Water Supply Reserve Fund Water Activity Summary Sheet March 21-22, 2018 Agenda Item 25(z)

Applicant & Grantee: Town of Rico

Water Activity Name: Town of Rico Water System Engineer's Analysis

Water Activity Purpose: Municipal & Industrial Study

County: Dolores

Drainage Basin: Dolores

Water Source: Silver Creek

Amount Requested: \$30,000 Southwest Basin Account

\$30,000 Statewide Account \$60,000 Total Grant Request

Matching Funds: Basin Account Match = \$30,000

• 100% of statewide request (meets 10% min)

Applicant Match (cash & in-kind) = \$60,000

• 200% of the statewide request (meets 10% min)

Total Match (Basin & Applicant) = \$90,000

• 300% of the statewide request (meets 50% min)

• 75% of the total project cost of \$120,000

Staff Recommendation:

Staff recommends approval of up to \$30,000 from the Southwest Basin Account and \$30,000 from the Statewide Account to fund the project titled: Town of Rico Water System Engineer's Analysis.

Water Activity Summary: WSRF grant funds, if approved, will help the Town of Rico engage an engineering firm to provide a detailed analysis of Rico's water systems with the goal of increasing water efficiency, quality, and productivity for Rico residents. The proposed water system analysis would help Rico continue to provide safe drinking water and would be the first step in an attempt to meet an expected "Municipal Gap" should the Town of Rico enjoy moderate growth.

The Town of Rico has two diversion points. One is Rico Well #1, dated June 2010, and the other is the Silver Creek Flume, dated June 1968. At this time, the Silver Creek system is offline. The proposed project consists of an analysis and feasibility study to determine what it would take to re-activate the Silver Creek System. It would also include an evaluation and upgrade plan that would help resolve an average monthly water loss of 47% from the well system. The Town is also exploring the possibility of combining the two systems to create a more reliable water source. WSRF funding would be used to hire an engineering firm to help Rico accomplish the following objectives: (1) enhance the Town of Rico's municipal water supply by reactivating the Silver Creek system; (2) increase the efficiency of Rico's water pipes and reduce water loss from leaks; and (3) create a plan to replace existing exterior meter boxes with interior meters boxes over the course of several years.

Discussion: As described in the Southwest Roundtable (SWBRT) chair's recommendation letter, this project was supported and recommended for approval on January 10, 2018. The project meets identified gaps in municipal water supplies - a goal recognized in both Colorado's Water Plan and The SWBRT Basin Implementation Plan. Rico is becoming a source of worker housing for those unable to afford housing in Telluride, so growth pressure is inevitable. The SWBRT strongly supports the request for statewide funds because this project aims to reconcile the protection of the Instream Flow, while allowing Rico to accommodate future growth.

The Town of Rico commissioned an engineering report toward the end of 1995. This report was predicated on the expectation the Rico would grow from a population of approximately 300 people to a population of 2000 within twenty years. It was also generated during the time that the Silver Creek system was providing water to the Town of Rico. The report analyzed eleven alternatives for supplying Rico with enough water for 2000 people. The Town of Rico decided to implement option eleven. This alternative suggested obtaining junior water rights on the Dolores River and constructing a well that would not require a treatment plant. The well was drilled and the new pipeline was constructed. Unfortunately however, water rights acquired fell far short of expectations. With Silver Creek offline, the 0.178 cfs obtained for the well allows for very little population growth.

Due to changes in the Colorado Department of Health and Environment (CDPHE) regulations regarding filtration of surface water, the Silver Creek system is no longer in compliance and is being used only as an emergency backup should Well #1 fail. The decree for the Silver Creek diversion point allows Rico 0.28 cfs with an additional 2.72 cfs being conditional. If the Town of Rico were to reactivate the Silver Creek water system, it would develop 202.85 acre feet per year (providing an additional 0.28 cfs) and would save 14.24 - 16.64 acre feet per year (reducing Rico's average monthly water loss from 47% to 20%).

