

# **COLORADO WATER CONSERVATION BOARD**

# WATER SUPPLY RESERVE ACCOUNT **APPLICATION FORM**



Today's Date: March 14, 2017

## Phase II - ENGINEERING SERVICES FOR MOUNTAIN HOME RESERVOIR DAM OUTLET WORKS UPGRADE

# Name of Water Activity/Project

## TRINCHERA IRRIGATION COMPANY

# **Name of Applicant**

RIO GRANDE BASIN ROUNDTABLE

Amount from Statewide Account:

Amount from Basin Account(s):

\$70,000.00

0

**Approving Basin Roundtable(s)** 

(If multiple basins specify amounts in parentheses.)

**Total WSRA Funds Requested:** 

\$70,000.00

## FEIN: 84-0338590

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- 2. Insurance Requirements
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- 4. W-9 Form (Required for All Projects Prior to Contracting)

# **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 (CWCB). 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 CWCB 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 CWCB website at: <a href="http://cwcb.state.co.us">http://cwcb.state.co.us</a> 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-accountgrants/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 <u>Craig.godbout@state.co.us</u>

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

1.	Applicant Name(s):	Trin	chera Irrigation	Company	
	Mailing address:	610 Main Street P.O. Box 41 Blanca, CO 81123			
	FEIN #:	84-033	38590		
	Primary Contact:	Wayne	e Schwab	Position/Title:	Superintendent
	Email:	trincherairrigation2@gmail.com			
	Phone Numbers:	Cell:	719-298-1369	Office:	719-379-3467
	Alternate Contact:	Tracy	Kester	Position/Title:	President
	Email:		none		
	Phone Numbers:	Cell:	719-206-0241	Office:	719-379-3467

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

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.

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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

Trinchera Irrigation Company (TIC), comprised of 36 stockholders, manages the use of water for irrigation in the northern half of Costilla County, Colorado. TIC operates Mountain Home Reservoir, Smith Reservoir, and the Sangre de Cristo Trinchera Diversion Canal, with a total of approximately 26 miles of canals and 45 miles of laterals. TIC is responsible for the delivery of irrigation water to approximately 100 sprinkler pivots and several thousand acres of flood irrigation. Capacity of Mountain Home Reservoir is 18,000 AF.

The number of irrigated acres served by the company has remained relatively stable over the years. In 1907, as Mountain Home Reservoir and its related canals were being constructed, The Trinchera Canal Company was organized to irrigate about 12,000 acres of land in northern Costilla County. Four years later that company was out of funds and the Trinchera Irrigation District was then formed, issuing \$650,000 in bonds to be paid to the defunct Trinchera Canal Company for its water rights and land. By 1944 the original company went into the hands of receivers and the present Trinchera Irrigation Company was formed as a nonprofit mutual irrigation company. The articles of incorporation were modified in 1946, issuing a total of 12,500 shares of stock, with each share entitling the holder to irrigate one acre of land. Stock ownership was limited to owners of land or users of water within the Trinchera Irrigation District during the year 1943.

Almost all shareholders have both surface water and ground water rights, with most wells dating from the 50s and 60s. TIC's operating funds are derived from assessments levied on shares of stock. These assessments are determined by dividing all operating costs plus debt service, maintaining a budget that reflects the local economy. For the past six years TIC has kept assessments steady at \$23/share, and for many years before they were at \$22/share. The flexibility of TIC's irrigation system has allowed it to evolve from former hand/horse powered operations and the truck gardening of spinach, carrots and cabbage prior to the invention of refrigerated transportation, to today's center pivot operations.

The Division of Wildlife (now Colorado Parks and Wildlife or CPW) has leased rights as a State Wildlife Area (SWA) for recreational fishing, boating, and wildlife viewing. CPW maintains a conservation pool of 653 acre feet at Mountain Home Reservoir. Both Smith and Mountain Home reservoirs are stocked with rainbow trout by CPW, providing recreational fishing and boating activities for residents and tourists. TIC is committed to sustain CPW's conservation pool.

Although TIC's charter is to provide irrigation water, with Mountain Home Reservoir decreed for irrigation purposes, the company's stockholders all live nearby, frequently fishing, boating, hunting, and enjoying the recreational and natural assets of the Trinchera watershed and Mountain Home Lake. The Company therefore proudly supports the reservoir's unique natural beauty, and, with additional support from CPW, Trout Unlimited, the Trinchera Blanca Foundation and other local entities, the Company is committed to protect the public enjoyment of this very special place.

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

NA

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.

There are no TABOR limitations for Trinchera Irrigation Company.

