

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(s)

Applicant & Fiscal Agent: Sullivan Ditch Company
Water Activity Name: Sullivan Ditch Repair Project
Water Activity Purpose: Agricultural
County: La Plata
Drainage Basin: Southwest
Water Source: Pine River
Amount Requested/Source of Funds: \$27,298 Southwest Basin Account
Matching Funds: Applicant/3rd Party Match: \$27,298 = 50% of the total project cost of \$54,596
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$27,298 from the Southwest Basin Account to help fund the project titled: Sullivan Ditch Repair Project.
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Water Activity Summary: WSRF grant funds, if approved, will assist in the rehabilitation of two sections of existing earthen ditch (North Section: 300 feet and South Section: 125 feet) along Sullivan Ditch that traverses steep cliff areas that are positioned above the Pine River. With the recent failure of the Thompson-Epperson Ditch which is adjacent to the Sullivan Ditch, ditch representatives hope to avoid the same type failure on the Sullivan Ditch by taking preemptive action. Rehabilitation will consist of replacing the existing ditch in two places with 3 foot diameter ADS pipe. Inspectors determined that these areas of existing ditch along the cliff present problems because of soil compaction and the proximity of the ditch to the cliff. If the ditch fails in either of the two specified sections, the side of the ditch could fall directly into the Pine River. If this were to occur, the river might be blocked and repairs would be extremely difficult and expensive.

Discussion: This project falls under IPP ID 4-MB (Ditch Company Improvement and Efficiency Projects) of the Southwest Basin Implementation Plan (SWBIP). The project also meets a Measurable Goal and Outcome of the SWBIP: Goal B - Meeting Agricultural Needs.

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

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Southwestern Water Conservation District	\$27,298	\$0	\$27,298
WSRA Southwest Basin Account	\$27,298	n/a	\$27,298
Total Project Costs	\$54,596	\$0	\$54,596

CWCB Project Manager: Finance Section

All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

Engineering: All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of professional engineer licensed by the State of Colorado to practice Engineering.

SOUTHWEST BASINS ROUNDTABLE

Michael Preston, Chair

c/o Dolores Water Conservancy District

P.O. Box 1150

Cortez, Colorado 81321

970-565-7562

July 25, 2016

Mr. Craig Godbout

Water Supply Management Section

Colorado Water Conservation Board

1580 Logan Street, Suite 600

Denver, Colorado 80203

SUBJECT: Sullivan Ditch Repair, Sullivan Ditch Company, \$27,298 from Basin Account

Dear Mr. Godbout:

The Southwest Basin Roundtable approved funding of \$27,298 from the Basin Account for the Sullivan Ditch Repair requested by the Sullivan Ditch Company. The application was considered in detail and approved at the July 13, 2016 meeting of the Southwest Basin Roundtable. There was a quorum of Roundtable members present.

The proposed project falls under IPP 4-MB of the Southwest Basin Implementation Plan. The project also meets a Measurable Goal and Outcome for the Southwest BIP to Maintain Agricultural Water Needs. Because Sullivan Ditch sits above the Pine River a failure would load massive amounts of sediment into the Pine River so this project also meets environmental and river health objectives of the Southwest BIP.

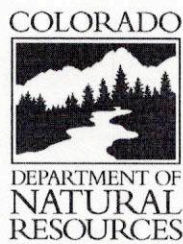
The completed Grant Application will be forwarded directly to you by the applicant. Please contact the applicant directly or me at 970-565-7562, mpreston@frontier.net, if you have questions or wish to discuss this application in more detail.

Sincerely,



Michael Preston

Southwest Basin Roundtable Chair



COLORADO WATER CONSERVATION BOARD

WATER SUPPLY RESERVE ACCOUNT
APPLICATION FORM



Today's Date: July 5, 2015

Sullivan Ditch Repair

Name of Water Activity/Project

The Sullivan Ditch Company, A Colorado Non-Profit Corporation

Name of Applicant

Southwest Basin
Roundtable

Amount from Statewide Account:

Amount from Basin Account(s):

\$27,298.00

Total WSRA Funds Requested:

\$27,298.00

Approving Basin Roundtable(s)
(If multiple basins specify amounts in parentheses.)

FEIN:84-1465785

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Required Exhibits

- A. Statement of Work, Budget, and Schedule
- B. Project Map
- C. As Needed (i.e. letters of support, photos, maps, etc.)