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

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Summary / Matching Funds:

Funding Source	<u>Cash</u>	In-Kind	Total
Town of Rico	\$30,000	\$0	\$30,000
Southwestern Water Conservation District	\$30,000	\$0	\$30,000
Subtotal	\$60,000	\$0	\$60,000
WSRF Southwest Basin Account	\$30,000	n/a	\$30,000
WSRF Statewide Account	\$30,000	n/a	\$30,000
Totals	\$120,000	\$0	\$120,000

CWCB Project Manager: Megan Holcomb

SOUTHWEST BASINS ROUNDTABLE Michael Preston, Chair c/o Dolores Water Conservancy District P.O. Box 1150 Cortez, Colorado 81321 970-565-7562

January 17, 2018

Megan Holcomb Water Supply Management Section Colorado Water Conservation Board 1580 Logan Street, Suite 600 Denver, Colorado 80203

SUBJECT: Town of Rico Water System Analysis - \$30,000 from Basin Fund and \$30,000 from Statewide Fund

Dear Ms. Holcomb:

The Southwest Basin Roundtable approved funding of \$30,000 from the Basin Fund and \$30,000 from the Statewide Account for the Town of Rico Water System Analysis. The application was considered in detail at the January 11, 2018 meeting of the Southwest Basin Roundtable. There was a quorum of Roundtable members present.

This Project addresses Measurable Goals and Outcomes of the Southwest Basin Implementation Plan including: C1: High rate of success for IPPs to meeting the municipal gap and C2: Provide safe drinking water to Southwest Colorado's citizens and visitors.

Completed IPP #42 allowed Rico to drill an alluvial well and two-mile pipeline to provide domestic water to the Town of Rico. The water rights to supply these facilities are limited to .178cfs in order to comply with the Instream Flow on the Dolores River through Rico, which is senior to the well and pipeline. The Town retains a senior direct flow right on Silver Creek, where they operated their water treatment plant prior to the installation of the well and pipeline. The pipeline is adequate to serve existing residents but allows for almost no future growth.

Rico is becoming a source of worker housing for those unable to afford housing in Telluride, so growth pressure is inevitable. The feasibility study that lead to the well and pipeline project also recommended working to bring the Silver Creek water right and treatment system back on line to support future growth. Now that the well and pipeline are installed and meeting current needs, the Town is ready to take up the analysis of what it will take to allow Silver Creek to be reestablished as a source of supply.

The SWBRT approves the Basin Fund request and strongly supports the State Fund request because this project aims a reconciling the protection of the Instream Flow, while allowing the Town of Rico to accommodate future growth, and provide an affordable option for worker housing.

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 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 | Colorado | Metro | Rio Grande | South Platte | Yampa/White Southwest

Ben Wade Craig Godbout Megan Holcomb

303-866-3441 x3238 303-866-3441 x3210 303-866-3441 x3222

WSRF Submittal Checklist (Required)			
Х	I acknowledge this request for funding was recommended for CWCB approval by the sponsoring Basin Roundtable(s).		
Х	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)		
Exhib	it A		
Х	Statement of Work ⁽²⁾ (Word – see Exhibit A Template)		
Х	Budget & Schedule ⁽²⁾ (Excel Spreadsheet – see Exhibit A Template)		
Х	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾		
Exhib	Exhibit C		
Х	Map ⁽²⁾		
	Photos/Drawings/Reports		
Х	Letters of Support		
	Certificate of Insurance ⁽³⁾ (General, Auto, & Workers' Comp.)		
Contr	racting 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.



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 2018	
Desired Notice to Proceed Date:	April 2018	

Water Activity Summary		
Name of Applicant	Town of Rico Colorado	
Name of Water Activity	Town of Rico Water System Engineer's Analysis	
Approving Roundtable	e(s)	Basin Account Request(s) ⁽¹⁾
Southwest Basin Roundtable	We won't know until the January meeting	
Basin Account Request Subtotal		\$30,000
Statewide Account Request ⁽¹⁾		\$60,000
Total WSRF Funds Requested (Basin & Statewide)		\$90,000
Total Project Costs		\$120,000

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



Grantee and Applicant Information			
Name of Grantee(s)	Town of Rico		
Mailing Address	P.O. Box 9, Rico Colorado, 81332		
FEIN	84-600-5-666		
Grantee's Organization Contact ⁽¹⁾	Kari Distefano		
Position/Title	Town Manager		
Email	townmanager@ricocolorado.gov		
Phone	970 967 2863		
Grant Management Contact ⁽²⁾	Kari Distefano		
Position/Title	Town Manager		
Email	townmanager@ricocolorado.gov		
Phone	970 967 2863		
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).

