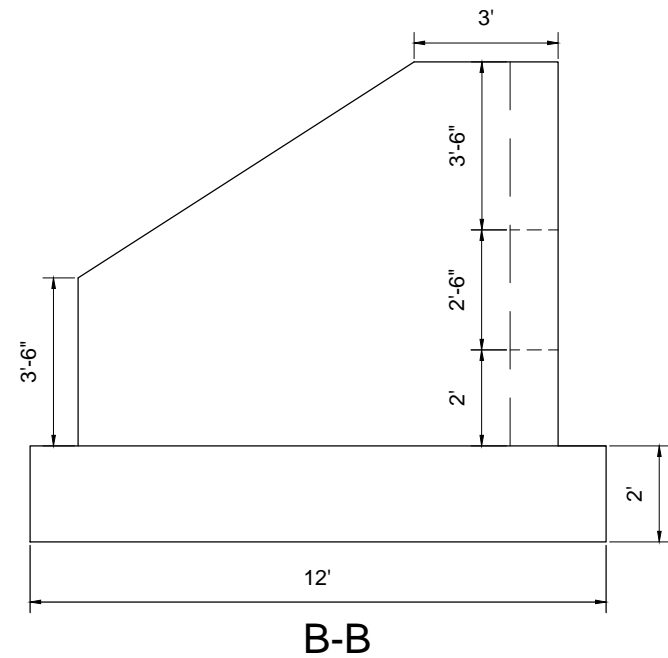
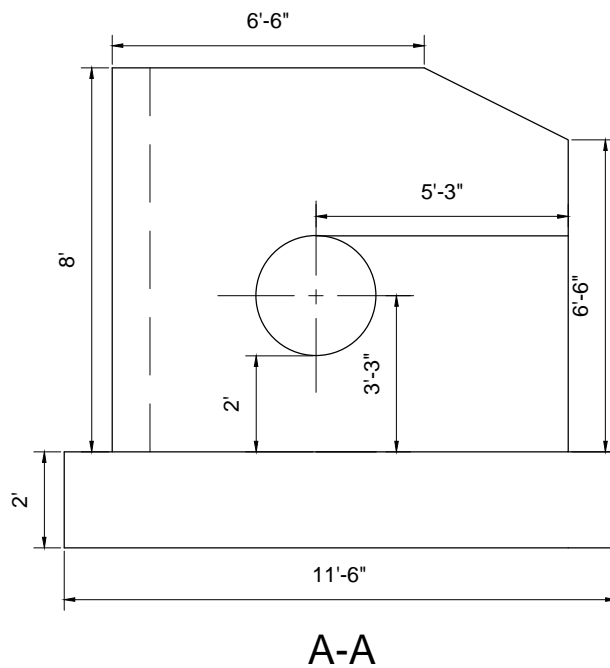
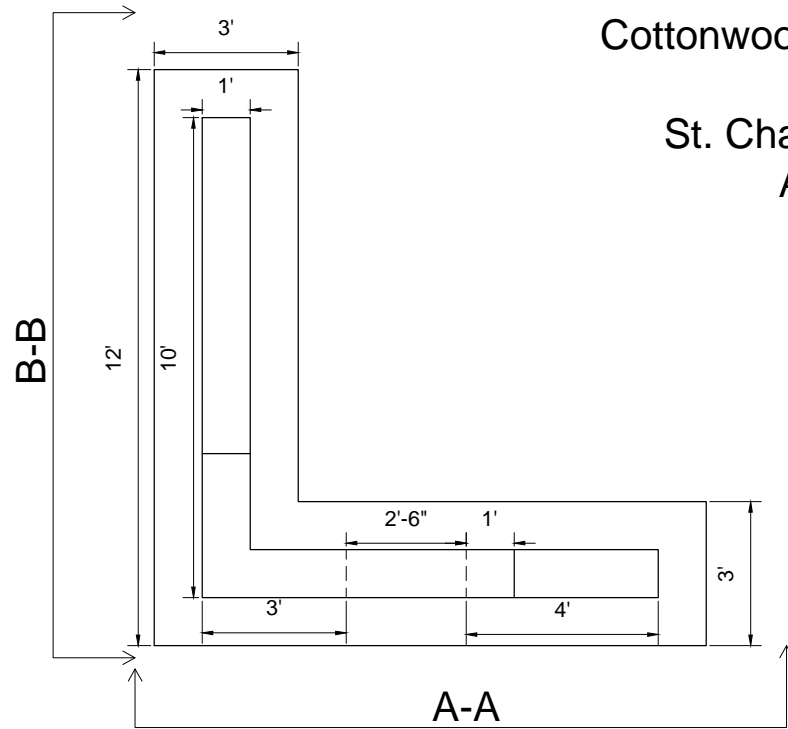
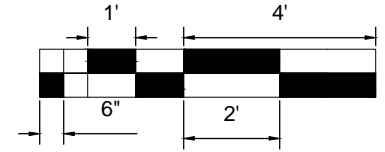
Task 2: New Cast-In-Place Concrete Headwall with New Slide Gate