Appendices – Reference Material

- 1. Program Information
- 2. Insurance Requirements
- 3. WSRA Standard Contract Information (Required for Projects Over \$100,000)
- 4. W-9 Form (Required for All Projects Prior to Contracting)

Water Supply Reserve Account – Application Form

Revised October 2013

Instructions

To receive funding from the Water Supply Reserve Account (WSRA), a proposed water activity must be approved by the local Basin Roundtable **AND** the Colorado Water Conservation Board (CWCBC). The process for Basin Roundtable consideration and approval is outlined in materials in Appendix 1.

Once approved by the local Basin Roundtable, the applicant should submit this application **with a detailed statement of work including budget and schedule as Exhibit A** to CWCBC staff by the application deadline.

WSRA applications are due with the roundtable letter of support 60 calendar days prior to the bi-monthly Board meeting at which it will be considered. Board meetings are held in January, March, May, July, September, and November. Meeting details, including scheduled dates, agendas, etc. are posted on the CWCBC website at: <http://cwcb.state.co.us> Applications to the WSRA Basin Account are considered at every board meeting, while applications to the WSRA Statewide Account are only considered at the March and September board meetings.

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: <http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf>. In addition, the applicant should also refer to the Supplemental Scoring Matrix applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests .

The application, statement of work, budget, and schedule **must be submitted in electronic format** (Microsoft Word or text-enabled PDF are preferred) and can be emailed or mailed on a disk to:

Craig Godbout - WSRA Application
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203
Craig.godbout@state.co.us

If you have questions or need additional assistance, please contact Craig Godbout at: 303-866-3441 x3210 or craig.godbout@state.co.us.

Part I. - Description of the Applicant (Project Sponsor or Owner);

1.	Applicant Name(s):	The Sullivan Ditch Company		
	Mailing address:	1200 C.R. 505 Bayfield, CO 81122		
	FEIN #:	84-1465785		
	Primary Contact:	Russell Burwell	Position/Title:	Vice President
	Email:	russellburwell@gmail.com		
	Phone Numbers:	Cell: 970-903-8668	Office:	
	Alternate Contact:	Caroline Munger	Position/Title:	Secretary/Treasurer
	Email:	carolinekirkseymunger@gmail.com		
	Phone Numbers:	Cell: 970-764-5627	Office:	

2. Eligible entities for WSRA funds include the following. What type of entity is the Applicant?

- ☐ Public (Government) – municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities and the local entity should be the grant recipient. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
- ☐ Public (Districts) – authorities, Title 32/special districts, (conservancy, conservation, and irrigation districts), and water activity enterprises.
- ☒ Private Incorporated – mutual ditch companies, homeowners associations, corporations.
- ☐ Private individuals, partnerships, and sole proprietors are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
- ☐ Non-governmental organizations – broadly defined as any organization that is not part of the government.

3. Provide a brief description of your organization

The Sullivan Ditch Company was organized on January 20, 1912. The ditch begins on the west bank of the Pine River and ends at a pond near County Road 502. The carrying capacity of the ditch is 7.04 cubic feet of water per second. There are 21 members of the ditch. The ditch services 606.85 acres of farmland.

4. If the Contracting Entity is different then the Applicant (Project Sponsor or Owner) please describe the Contracting Entity here.

5. Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRA grant. In order to expedite the contracting process the CWCB has established a standard contract with provisions the applicant must adhere to. A link to this standard contract is included in Appendix 3. Please review this contract and check the appropriate box.

☒

The Applicant will be able to contract with the CWCB using the Standard Contract

☐

The Applicant has reviewed the standard contract and has some questions/issues/concerns. Please be aware that any deviation from the standard contract could result in a significant delay between grant approval and the funds being available.

6. 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.

TABOR does not apply to the Sullivan Ditch Company as it is not a governmental entity and does not have taxing ability.

