Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
September 18-20, 2018
Agenda Item 12(l)

Applicant & Grantee:	Big Thompson Conservation District
Water Activity Name:	Irrigation Water Return Flow Filter Strip
Water Activity Purpose:	Multipurpose/Study & Implementation
County:	Larimer
Drainage Basin:	South Platte
Water Source:	Little Thompson River
Amount Requested:	$6,600 South Platte Basin Account
Matching Funds:	Applicant & 3rd Party Match (cash & in-kind) = $55,735 • 844% of the Basin Account request (meets 10% min)

Staff Recommendation:
Staff recommends approval of up to $6,600 from the South Platte Basin Account to help fund the project titled: Irrigation Water Return Flow Filter Strip.

Water Activity Summary: WSRF grant funds, if approved, will assist the Big Thompson Conservation District (BTCD) along with Colorado State University and Natural Resources Conservation Service demonstrate the effectiveness of using filter strips to agricultural and industrial entities, as well as other State and Federal agencies. The collaboration wishes to measure water quantity and quality entering the field where a filter strip has been planted to demonstrate the effectiveness and to actually identify the amount of nutrients, sediment and water that comes from several square miles above the river and enters into a growing grass filter. More specifically, WSRF funds will be expended to assist in the purchase of advertising, signage, an information kiosk, pamphlets, brochures, a video report, and to provide workshops that bring attention to their efforts and the resulting benefits.

Discussion: This effort will assist the South Platte Basin Roundtable achieve the goal to *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* as described in the South Platte Basin Implementation Plan in Section 1.9.7 Environmental and Recreational.

Issues/Additional Needs: No issues or additional needs have been identified.

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

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair's Recommendation Letter and the WSRF Grant Application for applicant's detailed response.

Funding Summary/Matching Funds:

Funding Source	Cash	In-kind	Total	Status
Big Thompson Conservation District	$8,500	$800	$9,300	Secured
Lempka Farms LLC, Inc.	$0	$6,435	$6,435	Pending
Colorado State University	$25,000	$15,000	$40,000	Secured
Sub-total	$33,500	$22,235	$55,735	
WSRF South Platte Basin Account	$6,600	n/a	$6,600	Secured
Total Project Costs	**$40,100**	**$22,235**	**$62,335**	

CWCB Project Manager: Craig Godbout

South Platte Basin Roundtable
Garrett Varra, Chair
July 28, 2018

Craig Godbout
Water Supply Planning Section
Colorado Water Conservation Board
1313 Sherman St., Room 718
Denver, CO 80203

Re: Approval Recommendation for the Big Thompson Conservation District WSRF Grant Application: Irrigation Water Return Flow Filter Strip

Dear Mr. Godbout,

The South Platte Roundtable voted at its July 10, 2018 meeting, to approve a grant application for the "Irrigation Water Return Flow Filter Strip" proposed by the Big Thompson Conservation District. The Roundtable approved $6,600 from the South Platte WSRF. There is no request for Statewide WSRF funding. The applicant's request for $6,600 will be presented for consideration at the CWCB's August, 2018 board meeting.

The Roundtable underwent an evaluation and approval process, and believes this application meets the Threshold and Evaluation Criteria for the WSRF Grant Program and will assist in meeting the water supply needs identified in the basin roundtable's consumptive and/or non-consumptive needs assessments. This request specifically recognizes that familiarity with the South Platte's water issues by regulatory agencies, elected officials, the business community, and the general public will bolster Colorado's ability to maintain sustainable water supplies.

As noted in the South Platte Basin Implementation Plan, Section 4.1.3: "The South Platte Basin is home to 80% of the State's population and accounts for 80% of the State's economy and tax base. It is an area with great diversity both economically and demographically that is facing 75% of the projected statewide municipal water supply gap. This Basin deserves and needs an intensive continued education, participation and outreach program designed to generate a lasting baseline of public awareness and support.

The grant will help bolster the efforts of Big Thompson Conservation District, with its partnership with Colorado State University to help disseminate educational materials through means of workshops, tours and published materials including current time data along with signage and video presentations of findings and applications. The South Platte Roundtable specifically asked the Big Thompson Conservation District to work closely with the Education Committee to support a focused and professional effort acknowledging local interests and defining local priorities, which can be replicated in other areas of the State.