Task 3 Creek Flows

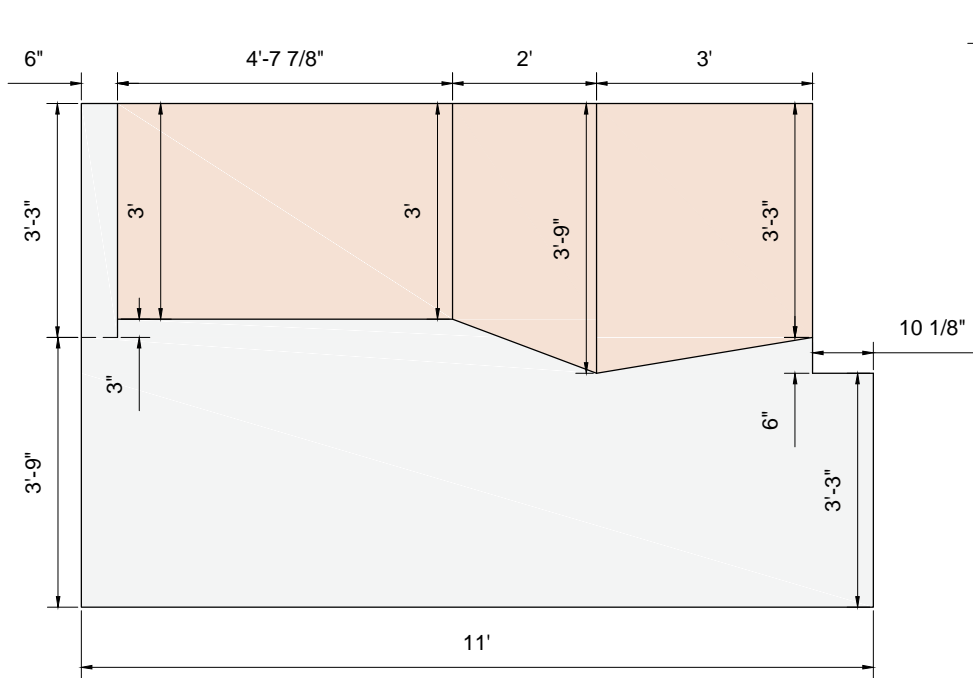
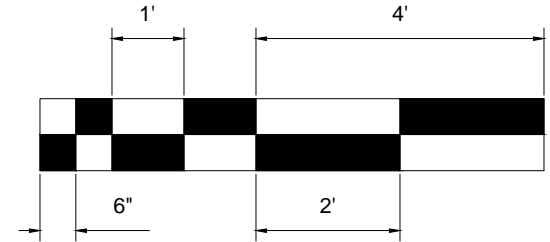
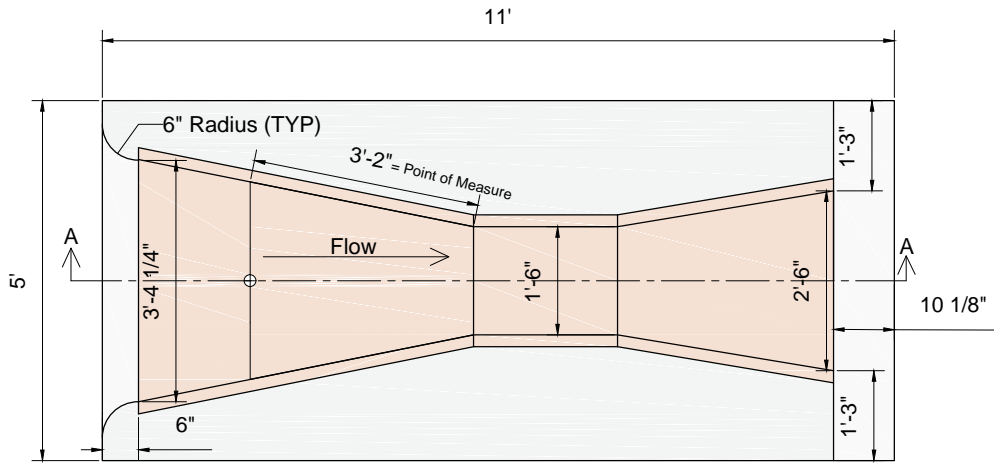
Task 3: Left (North) Bulk-Bags Installed to Dewater and Divert Flows Around Right (South) Side of Creek