The Town of Rico was incorporated in 1880 shortly after the Pioneer Mining District was founded. The mine remained in operation until the mid 1970s. Currently Rico's economy is based on attracting tourists that come for the recreational activities like mountain biking, hunting and fishing. The Town also provides lower cost housing for residents working in Telluride, the neighboring resort, as well as for those who enjoy the beauty and solitude Rico offers.

In addition to the normal functions of a town such as public works and the administrative duties associated with operating a municipality, Rico has a recreation program that operates a small park and provides winter activities including Nordic trails and a skating rink. The Rico Town Hall also supplies a venue for the local library.



Last	Update: August 3, 2017
	Type of Eligible Entity (check one)
	Public (Government): municipalities, enterprises, counties, and State of Colorado agencies.
X	Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
	Public (Districts): authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises
	Private Incorporated: mutual ditch companies, homeowners associations, corporations
	Private Individuals, Partnerships, and Sole Proprietors: 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
	Implementation
	Category of Water Activity (check all that apply)
	Nonconsumptive (Environmental)
	Nonconsumptive (Recreational)
	Agricultural
X	Municipal/Industrial
X	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/Counties Dolores County			
Latitude 37.6928°			
Longitude	108.0303°		

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 Town of Rico would like to engage an engineering firm to provide a detailed analysis of Rico's water systems with the goal of increasing efficiency, quality and productivity. The primary beneficiaries of this project will be the residents and businesses of Rico as well as tourists will benefit from a more reliable, efficient water system.

The Town of Rico has two diversion points. One is Rico Well #1 dated June 2010 and the other is the Silver Creek Flume dated June 1968. At this time, the Silver Creek system is off-line because the filtration system was not reducing turbidity to the degree required by CO Dept. of H&E. Rico Well #1 supplies water to 31 commercial and 242 residential taps. The proposed scope of work would include both systems. It would consist of an analysis and feasibility study to determine what it would take to re-activate the Silver Creek System and an evaluation and upgrade plan that would help resolve an average monthly water loss of 47% from the Rico Well #1 system. Finally the Town would like to explore the possibility of combining the two systems to create a more reliable water source to allow for the moderate growth the Town needs to become more financially sustainable.

Measurable Results



Measurable Results			
To catalog measurable results achieved with WSRF funds please provide any of the following values.			
	New Storage Created (acre-feet)		
202.85 acre feet per year*	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)		
14.24 – 16.64 acre feet per year**	Efficiency Savings (indicate acre-feet/year OR dollars/year)		
	Area of Restored or Preserved Habitat (acres)		
	Length of Pipe/Canal Built or Improved		
	Other	Explain:	

^{*} This supply would become available if the Town of Rico were to reactivate the Silver Creek water system, which would provide the Town with an additional .28 cfs.

Water Activity Justification

Provide a description of how this water activity supports the goals of <u>Colorado's Water Plan</u>, the most recent <u>Statewide Water Supply Initiative</u>, and the respective <u>Roundtable Basin Implementation Plan</u> and <u>Education Action Plan</u> (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).

^{**}This would be the efficiency savings if this analysis would help to reduce our average monthly water loss from 47% to 20%.



Water Activity Justification

Meeting identified gaps in municipal water supplies is a goal recognized in both *Colorado's Water Plan* and *The Southwest Basin Round Table Basin Implementation Plan*. Specifically included in *Colorado's Water Plan* in Section 6.2 "Meeting Colorado's Water Gaps" is a reference to four goals identified by the Southwest Basin Roundtable. They are to:

- "Pursue a high success rate for identified specific and unique projects and processes to meet the municipal gap and to address all water needs and values"
- "Provide safe drinking water to Southwest Colorado's citizens and visitors"
- "Promote wise and efficient water use through implementation of municipal conservation strategies to reduce overall future water needs"
- "Support and implement water reuse strategies."

The proposed water system analysis would help Rico continue to provide safe drinking water, and would be the first step in an attempt to meet an expected "Municipal Gap" should the Town of Rico enjoy moderate growth.

The North Rico Well #1 is currently supplying water to the Town of Rico, but the water rights on this well are limited. Based on the settlement between Rico and the Dolores Water Conservancy District, Rico has rights to .178 cubic feet per second (cfs), which equates to 80 gallons per minute or 3.5 million gallons per month for uses including municipal, industrial, domestic, commercial, irrigation and recreational.

There are 273 water taps in Rico. Records from past years show that monthly water use generally stays between 900,000 gallons per month and 2.4 millions gallons per month. These records also indicate that each of the 273 taps is not operating at full capacity. If that were the case, water use would be closer to 3.1 million gallons monthly, an amount that would be at the upper end of the carrying capacity of the of the well.