Part II. - Description of the Water Activity/Project

1. What is the primary purpose of this grant application? (Please check only one)

<input type="checkbox"/>	Nonconsumptive (Environmental or Recreational)
<input checked="" type="checkbox"/>	Agricultural
<input type="checkbox"/>	Municipal/Industrial
<input type="checkbox"/>	Needs Assessment
<input type="checkbox"/>	Education
<input type="checkbox"/>	Other

Explain:

2. If you feel this project addresses multiple purposes please explain.

Funding of this project will primarily sustain agriculture and open space in the Upper Pine Valley region of La Plata County. Additionally, the project secures water serving conservation easements that protects open space and wildlife values. The project may also reduce evaporation and water leakage from the ditch, as well as prevent possible obstruction and ecological damage of the Pine River should the ditch fail and fall or slump into the river.

Without funding from the Roundtable there is uncertainty as to how and when this project could move forward.

3. Is this project primarily a study or implementation of a water activity/project? (Please check only one)

<input type="checkbox"/>	Study	<input checked="" type="checkbox"/>	Implementation
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4. To catalog measurable results achieved with WSRA funds can you provide any of the following numbers?

<input type="text"/>	New Storage Created (acre-feet)
<input type="text"/>	New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)
<input type="text"/>	Existing Storage Preserved or Enhanced (acre-feet)
<input type="text"/>	Length of Stream Restored or Protected (linear feet)
425	Length of Pipe/Canal Built or Improved (linear feet)
<input type="text"/>	Efficiency Savings (acre-feet/year OR dollars/year – circle one)
<input type="text"/>	Area of Restored or Preserved Habitat (acres)
<input type="text"/>	Other Explain: <input type="text"/>

4. To help us map WSRA projects please include a map (Exhibit B) and provide the general coordinates below:

Latitude:	107° 36.401' W	Longitude:	37° 17.210' N
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5. Please provide an overview/summary of the proposed water activity (no more than one page). Include a description of the overall water activity and specifically what the WSRA funding will be used for. A full **Statement of Work** with a detailed budget and schedule is required as **Exhibit A** of this application.

This project is subject to IPP#4-MB, titled “Ditch Company Improvement and Efficiency Projects.”

In the fall of 2014 after the failure of the ThompsonEpperson ditch in our area, officers of the ditch together with an engineer and a contractor who annually cleans the Sullivan Ditch and repairs the Thompson Epperson ditch inspected parts of the Sullivan Ditch. The Sullivan Ditch runs along the west edge of the Pine River for several miles. Part of the route is along a very seep cliff at times 100’ above the river. The ditch failed at one time, according to the history of the ditch, in the 1930s and was repaired using old car axels and used scraper blades. This repair is clearly visible.

The inspectors determined that several areas of the ditch along the cliff presented problems because of the soil composition and the proximity of the ditch to the edge of the cliff. If the ditch fails in one of these areas the side of the ditch would fall directly into the river. The river might be blocked and repair would be extremely difficult and expensive if not impossible. The repair would necessitate the base of the ditch to be extended into the river.

Two areas were located that need to be piped. They are indicated as Sullivan Ditch North and South Repair. The engineers report and estimate of costs is attached as Exhibit A. Total cost is estimated as \$81,895 in addition to the cost of the engineering report (\$2,500) that has been paid by the Ditch Company.

One area along the cliff has already been piped about 7 years ago by two members of the ditch so that the ditch could increase its carrying capacity as well as secure the cliff area.

Part III. – Threshold and Evaluation Criteria

1. Describe how the water activity meets these **Threshold Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)

- a) The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.¹

This Project supports the Southwest Basin Roundtable's Implementation Plan (BIP) "Goal B of Meeting Agricultural Needs." The specific goal is to "implement efficiency measures to maximize beneficial use and production". The project is to implement irrigation system improvements to improve water delivery and maximize beneficial uses. Along with being categorized as a goal of the BIP, this project meets goals within the Colorado Water Plan as well. According to Chapter 10's Critical Agricultural Actions table, the project specifically meets item #3 to "provide grants, loans, and technical support to update and improve Colorado's aging agricultural infrastructure, especially where improvements provide multiple benefits." This project is designed to pipe the Sullivan Ditch along two steep cliff sections that overhang the Pine River. Soil composition along the cliff sections, similar to the failure site of the Thompson-Epperson Ditch, could turn to the consistency of a fine powder due to many years of carrying water and repair. Without piping this area along the cliff, failure of the ditch is foreseeable. And, if the ditch should fail along these cliff areas, it would be impracticable to repair the ditch. The Sullivan Ditch serves agricultural benefits as well as open space and wildlife values.