Task 4: Site Restoration of disturbed Areas

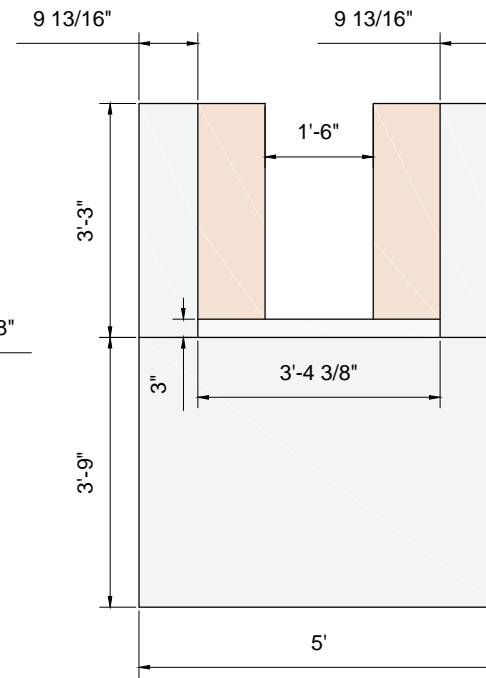
Cottonwood Creek Diversion Structure
Headwall
St. Charles Mesa Water District
ACA Products, Inc.



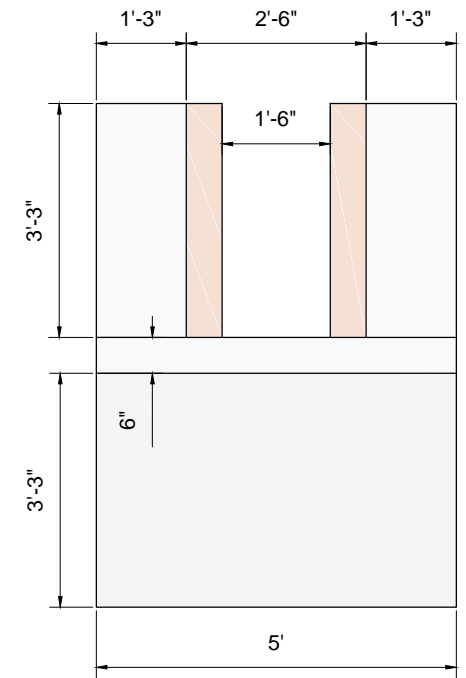
Cottonwood Creek Diversion Structure
 Parshall Flume Foundation
 St. Charles Mesa Water District
 ACA Products, Inc.



Section A-A



U/S View



D/S View

Series 6600 Model 101C Slide Gate

TECHNICAL DATA SHEET

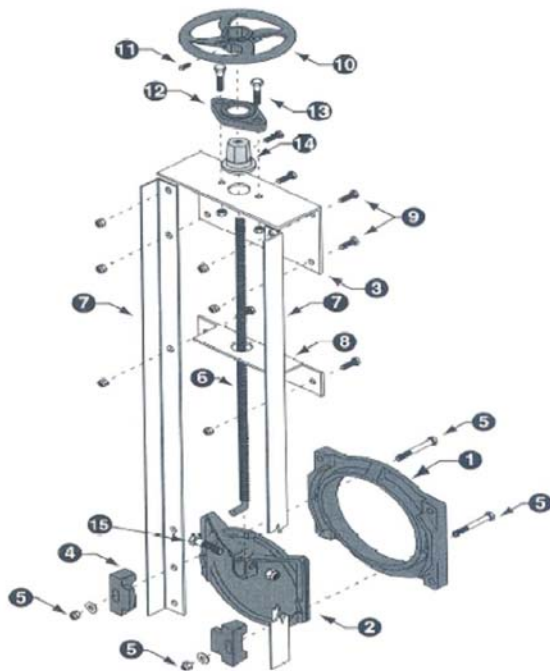


Features:

- One-piece adjustable Wedges ensure uniform wedging action
- Roll threaded rising stem provides ease of operation and extended stem life
- Rugged Cast Iron seat and cover
- Available for mounting to headwalls or corrugated pipe
- Precision machined seating surfaces

Material Specification

Item	Description	Material	Specification
1	Seat	Cast Iron	ASTM A126, Class B
2	Slide	Cast Iron	ASTM A126, Class B
3	Head Bar	Steel, Galvanized	ASTM A36
4	Wedge	Cast Iron	ASTM A126, Class B
5	Wedge Bolts/Nuts	Steel, Plated	ASTM A307, A164
6	Stem	Steel	ASTM A108, Grade 1045
7	Side Angles	Steel, Galvanized	ASTM A36
8	Stem Support	Steel, Galvanized	ASTM A36
9	Headbar Bolts/Nuts	Steel, Plated	ASTM A307, A164
10	Handwheel	Cast Iron	ASTM A126, Class B
11	Handwheel Set Screw	Steel, plated	ASTM A307, A164
12	Keeper	Cast Iron	ASTM A126, Class B
13	Keeper Bolts/Nuts	Steel, plated	ASTM A307, A164
14	Lift Nut	Brass	ASTM B16
15	Stem Bolt/Nut	Plated	ASTM A307, A164



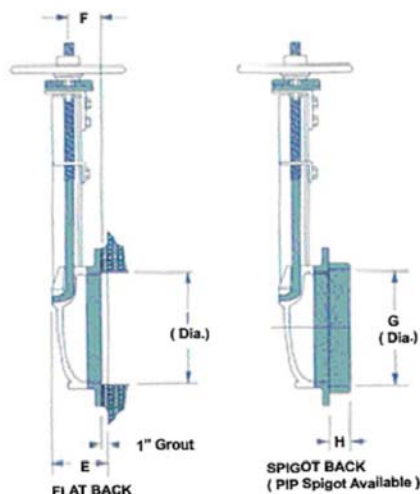
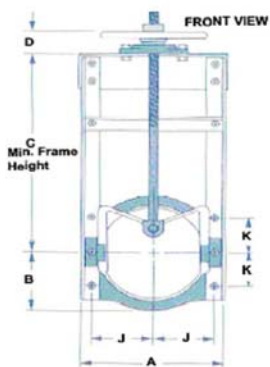
APPLICATIONS

Features

The Series 6600 Slide Gate is designed for use in canals and ditches, on corrugated pipe, flood control systems, oil refineries, fish hatcheries and various low head industrial water control applications where pressure is in seating direction only.

Series 6600 Model 101C Slide Gate

TECHNICAL DATA SHEET SPECIFICATIONS



Pressure Rating

Gate Sizes:

6" – 24"	23 ft.
30" – 36"	11 ft.
42" – 48"	9 ft.
54" – 60"	6 ft.

Installation

The Series 6600 Slide Gate is normally on Corrugated steel pipe or bolted to a concrete head wall. When attaching to corrugated pipe, you may either bolt directly to the spigot back seat, or use a rod and harness assembly.

Options

- Frame angles available Galvanized or Stainless Steel
- Cast iron or Bronze seating faces
- Stainless Steel stem and fasteners
- Flat back for headwall or flange mounting.
- Spigot back for mounting to corrugated pipe.
- Square bottom slide
- Rising stem and non-Projecting stem extensions
- Tapered setting collars for concrete pipe installations
- Fabricated adaptors for HDPE or PVC pipe mounting