In addition to Well#1 that is currently serving the Town, Rico has water rights on Silver Creek and a water system that was decommissioned in 2014. Due to changes in the Colorado Department of Health and Environment (CDPHE) regulations regarding filtration of surface water, the Silver Creek system is no longer in compliance and is being used only as an emergency back up should Well #1 fail. The decree for the Silver Creek diversion point allows Rico 0.28 cfs with an additional 2.72 cfs being conditional.



Water Activity Justification

Growth, economic activity, and the lack of affordable housing in the neighboring resort community of Telluride suggest that Rico is poised to experience an uptick in housing starts. Lots and homes in Rico are still relatively reasonably priced. Middle managers and tradesmen who would like to remain in the area but are unable to afford housing in Telluride are beginning to look at Rico for a possible residence. According to projections included in *The Southwest Basin Round Table Basin Implementation Plan*, Dolores County could expect population growth of up to 3977 by 2050. The Town of Rico is currently 13% of Dolores County's population, therefore, in 2050; Rico could be home to 517. If those projections were accurate, our current water supply would be inadequate. It is also worth noting that Rico's growth may track closer to that of San Miguel County due to the fact that Telluride and Rico are more economically aligned than Rico and Dove Creek. If that scenario played out, Rico could expect as many as 910 residents by 2050.

The portion of the proposal that follows speaks to the goals of "wise and efficient water use through implementation of municipal conservation strategies to reduce overall future water needs" and "Provide safe drinking water to Southwest Colorado's citizens and visitors"

This proposal requests an efficiency analysis and feasibility study of our existing water system; specifically the following:

- Analyze the current condition of the mile long supply line that delivers water from the storage tanks at Well # 1 to the Town of Rico and provide an evaluation of the exiting Silver Creek tanks and filtration system.
- Suggest a meter replacement plan that would ultimately ensure that all meters are functioning
 properly, located inside buildings, and could be read remotely and thus confirm that household
 and commercial conservation measures are working.
- Provide the Town of Rico with a proposed water line replacement schedule that targets the parts of the water line that are old enough to be experiencing corrosion.
- Evaluate Rico's water storage capacity and determine whether an additional tank will be required in the future.
- Provide a study of the chemical composition of the water of both the Well #1 and Silver Creek
 to ensure that mixing water from the two systems would not cause corrosion in the pipes
 leaving Rico with a Flint Michigan type situation.
- Estimate costs associated with the suggested improvements so that the Town of Rico can begin to develop a capital improvement plan.
- Provide the Town of Rico with a strategy to reduce the hardness of the well water.



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.

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Contributing Entity	Amount and Form of Match (note cash or in-kind)		
Southwestern Water Conservation District	\$30,000		



Matching Requirements: Basin Account Requests			
Town of Rico	\$30,000		
Total Match	\$60,000		
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):
Town of Rico	\$30,000
Southwestern Water Conservation District	\$30,000
Total Match	\$60,000
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.



Related Studies

The Town of Rico commissioned an engineering report toward the end of 1995. That report was supplied by Harris Water Engineering, Inc. and dated February of 1996. This report was predicated on the expectation the Rico would grow from a population of approximately 300 people to a population of 2000 within twenty years. It was also generated during the time that the Silver Creek system was providing water to the Town of Rico. The report analyzed eleven alternatives for supplying Rico with enough water for 2000 people. The Town of Rico decided to implement option eleven. This alternative suggested obtaining junior water rights on the Dolores River and constructing a well that would not require a treatment plant. The well was drilled and the new pipeline was constructed. Unfortunately however, water rights acquired fell far short of expectations. Silver Creek is off line and the 0.178 cfs obtained for the well allows for very little population growth.

It is worth noting that Harris Engineering's preferred alternative at the time was number 5, a plan which would have used the Silver Creek system as much as possible and using the well and newly constructed pipe along the Dolores when necessary.

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

The Town of Rico received \$20,000 from the Southwestern Water Conservation District in 2007 for the water attorneys necessary to procure water rights for the Rico Well #1.