#### Water Supply Reserve Account – Application Form Revised October 2013

## Part II. - Description of the Water Activity/Project

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

	Nonconsumptive (Environmental or Recreational)
X	Agricultural
	Municipal/Industrial
	Needs Assessment
	Education
	Other Explain:

- 2. If you feel this project addresses multiple purposes please explain.
  - Rehabilitate a reservoir in the Rio Grande Basin A Rio Grande Basin Water Plan priority
  - Restore full operating capability at Mountain Home Reservoir
  - Meet State requirements for draw-down capacity
  - Improve water management efficiency and reduce risk of flood
  - Help meet Basin water storage needs and reduce reliance on ground water pumping
  - Significantly reduce storage loss, delivering irrigation water efficiently
  - Protect fishery and the CPW conservation pool by avoiding lowering or emptying the reservoir
  - Improve health of wetland areas and riparian corridors by maintaining historic flow patterns
  - Preserve recreational benefits in Costilla County, where only 2% of the land is public
  - Collaborate to enhance environmental, recreational and wildlife habitat assets
- 3. Is this project primarily a study or implementation of a water activity/project? (Please check only one)



Study

Implementation

4. To catalog measurable results achieved with WSRA funds can you provide any of the following numbers?

	New Storage Created (acre-feet)
	New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)
	Existing Storage Preserved or Enhanced (acre-feet)
	Length of Stream Restored or Protected (linear feet)
	Length of Pipe/Canal Built or Improved (linear feet)
Avg 1800 AF/yr	Efficiency Savings (acre-feet/year ) R dollars/year – circle one)
	Area of Restored or Preserved Habitat (acres)
653 AF	Other Explain: Preserve CPW conservation pool of 653 acre feet

### Water Supply Reserve Account – Application Form Revised October 2013

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

Latitude: 37.39512 Longitude: -105.38133

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.

(Next page)

**Problems:** The outlet works at Mountain Home Reservoir have reached the end of their designed functionality. Further deterioration of the gates will severely compromise the ability of TIC irrigators in northern Costilla County to obtain their decreed water rights in priority. The dam at Mountain Home Reservoir was constructed in the early 1900s. Depending on the storage elevation (i.e. head pressure) the gate leakage has resulted in an average of 170 acre feet per month of storage water loss over the past ten years, or 1,190 AF annually. At a CWCB-acknowledged estimated valuation of \$250 per acre foot (February 14, 2017 Roundtable Meeting), this is a one year loss of \$297,500, or a loss of almost \$3Million over the past decade. If only from a financial perspective, this loss must be stopped, requiring the restoration of full operating efficiency to the outlet works at Mountain Home Reservoir.

A majority of the acreage served by Trinchera Irrigation Company (TIC) can be irrigated with both surface water and ground water, but for the past ten years or so, due to drought conditions, TIC has had to prematurely release water from Mountain Home Reservoir during irrigation season, tapping reservoir supplies sooner than necessary in order to meet shortfalls in late summer and early fall, when the need is greatest. This causes increased reliance on groundwater pumping, a major problem in this Basin.

Mountain Home Reservoir is part of a 715-acre Colorado State Wildlife Area. A 653 acre foot conservation pool provides a year-round sport fishery, regularly stocked by CPW with rainbow trout, brook trout, cutthroat trout and northern pike. TIC intends to make these upgrades without draining or excessively drawing down the reservoir, thus preserving historical seasonal flow patterns and preserving the CPW conservation pool. Although doing so will add to the cost of this dam rehabilitation, TIC is committed to preserving the conservation pool during implementation, preserving valuable wetland ecosystems and wildlife habitat, and minimizing impacts on recreational and environmental assets.

<u>Solution</u>: Restoring the outlet works stops costly water losses, provides decreed surface flows for irrigation, reduces reliance on ground water pumping, and meets several consumptive and nonconsumptive criteria of the Rio Grande Basin Plan for meeting future water demands.

Engineering Contractor: Engineering Analytics, Inc. (EA), founded in 2008, is an engineering consulting firm headquartered in Fort Collins, Colorado. The firm was chosen by TIC based on its expertise in dam rehabilitation, having worked on dam rehabilitation projects in all seven SEO divisions. EA has established a reputation for excellence on dam embankment, outlet works and spillway projects in the San Luis Valley, as evidenced by their recently completed rehabilitation of Sanchez Reservoir Dam. TIC has paid EA \$13,000 to start this work and has found the EA team to be exceptionally well qualified and experienced, capable of dealing with demanding technical problems, diligent in meeting our needs, and very easy to work with. TIC is confident in having chosen an excellent engineering firm.

<u>Overall Engineering Study Activity</u>: This project provides the engineering services required in order to restore full designed operating capacity to the reservoir's deteriorated outlet works.