The Sullivan Ditch Company grant for piping of its cliff area will not affect or impair existing water rights.

- b) The water activity underwent an evaluation and approval process and was approved by the Basin Roundtable (BRT) and the application includes a description of the results of the BRT's evaluation and approval of the activity. At a minimum, the description must include the level of agreement reached by the roundtable, including any minority opinion(s) if there was not general agreement for the activity. The description must also include reasons why general agreement was not reached (if it was not), including who opposed the activity and why they opposed it. Note- If this information is included in the letter from the roundtable chair simply reference that letter.

The Southwest Basin Roundtable Chair will submit a letter of approval.

¹ 37-75-102. Water rights - protections. (1) It is the policy of the General Assembly that the current system of allocating water within Colorado shall not be superseded, abrogated, or otherwise impaired by this article. Nothing in this article shall be interpreted to repeal or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental

- c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.² The Basin Roundtable Chairs shall include in their approval letters for particular WSRA grant applications a description of how the water activity will assist in meeting the water supply needs identified in the basin roundtable's consumptive and/or non-consumptive needs assessments.
- d) Matching Requirement: For requests from the **Statewide Fund**, the applicants will be required to demonstrate a **25 percent** (or greater) match of the total grant request from the other sources, including by not limited to Basin Funds. A minimum match of 5% of the total grant amount shall be from Basin funds. A minimum match of 5% of the total grant amount must come from the applicant or 3rd party sources. Sources of matching funds include but are not limited to Basin Funds, in-kind services, funding from other sources, and/or direct cash match. Past expenditures directly related to the project may be considered as matching funds if the expenditures occurred within 9 months of the date the contract or purchase order between the applicant and the State of Colorado is executed. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in **Exhibit A** of this application)

The Members of the Sullivan Ditch authorized the expenditure of prudent engineering fees for the Project Cost Estimate, attached as Exhibit A and voted to assess the membership to pay one third of the amount of the project if the grant could be obtained.

² 37-75-104 (2)(c). Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, develop a basin-wide consumptive and nonconsumptive water supply needs assessment, conduct an analysis of available unappropriated waters within the basin, and propose projects or methods, both structural and nonstructural, for meeting those needs and utilizing those unappropriated waters where appropriate. Basin Roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing its needs assessment, and shall propose projects or methods for meeting those needs. Recommendations from this assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

Water Supply Reserve Account – Application Form

Revised October 2013

2. For Applications that include a request for funds from the **Statewide Account**, describe how the water activity/project meets all applicable **Evaluation Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines and repeated below.) Projects will be assessed on how well they meet the Evaluation Criteria. **Please attach additional pages as necessary.**

Evaluation Criteria – the following criteria will be utilized to further evaluate the merits of the water activity proposed for funding from the Statewide Account. In evaluation of proposed water activities, preference will be given to projects that meet one or more criteria from each of the three “tiers” or categories. Each “tier” is grouped in level of importance. For instance, projects that meet Tier 1 criteria will outweigh projects that only meet Tier 3 criteria. The applicant should also refer to the Supplemental Scoring Matrix applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests. WSRA grant requests for projects that may qualify for loans through the CWCB loan program will receive preference in the Statewide Evaluation Criteria if the grant request is part of a CWCB loan/WSRA grant package. For these CWCB loan/WSRA grant packages, the applicant must have a CWCB loan/WSRA grant ratio of 1:1 or higher. Preference will be given to those with a higher loan/grant ratio.

Tier 1: Promoting Collaboration/Cooperation and Meeting Water Management Goals and Identified Water Needs

- a. The water activity addresses multiple needs or issues, including consumptive and/or non-consumptive needs, or the needs and issues of multiple interests or multiple basins. This can be demonstrated by obtaining letters of support from other basin roundtables (in addition to an approval letter from the sponsoring basin).
- b. The number and types of entities represented in the application and the degree to which the activity will promote cooperation and collaboration among traditional consumptive water interests and/or non-consumptive interests, and if applicable, the degree to which the water activity is effective in addressing intrabasin or interbasin needs or issues.
- c. The water activity helps implement projects and processes identified as helping meet Colorado’s future water needs, and/or addresses the gap areas between available water supply and future need as identified in SWSI or a roundtable’s basin-wide water needs assessment.