This educational effort is a demonstration plot, based to further market the efforts to provide information that can be utilized by landowners, land managers and producers not only in agriculture, but industry as well to create a means to filter surface water to reduce sediment, nutrients and direct water entering waterways and riparian areas.

During the evaluation and approval process, there were no dissenting votes or opinions expressed and there was a quorum present.

This letter is intended to fulfill Threshold Criteria B (Part III 1.b. in the WSRF Application). The full WSRF Application will be provided separately by the applicant. Please let me know if you need any additional information. Thank you for your consideration.

Sincerely,

Garrett Varra, Chair
South Platte Basin Roundtable

Last Update: August 3, 2017

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	**Gunnison | North Platte | South Platte | Yampa/White**	**Colorado | Metro | Rio Grande | Southwest**
Ben Wade	Craig Godbout	Megan Holcomb
ben.wade@state.co.us	craig.godbout@state.co.us	megan.holcomb@state.co.us
303-866-3441 x3238	303-866-3441 x3210	303-866-3441 x3222

WSRF Submittal Checklist (Required)	
X	I acknowledge this request for funding was recommended for CWCB approval by the sponsoring Basin Roundtable(s).
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)
Exhibit A	
X	Statement of Work(2) *(Word – see Exhibit A Template)*
X	Budget & Schedule(2) *(Excel Spreadsheet – see Exhibit A Template)*
	Letters of Matching and/or Pending 3rd Party Commitments(2)
Exhibit C	
X	Map(2)
X	Photos/Drawings/Reports
X	Letters of Support
X	Certificate of Insurance(3) (General, Auto, & Workers' Comp.)
Contracting Documents	
	Certificate of Good Standing(3)
	W-9(3)
	Independent Contractor Form(3) (If applicant is individual, not company/organization)
	Electronic Funds Transfer (ETF) Form(3)

(1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting
(2) Required with application if applicable.
(3) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

Last Update: August 3, 2017

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:	July
Desired Notice to Proceed Date:	July 2018

Water Activity Summary	
Name of Applicant	Big Thompson Conservation District
Name of Water Activity	Irrigation Water Return Flow Filter Strip

Approving Roundtable(s)	Basin Account Request(s)[1]
Basin Account Request Subtotal	$6,600
Statewide Account Request[1]	$
Total WSRF Funds Requested (Basin & Statewide)	$6,600
Total Project Costs	$ 61,835

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

Last Update: August 3, 2017

Grantee and Applicant Information	
Name of Grantee(s)	Big Thompson Conservation District
Mailing Address	PO Box 441
FEIN	84-6000147
Grantee's Organization Contact(1)	Larry Lempka
Position/Title	District Manager
Email	info@bigthompson.org
Phone	970-624-7570
Grant Management Contact(2)	
Position/Title	Larry Lempka, District Manager
Email	info@bigthompson.org
Phone	970-624-7570
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

(1) Person with signatory authority

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

Description of Grantee
Provide a brief description of the grantee's organization (100 words or less).
Big Thompson Conservation District was formed in 1943 through the Soil Conservation Service to aid landowners due to the Dust Bowl. The District is now under the guidance of the USDA through NRCS and partners with Colorado State Conservation Board. The mission of the Big Thompson Conservation District to work for constructive land use providing for the conservation and preservation of natural resources, including adequate water reserves and uses, the control of wind and water erosion, noxious weed control and the reduction of damage resulting from floods.

Last Update: August 3, 2017

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)	
X	Study
X	Implementation

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

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in **decimal degrees**. The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	Larimer
Latitude	40 – 16’ 52.72”
Longitude	105 – 05’ 05.57”

Last Update: August 3, 2017

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 Big Thompson Conservation District along with Colorado State University and support from Natural Resources Conservation Service are implementing Filter Strips along the Little Thompson River. The collaboration wishes to measure water quantity and quality entering the field where a filter strip has been planted to demonstrate the effectiveness and to actually identify the effectiveness showing the amount of nutrients, sediment and water filtered into the farm ground that comes from several square miles above the river and enters into a growing grass filter. We are measuring intake and outflow of the water as it comes into the filter strip and as it leaves into the river to demonstrate the effectiveness of living filters in relation to water quality as it returns to streams and rivers, and the potential for additional agricultural applications.