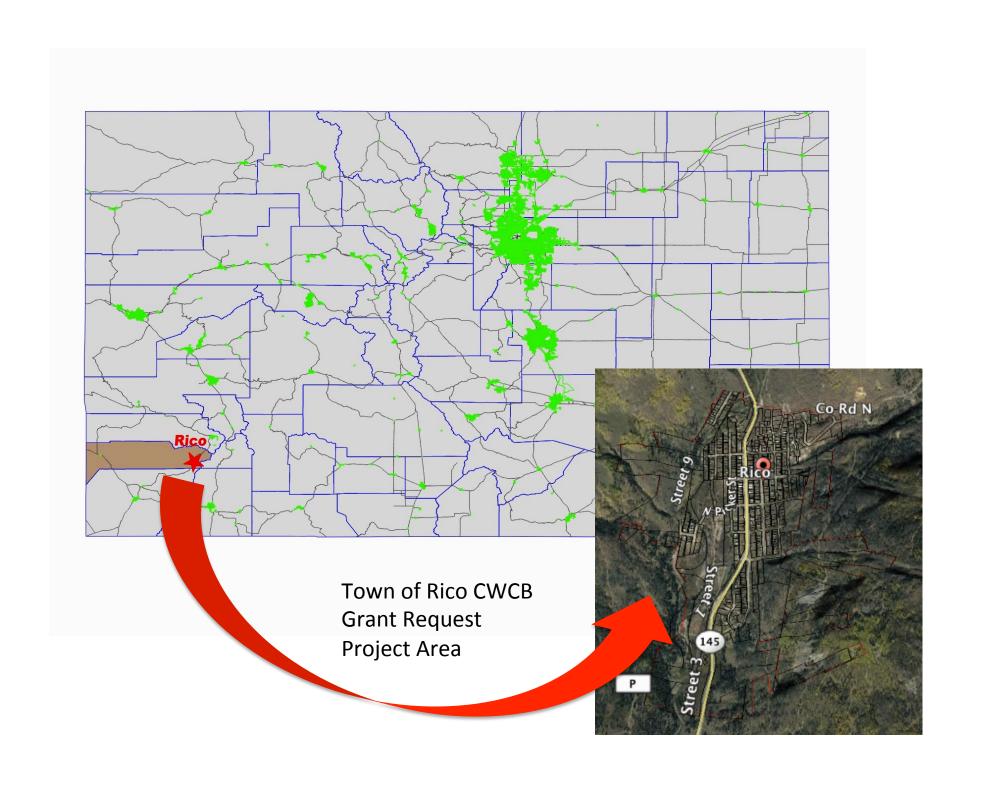
The Town of Rico received a loan from CWCB in 1978. It will be paid off in September of 2018.

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.



The Town of Rico went to the voters on November 4th, 1997 with the following question: "Shall the Town of Rico, commencing in 1998, be authorized to receive and spend the full revenues from State and Federal Grants, and all other non-tax revenues, and without limiting in any year the amount of other revenues that may be collected and spent by the Town of Rico, as a voterapproved revenue change and an exception to the spending limitations which would other wise apply?" The measure passed 28 to 19.





THE SOUTHWESTERN WATER CONSERVATION DISTRICT

Developing and Conserving the Waters of the SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES IN SOUTHWESTERN COLORADO

West Building – 841 East Second Avenue DURANGO, COLORADO 81301 (970) 247-1302

January 25, 2018

Board of Directors Colorado Water Conservation Board 1313 Sherman Street Denver, CO 80203

Subject: Town of Rico WSRF Application

Dear Board of Directors:

The Southwestern Water Conservation District offers financial assistance in the form of grants to "qualified entities" that are carrying out the statutory purpose of the District to protect, conserve, use and develop the water resources of the San Juan and Dolores River basins, as well as to safeguard all waters to which the state of Colorado is equitably entitled.

Previously funded work in southwestern Colorado has included ditch rehabilitation, water storage development and enhancement, water quality studies, collaborative water forums and workgroups, habitat restoration, and educational programs, to name a few.

The Town of Rico has submitted an application to the District for 2018 funding to support a water system analysis in the amount of \$30,000. While the District board won't consider the grant request for approval until February 14, 2018, staff has reviewed the application and found it meets all minimum requirements. The request is in line with the District's statutory mission.

While at this time staff cannot guarantee the application will be approved in all, or in part, due to limits on available funds and the need for board review and approval, we thank the CWCB board for their review of this application and their ongoing collaboration in meeting water needs in southwestern Colorado.

Sincerely,

Bruce Whitehead Executive Director (970) 247-1302