Tier 2: Facilitating Water Activity Implementation

- d. Funding from this Account will reduce the uncertainty that the water activity will be implemented. For this criterion the applicant should discuss how receiving funding from the Account will make a significant difference in the implementation of the water activity (i.e., how will receiving funding enable the water activity to move forward or the inability obtaining funding elsewhere).
- e. The amount of matching funds provided by the applicant via direct contributions, demonstrable in-kind contributions, and/or other sources demonstrates a significant & appropriate commitment to the project.

Tier 3: The Water Activity Addresses Other Issues of Statewide Value and Maximizes Benefits

- f. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.
- g. The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters.
- h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.

- i. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.
 - j. The water activity is complimentary to or assists in the implementation of other CWCB programs.
- Continued: Explanation of how the water activity/project meets all applicable **Evaluation Criteria**.
Please attach additional pages as necessary.

Part IV. – Required Supporting Material

1. **Water Rights, Availability, and Sustainability** – This information is needed to assess the viability of the water project or activity. Please provide a description of the water supply source to be utilized, or the water body to be affected by, the water activity. This should include a description of applicable water rights, and water rights issues, and the name/location of water bodies affected by the water activity.

Water rights are from the Pine River. Sullivan Ditch Company's original water Priority P-36. Court case No. 1248 (District Court, Water Division 7), adjudicated on June 12, 1934 for 7.08 cfs with an appropriation date of April 1, 1910.

2. Please provide a brief narrative of any related studies or permitting issues.

See, attached Engineering Report.

3. Statement of Work, Detailed Budget, and Project Schedule

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. **Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement.** All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.

Please provide a detailed statement of work using the template in Exhibit A. Additional sections or modifications may be included as necessary. Please define all acronyms and include page numbers.

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion 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 Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 10 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

Water Supply Reserve Account – Application Form

Revised October 2013

The above statements are true to the best of my knowledge:

Signature of Applicant:

Russell Burwell/cwm

Print Applicant's Name:

Russell Burwell, Vice President Sullivan Ditch Company

Project Title: Sullivan Ditch Repair

Date: July 5, 2016

Return an electronic version (hardcopy may also be submitted) of this application to:

Craig Godbout – WSRA Application
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203
303-866-3441, ext. 3210 (office)
303-547-8061 (cell)
craig.godbout@state.co.us

Exhibit A
Statement of Work
Date: July 5, 2016

WATER ACTIVITY NAME - Sullivan Ditch Repair – Cliff Piping

GRANT RECIPIENT – Sullivan Ditch Company

FUNDING SOURCE - 1/3 funding provided by the Ditch Members 2/3 funding from grant funds

INTRODUCTION AND BACKGROUND

Provide a brief description of the project. (Please limit to **no more than 200 words**; this will be used to inform reviewers and the public about your proposal)

This project is subject to IPP#4-MB entitled “Ditch Company Improvement and Efficiency Projects” and supports the Southwest Basin Roundtables Implementation Plan (BIP) “Goal B of Meeting Agricultural Needs.” The funds will be used to pipe two sections of the Sullivan Ditch that traverse steep cliff areas that hang over the Pine River. With recent failure of the Thompson-Epperson Ditch, the ditch adjacent to the Sullivan Ditch, Sullivan Ditch representatives seek to pipe sections of the Ditch that could fail, and if it did -- would be economically impracticable to repair given the extreme slope of the cliff areas requiring reconstruction. The piping of the cliff areas are preemptive repairs prior to foreseeable failure of these sections of the Ditch, below which it drops drastically to the Pine River. This failure is foreseeable given years of compaction. The underling soil, like that of the Thompson-Epperson failure site, could turn to the consistency of baking flower and no longer support the water and the Ditch.

OBJECTIVES

List the objectives of the project

This Project supports the Southwest Basin Roundtable's Implementation Plan (BIP) "Goal B of Meeting Agricultural Needs." The specific goal is to "implement efficiency measures to maximize beneficial use and production". The project is to implement irrigation system improvements to improve water delivery and maximize beneficial uses. Along with being categorized as a goal of the BIP, this project meets goals within the Colorado Water Plan as well. According to Chapter 10's Critical Agricultural Actions table, the project specifically meets item #3 to "provide grants, loans, and technical support to update and improve Colorado's aging agricultural infrastructure, especially where improvements provide multiple benefits." This project is designed to pipe the Sullivan Ditch along two steep cliff sections that overhang the Pine River. Soil composition along the cliff sections, similar to the failure site of the Thompson-Epperson Ditch, could turn to the consistency of a fine powder due to many years of carrying water and repair. Without piping this area along the cliff, failure of the ditch is foreseeable. And, if the ditch should fail along these cliff areas, it would be impracticable to repair the ditch. The Sullivan Ditch serves agricultural benefits as well as open space and wildlife values.