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)	
1000 feet	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
3 Acres	Area of Restored or Preserved Habitat (acres)	
	Length of Pipe/Canal Built or Improved	
Reduced pollutants	Other	Explain: Filter Strip to reduce return flow from upland farmland returning directly to the Little Thompson River.

Last Update: August 3, 2017

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).
1) This will maximize a Process (IPP) **A. Study the effects of Filter Strips to reduce sediment, nutrients and reduce direct flow of water directly back into the River.** **B. To provide actual data of the effects of farmer initiated water treatment and the identified retention of nutrients, deposition and water placement into subsurface areas along a riparian area.** **C. This data can be used to establish regulatory needs and applications.** **2) Maximize use of existing South Platte water.** **A. To demonstrate that return flows can be directed into waterways without adding additional nutrients and sediment to the river.** **B. Improve water quality to return flows.** **C. Increase subsurface migration of water into stream beds.** **3) Protect & enhance environmental and recreational attributes** **A. Reduce the amount of nutrients and sediment are returned to live rivers.** **B. Help to keep the rivers healthy** **C. Resilient agricultural activity along a restored stretch of flood repaired river.** **4) Utilize effective communications and outreach to support program** **A. Create a visual live learning laboratory to demonstrate the use of Filter Strips.** **B. Create Signage to show the demonstration.** **C. Create publications and material to show the results of the findings.** **D. Encourage Tours and live visits to the site.** **E. Develop workshop programs to promote the project.** **5) Research new technologies and strategies to utilize low quality water supplies** **A. To demonstrate how water can be filtered by live plants to improve water quality.** **B. Allow return flows to enter the river through underground sources to reduce contaminates and reduce water temperature.** **Coordination of events, information and activities shall be made with the Education Committee.**

Last Update: August 3, 2017

Water Activity Justification

(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.

Matching Requirements: Basin Account Requests	
Basin (only) Account grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3rd party and shall be accompanied by a **letter of commitment** as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity's letterhead). Attach additional sheet if necessary.	
Contributing Entity	Amount and Form of Match (note cash or in-kind)
LLC, Inc. – Lempka Farm	In Kind $ 6,435

Last Update: August 3, 2017

Matching Requirements: Basin Account Requests	
Big Thompson Conservation District	Cash $8,500
Big Thompson Conservation District	In Kind $800
Colorado State University	Cash $15,000
Colorado State University	In-Kind $25,000
Total Match	$55,435
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	

Matching Requirements: Statewide Account Requests	
Statewide Account grant requests require a 50% match as described in the 2016 WSRF Criteria and Guidelines. A minimum of 10% match shall be from Basin Account funds (cash only). A minimum of 10% match shall be provided by the applicant or 3rd party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3rd party) and shall be accompanied by a **letter of commitment.** Attach additional sheet if necessary.	
Contributing Entity	Amount and Form of Match (note cash or in-kind):
Total Match	$ 40,000
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	

Related Studies
Please provide a list of any related studies, including if the water activity is complimentary to or assists in the implementation of other CWCB programs.

Last Update: August 3, 2017

Related Studies
Little Thompson Watershed Master Plan 2014 Hydraulic and Geomorphic Studies 2015 Sediment Transfer Study 2016 Water Supply Study 2016

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
Water Supply Study Phase I 1) Big Thompson Conservation District and Little Thompson Watershed Coalition 2) Water Supply Study Needs Assessment 3) South Platte Round Table 4) July 2015 5) POGG1PDAA 2015 00271

Tax Payer Bill of Rights
The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.
BTCD does not receive any tax funding and at present will not be effected at current levels of participation.

Last Update: January 9, 2018

Colorado Water Conservation Board	
Water Supply Reserve Fund	
Exhibit A - Statement of Work	
Date:	**May 1, 2018**
Water Activity Name:	**Filter Strip For Nutrients and Sediment Reduction**
Grant Recipient:	**Big Thompson Conservation District**
Funding Source:	

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.

The Big Thompson Conservation District along with Colorado State University and Natural Resources Conservation Service are implementing Filter Strips along the Little Thompson River. The collaboration wishes to measure water quantity and quality entering the field where a filter strip has been planted to demonstrate the effectiveness and to actually identify the amount of nutrients, sediment and water that comes from several square miles above the river and enters into a growing grass filter.