Dimensional Information

Gate Size (in)	Dimensions (in)											Anchor Bolt Data		Lift Type	H/ wheel Dia.	Stem Dia.
	A	B	C	D	E	F	G	H	I	J	K	Qty.	Size			
6	9.3	4.0	15.50	2.88	3.88	2.25	6.75	1.50	6.00	4.00	2.50	4.0	1/2 X 12	H1	10.0	7/8
8	11.3	5.0	18.00	2.88	3.88	2.25	8.75	1.50	8.00	5.00	4.00	4.0	1/2 X 12	H1	10.0	7/8
10	13.3	6.0	21.00	2.88	3.88	2.25	10.75	1.50	10.00	6.00	4.00	4.0	1/2 X 12	H1	10.0	7/8
12	15.3	7.3	24.00	2.88	3.88	2.25	13.25	1.50	12.00	7.00	4.00	4.0	1/2 X 12	H1	10.0	7/8
14	17.3	8.3	27.25	2.88	3.88	2.25	15.25	1.50	14.00	8.00	4.00	4.0	1/2 X 12	H1	10.0	7/8
15	18.3	8.8	28.50	2.88	3.88	2.25	16.25	1.50	15.00	8.50	4.00	4.0	1/2 X 12	H1	10.0	7/8
16	19.3	9.3	30.00	2.88	3.88	2.25	17.25	1.50	16.00	9.00	4.00	4.0	1/2 X 12	H1	10.0	7/8
18	23.0	10.6	33.25	2.88	4.88	2.88	19.25	1.50	18.00	10.50	7.00	4.0	5/8 X 12	H1	14.0	1-1/8
20	25.0	11.6	36.75	2.88	4.88	2.88	21.25	1.50	20.00	11.50	7.00	4.0	5/8 X 12	H1	14.0	1-1/8
21	26.0	12.1	37.25	2.88	4.88	2.88	22.25	1.50	21.00	12.00	7.00	4.0	5/8 X 12	H1	14.0	1-1/8
24	29.0	13.6	42.25	2.88	4.88	2.88	25.25	1.50	24.00	13.50	7.00	4.0	5/8 X 12	H1	14.0	1-1/8
30	35.9	17.1	51.50	2.88	5.88	3.75	31.25	2.00	30.00	16.88	12.00	4.0	3/4 X 12	H2	18.0	1-1/2
36	41.9	20.1	60.50	3.50	6.50	3.75	37.25	2.00	36.00	19.88	12.00	4.0	3/4 X 12	H2	24.0	1-1/2
42	47.9	23.1	69.50	3.50	6.88	4.12	43.38	2.00	42.00	22.88	16.00	6.0	3/4 X 12	H2	24.0	1-1/2
48	53.9	26.1	78.50	6.12	6.88	4.12	49.38	2.00	48.00	25.88	16.00	6.0	3/4 X 12	H2B	24.0	1-1/2
54	61.3	29.3	87.75	6.12	7.75	4.62	55.38	2.00	54.00	29.25	18.00	6.0	1 X 12	H2B	30.0	2.00
60	66.0	32.3	97.25	6.12	9.00	5.12	61.38	2.00	60.00	32.50	20.00	6.0	1 X 12	H2B	30.0	2.00



UPPER ARKANSAS
WATER CONSERVANCY
DISTRICT

December 4, 2019

Ben Wade
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203

**RE: Letter of Matching Commitment – St. Charles Mesa Cottonwood Irrigation Ditch #2
Headgate/Augmentation Station Project**

Dear Mr. Wade:

The infrastructure replacement for the St Charles Mesa Water District's headgate and augmentation station supports the districts goal of protecting water usage. These improvements will allow for more efficient water delivery and measuring through the augmentation station creating more effective water administration. In an effort of efficiency savings, the Upper Arkansas Water Conservancy District will jointly utilize St. Charles Mesa's telemetry station to measure UAWCD's Cottonwood Irrigating Ditch water for augmentation of structures on Cottonwood Creek and will not have to build their own augmentation station in a similar area on that reach. The collaboration of UAWCD with SCMWD will increase the beneficial uses of water on Cottonwood Creek through the utilization of the water districts augmentation plan.

We, the Upper Arkansas Water Conservancy District, are pleased to commit \$10,000 in-kind as matching funds towards the Cottonwood Irrigation Ditch #2 Headgate/ Augmentation Station project and recognize the value of collaboration on this project.

Sincerely,

Ralph "Terry" Scanga
General Manager, Upper Arkansas Water Conservancy District