To achieve these goals, the Sullivan Ditch will:
Pipe 300 feet of 3' diameter pipe on the North Section of the ditch.
Pipe 125 feet of 3' diameter pipe on the South Section of the ditch.

TASKS

Provide a detailed description of each task using the following format

TASK 1 – North Cliff Repair

Description of Task

Install and connect Northern section of the Sullivan Ditch that hangs over the cliff with 3' in diameter pipe.

Method/Procedure

Purchase and mobilize the construction site. Install a berm and pipe base lining material as well as a pipe entrance and exit lining. Lastly, the site will be reseeded.

Deliverable

300' of 3' in diameter piping installed with improved berm and base lining as well as a reseeded site.

TASK 2 – South Cliff Repair

Description of Task

Install and connect Southern section of the Sullivan Ditch that hangs over the cliff with 3' in diameter pipe.

Method/Procedure

Purchase and mobilize the construction site. Install a berm and pipe base lining material as well as a pipe entrance and exit lining. Lastly, the site will be reseeded.

Deliverable

125' of 3' in diameter piping installed with improved berm and based lining as well as a reseeded site.

REPEAT FOR TASK 3, TASK 4, TAKE 5, ETC.

n/a

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion 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 Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

BUDGET

Provide a detailed budget by task including number of hours and rates for labor and unit costs for other direct costs (i.e. mileage, \$/unit of material for construction, etc.). A detailed and perfectly balanced budget that shows all costs is required for the State's contracting and purchase order processes. Sample budget tables are provided below. Please note that these budget tables are examples and will need to be adapted to fit each individual application. Tasks should correspond to the tasks described above.

Total Costs				
	Labor	Other Direct Costs	Matching Funds (If Applicable)	Total Project Costs
Task 1 – Piping Northern Cliff	15,000	40,110		55,110
Task 2 – Piping Southern Cliff	6,250	20,535		26,785
In-Kind Contributions				<\$4,596>*
Total Costs:	27,250	51,345		

*\$27,298 has been raised and collected by Sullivan Ditch Members. The Sullivan Ditch is also seeking additional grant funding of \$27,298 from the Southwester Water Conservation District.

Labor and Activity on the Ground							
Project Personnel:	Mobilization	Project Engineer	Leonard & Sons Excavation Labor	Reseeding	10% Contingency	Clerical	Total Costs
Hourly Rate:							
Task 1 -	3,000	2,000	15,000	1,500	5,010		26,510
Task 2 -	3,000	2,000	6,250	625	2,435		14,310
Total Hours:							
Cost:	6,000	4,000	21,250	2,125	7,145		40,820

Other Direct Costs						
Item:	3' diameter ADS pipe	Pipe Delivery	Berm & Pipe Lining Material	Pipe Entrance & Exit Lining		Total
Units:	No.					
Unit Cost:						
Task 1 – 300' @\$55 per ft	16,500	2,500	9,000	600		28,600
Task 2 - 125' @\$55 per ft	6,875	1,250	3,750	600		12,475
Total Units:	425' pipe					
Total Cost:	23,375	3,750	12,750	1,200		41,075

In-Kind Contributions (If Applicable)				
Project Personnel:				Total
Hourly Rate:				
Task 1 -				\$36,740
Task 2 -				\$17,856
Total Hours:				n/a
Total Cost:				54,596

*\$27,298.00 is being paid by Sullivan Ditch Members and \$27,298.00 of the \$54,596 of in-kind contributions is being sought from grant funding from the Southwestern Water Conservation District.

**In addition, the Sullivan Ditch has paid \$2,500 for engineering reports. These preliminary costs are not included in the funding request nor shall the Ditch members seek reimbursement.

SCHEDULE A

Schedule for Work

October, 2016 is the projected start date for the Sullivan Ditch cliff repair project.