Objectives: (List the objectives of the project)

1. Planning and Management Activities This will include land rental, planting and seeding of the perennial grass, cutting of ditches, weed control as well as the time and labor to do the installation, seeding and planning.

2. Education, Outreach and Demonstration

2. a PR and Advertising – Tours; The first tour is set with Colorado Ag Water Association in August 2018

2. b Large Plot Sign; This has been priced through a local company for a high quality long lasting sign.

2. c Information Kiosk; A weatherproof attachment to the sign where fliers and information can be displayed for dissemination.

2. d Pamphlets and Brochures; Design and printing of materials to show the results as well as a "how to" on installing on property adjacent to rivers and streams.

2.e Video Report; Background of the property with relation to work post 2013 flood, installation of the different varieties of grasses and performance, as well as progress with visual evidence, drone flyovers, interviews and visual results

2. f Workshops; Hands on displays and presentations of reasons to use, results and what important features to be aware of when installing filter features.

3. CSU Soil and Water Testing/Monitoring; The collaborative work accomplished through contribution of testing and monitoring equipment, testing of new equipment, drone work, testing and sampling as well as collection and writings of results.

Tasks
Provide a detailed description of each task using the following format:
Task 1 – Plot Preparation, Planting and Establishing Base Lines
Description of Task:
A. On the demonstration plot which has been leveled and reconstructed from the floods, plant the filter strip with 2 different varieties of grasses to show which varieties are the most beneficial. B. Measure and establish an irrigation ditch on the newly leveled field. C. Soil testing, mapping and measurements of fields. D. Installation of measuring weirs to measure inflow from 3 points the water that enters the field, and measure the water as it enters the river, if any. E. Sample and test water on the inflow to determine nutrients and deposition. Measure and test the water on the outflow of the field to determine changes while infiltrating the field strip. F. Involve CSU and NRCS along with Big Thompson Conservation District to demonstrate implementation of the project along with the Farm Cooperator. A. Measure the amount of water entering all areas of the project site to determine actual irrigation return flows, rain and snow runoff from a 3 square mile area entering the Little Thompson River. B. Test Water Samples for soil and chemical content entering the plot and exiting into river. C. Drone fly overs to get overhead data and pictures. D. Do Soil Testing at the end of the growing season to evaluate change in fertility levels. E. Compile data and do reporting.
Method/Procedure:

Last Update: January 9, 2018

Tasks
Common farming practices to establish the new grass, enable the best scenario for the grass to get established and set up irrigation as not to erode and wash out new plants and the flow is directed to measuring devices. Install measuring weirs with sampling ports to measure the water. Create mapping of the soil profile to get a baseline for progress. Create a visual log of activities and results through use of photo, video and drone photography. Establish base lines for fertility, and analyze the changes over time.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Create a learning tool that is hands on and available to the public for viewing and requested access. Demonstrate with the use of BMP's how to keep waters clean and viable. Provide analytical proof to demonstrate how Regulation 85 can be relaxed due to stewardship of producers. Create a viable working area that is appealing and also cost effective and efficient.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Make all information available to CWCB. Provide quarterly, annual and final reports for dissemination. Create a video or other data means to relay the information to the public. Create educational materials as well as workshops and tours to demonstrate accomplishments.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 – Monitoring, Evaluation and Data Collection</u>
Description of Task: Education, Outreach and Implementation
Method/Procedure: 2. a PR and Advertising - Tours 2. b Large Plot Sign 2. c Information Kiosk 2. d Phamplets and Brochures 2.e Video Report 2. f Workshops

Last Update: January 9, 2018

Tasks
Using weirs and water stilling quadrants for testing of water quantity and quality. Monitor with period video and photos to monitor progress. Use of Drones for overhead video. Shallow and deep soil profiling and testing to determine nutrient and soil moisture changes.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Create a learning tool that is hands on and available to the public for viewing and requested access. Demonstrate with the use of BMP's how to keep waters clean and viable. Provide analytical proof to demonstrate how Regulation 85 can be relaxed due to stewardship of producers. Create a viable working area that is appealing and also cost effective and efficient.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Make all information available to CWCB. Provide quarterly, annual and final reports for dissemination. Create a video or other data means to relay the information to the public. Create educational materials as well as workshops and tours to demonstrate accomplishments.