<u>Task</u>	<u>Date</u>	<u>Finish Date</u>
1 Clearing bush, site preparation, and water control	October 1, 2016	October 7, 2016
2 Lay pipe, fill in-fill material, clear, clean and restore site	October 7, 2016	October 14, 2016



SAN JUAN ENGINEERING, INC.
P.O. Box 1100 - BAYFIELD, CO 81122

Sullivan Ditch Company
Spring 2014
Ditch Repair Project
Project Cost Estimate

Sullivan Ditch North Repair

Mobilization	\$3,000
Pipe Material	\$16,500
Pipe Delivery	\$2,500
Pipe Install Labor	\$15,000
Berm and Pipe Base Lining Material	\$9,000
Pipe Entrance and Exit Lining	\$600
Reseeding	\$1,500
Engineering	\$2,000
Subtotal	\$50,100
10% Contingency	\$5,010
Subtotal	\$55,110

Sullivan Ditch South Repair

Mobilization	\$3,000
Pipe Material	\$6,875
Pipe Delivery	\$1,250
Pipe Install Labor	\$6,250
Berm and Pipe Base Lining Material	\$3,750
Pipe Entrance and Exit Lining	\$600
Reseeding	\$625
Engineering	\$2,000
Subtotal	\$24,350
10% Contingency	\$2,435
Subtotal	\$26,785

TOTAL ESTIMATED PROJECT BUDGET **\$81,895**

Leonard & Sons Excavation, LLC
175 C.R. 500
Bayfield, CO. 81122
(970) 884-2239



BID

DATE	Bid
9/30/2014	174

BILL TO

JOB SITE

Sullivan Ditch
c/o Roger Kugle
994 CR 505
Bayfield, CO. 81122

DESCRIPTION	
Sullivan Ditch North Repair	0.00
Estimated 300' of 3' diameter ADS @ approx \$55 per ft	16,500.00
\$50 per ft to install 3' diameter ADS	15,000.00
Sullivan Ditch South Repair	0.00
Estimated 125' of 3' diameter ADS @ approx \$55 per ft	6,875.00
\$50 per ft to install 3' diameter ADS	6,250.00

Total	44,625.00
--------------	------------------

Leonard & Sons Excavation, LLC
175 C.R. 500
Bayfield, CO. 81122
(970) 884-2239



BID

DATE	Bid
9/30/2014	174

BILL TO	JOB SITE
Sullivan Ditch c/o Roger Kugle 994 CR 505 Bayfield, CO. 81122	

DESCRIPTION	
Sullivan Ditch North Repair	0.00
Estimated 300' of 3' diameter ADS @ approx \$55 per ft	16,500.00
\$50 per ft to install 3' diameter ADS	15,000.00
 Sullivan Ditch South Repair	 0.00
Estimated 125' of 3' diameter ADS @ approx \$55 per ft	6,875.00
\$50 per ft to install 3' diameter ADS	6,250.00

Total	44,625.00
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DATE:	9/2/14	REV.	DATE	BY	DESCRIPTION
DESIGNED BY:	EN				
DRAWN BY:	EN				
CHECKED BY:	RJ				
PROJECT NO:	14-022				
CAD FILE:	SITE PLAN.DWG				

WARNING
0 0.5 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.



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8828 COUNTY ROAD 521 P.O. BOX 1100
BAYFIELD, COLORADO 81122
Phone: (970) 884-9749 Fax: (970) 884-9820



SULLIVAN DITCH VICINITY MAP

SHEET
S1
1 OF 4



DATE:	9/2/14	REV.	DATE	BY	DESCRIPTION
DESIGNED BY:	EN				
DRAWN BY:	EN				
CHECKED BY:	RJ				
PROJECT NO.	14-010				
CAD FILE:	SITE PLAN.DWG				

WARNING
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NOT MEASURE 1"
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SULLIVAN DITCH NORTH REPAIR

**SHEET
S2**

2 OF 4



DATE:	9/2/14	REV.	DATE	BY	DESCRIPTION
DESIGNED BY:	EN				
DRAWN BY:	EN				
CHECKED BY:	RJ				
PROJECT NO.	14-010				
CAD FILE:	SITE PLAN.DWG				



IF THIS BAR DOES
NOT MEASURE 1"
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NOT TO SCALE.



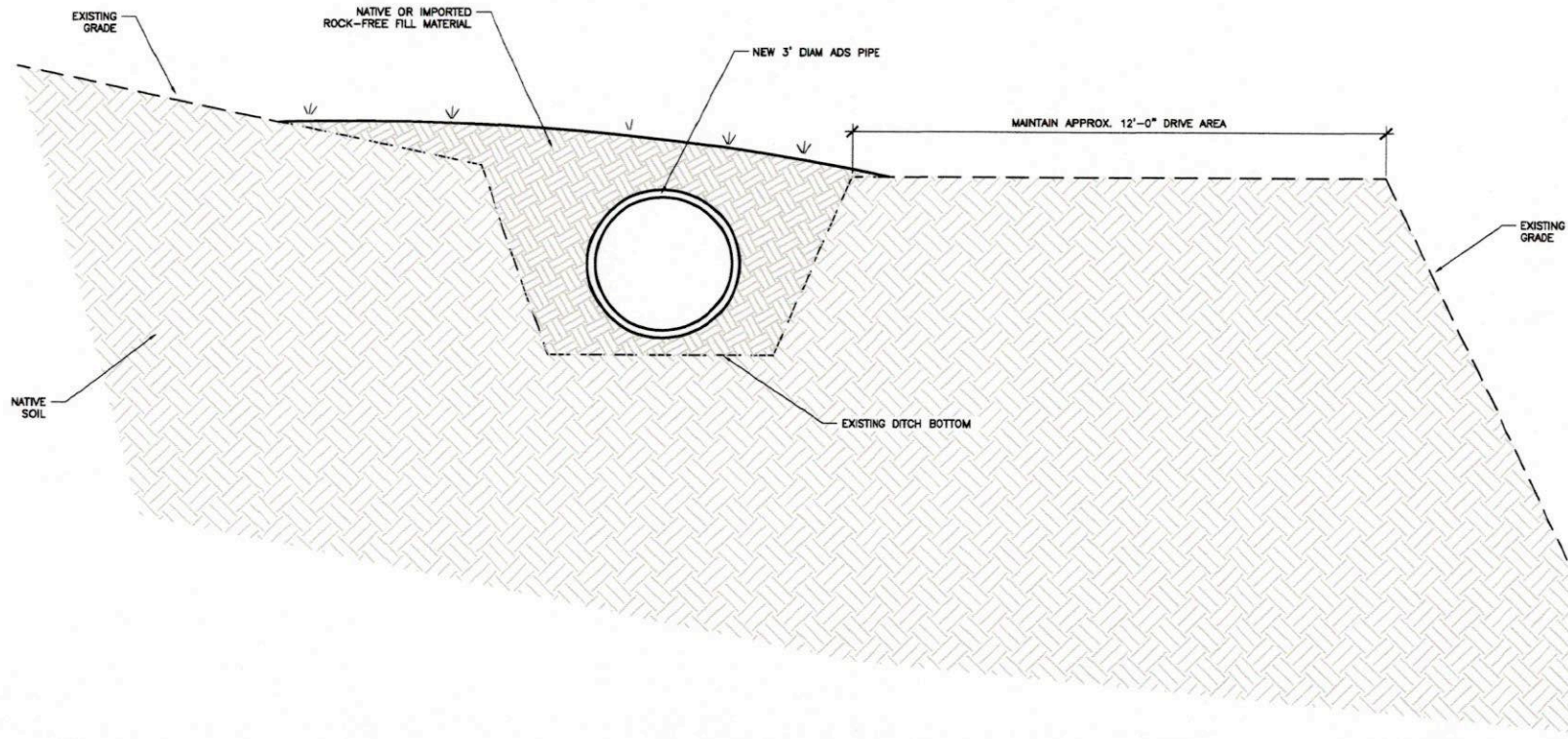
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BAYFIELD, COLORADO 81122
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SULLIVAN DITCH SOUTH REPAIR

SHEET
S3

3 OF 4



DATE:	8/23/14	REV.	DATE	BY	DESCRIPTION
DESIGNED BY:	EN				
DRAWN BY:	EN				
CHECKED BY:	RJ				
PROJECT NO.	14-022				
CAD FILE:	SECTION.DWG				

WARNING
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SULLIVAN DITCH TYPICAL SECTION

**SHEET
S4**

4 OF 4