Tasks
Provide a detailed description of each task using the following format:
Task 3 – Involvement of CSU
Description of Task: CSU Soil and Water Testing/Monitoring. Through the use of remote testing devices, soil moisture monitoring, water sampling, drone flyovers and a weather station to fully measure the effects of the living filter strip. They intend to accumulate the data and provide through online current activity, as well as water testing to measure how the water is cleaned before re-entering a water way from a farm field. Also, to provide a report of findings to allow people to understand the results of what a live growing field to can do to reduce nutrient and soil sediment return to the river.

Method/Procedure:
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

With the aid of CSU and NRCS, the data will be collected and results of the changes to the farm and water quality shall be analyzed and published. Reports shall be generated to provide a means for the data to be read and interpreted. Report findings to EPA, CDPHE, CWCB and others with regard to effects toward Reg 85. Continue to test and monitor as long as possible and report the findings.

Last Update: January 9, 2018

Method/Procedure:

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

Last Update: January 9, 2018

Reporting 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: 10/17/17

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Supply Reserve Fund

EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs

Date: May 1, 2018

Water Activity Name: Filter Strip Demonstration

Grantee Name: Big Thompson Conservation District

Task No.[1]	Description	Start Date[2]	End Date	Matching Funds (cash & in-kind)[3]	WSRF Funds (Basin & Statewide combined)[3]	Total
1	Planning and Management Activities	1-Jan-18	Ongoing	$6,435		$6,435
2. a	PR and Advertising - Tours	August 27, 2018	Ongoing	$1,500	$2,000	$3,500
2. b	Large Plot Sign	September 2018	Ongoing	$2,000	$1,000	$3,000
2. c	Information Kiosk	September 2018	Ongoing	$200	$100	$300
2. d	Phamplets and Brochures	September 2018	Ongoing	$100	$1,000	$1,100
2.e	Video Report	Jan 2019	Nov 30, 2018	$200	$1,800	$2,000
2. f	Workshops	Winter 2018	August 2020	$5,000	$700	$5,700
3	CSU Soil and Water Testing/Monitoring	July 2018	December 2020	$40,000		$40,000
			Total	**$55,435**	**$6,600**	**$62,035**

(1) The single task that include costs for Grant Administration must provide a labor breakdown (see Indirect Costs tab below) where the total WSRF Grant contribution towards that task does not exceed 15% of the total WSRF Grant amount.

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

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

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

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

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

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

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


Filter Strip Location
Legend
Filter Strip Area
Google Earth
© 2018 Google
N
400 ft

SOIL AND CROP SCIENCES
COLORADO STATE UNIVERSITY

C-127 Plant Sciences • 1170 Campus Delivery
Fort Collins, Colorado 80523-1170
(970) 491-6517 • (970) 491-5676 (FAX)
http://soilcrop.agsci.colostate.edu/

To: Garrett Varra, Chairman
South Platte Basin Round Table

Dear Mr. Varra,

The purpose of this letter is to confirm the participation of the Colorado State University Water Quality Program in the filter strip demonstration project at Lempka Farms. We were contacted by Laura Tyler with the Big Thompson Conservation District about assisting with design and water quality monitoring for the field site in late spring 2018. We have been involved at the site since that time. In collaboration with Larry and the Conservation District, we have since installed significant instrumentation to monitor environmental conditions and water quality. A brief summary of instrumentation currently on site:

- 3 ramp flumes and pressure transducers to measure tail water inflow to the filter strip
- 1 large H flume with bubbler level logger to measure outflow
- 2 automatic water samplers (one inflow and one outflow) for quality measurements
- Soil moisture sensors
- ET gauge
- Manual and logging rain gauges
- Drone mapping

This work is currently being done with limited resources, however our program intends to pursue grant funding to be able to continue and potentially expand work at the site beyond this field season.

To date, we have estimated matching costs to the project of about $40,000 which would include $25,000 for the listed equipment that has been installed with about $15,000 in labor and hard costs to implement the installation and operation.

I would be happy to answer any questions or provide further details.

Sincerely,

Erik Wardle
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