**\$70,000 of Basin Funds requested in this proposal** will be used to engineer and design the replacement of the gates at Mountain Home Dam, with preliminary and final engineering and design services provided by Engineering Analytics, Inc. to (1) Evaluate alternatives and develop engineering recommendations given current condition of outlet works and determine whether to replace existing valves with mechanically or hydraulically operated valves; recommend safe storage methods for water in the dam, based on current conditions; identify long term improvements to valve chamber and entire low-level outlet works; (2) Develop construction cost estimate for the selected outlet works improvements; (3) Develop Implementation phase Loan Feasibility Study Report and CWCB Loan Application; (4) Conduct site reconnaissance, building on preliminary field investigation by RJH Consultants; (5) Develop preliminary design drawings and specs based on maintaining reservoir level by underwater bulkheading of intakes; (6) Draft then finalize engineering design report for SEO; and (7) Deliver final design, construction schedule & cost estimate.

## Part III. – Threshold and Evaluation Criteria

- 1. <u>Describe how</u> 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.<sup>1</sup>

TIC proposes an eligible water activity, as identified in Senate Bill 06-179, as it involves obtaining the engineering services required to determine the best way to repair, upgrade or replace the outlet works at Mountain Home Reservoir.

TIC is an eligible entity in that it is a mutual nonprofit ditch company classified under the U.S. tax code under section 501(c)(12).

TIC is requesting funds only from the SB 179 Rio Grande Basin Account, and is not requesting any funds at this time from the Statewide Account.

TIC is complying with all applicable submission, review, and approval deadlines and procedures.

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 BRTs 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.

This information is included in the letter from the Rio Grande Basin chair.

<sup>&</sup>lt;sup>1</sup> 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 agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.<sup>2</sup> 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.

The approval letter for this WSRA grant application from the Chair of the Rio Grande Basin Roundtable details how this water activity assists in meeting the water supply needs identified in the Basin Roundtable's consumptive and/or non-consumptive needs assessments.

At this time, as stated in CWCB's website, "The Rio Grande Basin is actively working on updates to its consumptive needs assessment and coming into compliance with the Rio Grande Compact. The Rio Grande Basin has completed and approved Phase I of its nonconsumptive needs assessment through the creation of a map with subcategory counts 12-digit Hydrologic Unit Codes (HUCs). The Rio Grande Basin used seven environmental and recreational subcategories for their mapping efforts. Nearly all HUCs within the Rio Grande Basin had at least one environmental or recreational subcategory present. The areas of the Rio Grande Basin with the highest concentration of priority subcategories are located near Crestone, <u>south of Fort Garland</u>, northeast of Alamosa, along Hat Springs Creek in the northwest portion of the basin, and a number of HUCs in western Conejos County."

This map, provided in Exhibit B, clearly designates Mountain Home Reservoir ("south of Fort Garland") as having the highest concentration of environmental and recreational priority subcategories.

This proposal meets the provisions of Section 37-75-104(2), Colorado Revised Statutes and is eligible for funding under Senate Bill 06-179 because 1) it is being submitted for approval to the Rio Grande Interbasin Roundtable pursuant to article 75 of title 37, C.R.S.; 2) this water activity will take place in the Rio Grande Basin; 3) it meets the eligibility categories described below; and 4) this proposal is submitted for approved by the Rio Grande Interbasin Roundtable in conformity with criteria and guidelines jointly developed by the IBCC and CWCB.

This water activity meets the eligibility requirements as required in Part 2 of the criteria and guidelines as detailed above.

<sup>&</sup>lt;sup>2</sup> 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.

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 shall be from 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)

This request for WSRA funds is only for **Rio Grande Basin Roundtable funds, so TIC is not required to provide matching funds -- However,** for this \$100,000 project, TIC is providing matching funds, as follows:

WSRA Basin Funds	\$70,000	
Trinchera Irrigation Co.	\$13,000 (paid)	ו
Trinchera Blanca Foundation	\$17,000 (in process)	43%

2. For Applications that include a request for funds from the **Statewide Account**, <u>describe how</u> 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.** 

# This request for funds is only for the **Rio Grande Basin Roundtable funds; therefore TIC is not required to meet the following activity/project Evaluation Criteria.**

**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 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.

# Water Supply Reserve Account – Application Form

**Revised October 2013** 

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.

## NOTE:

This project, which requests Basin funds only, provides engineering services for a project which satisfies many of the above #2 criteria, with further details available on request. Now that the previously funded Phase I feasibility and preliminary field studies have been completed, TIC is now submitting this Phase II request to fund the engineering studies. Upon completion of the engineering, TIC plans to submit a Phase III application requesting funds from both the Basin and Statewide accounts. A CWCB loan component will be calculated at that time, with amounts determined based upon the outcome of additional funding efforts and results of the engineering studies. TIC is currently working with EA, and its stockholders are preparing for the subsequent Phase III proposal and grant application. Award of this present grant request is critical, as the project cannot proceed without the required engineering.

## 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 Supply Reserve Account – Application Form Revised October 2013

Water rights in the TIC system reflect more than 150 years of evolution. The majority of TIC's water rights, established in 1863, have been set up to be alternate points of diversion (APD) within the network of other company-owned water rights. The advantage of this type of system is that the volume of water which can be taken out at any headgate is not limited to the decreed amount at that specific headgate. For example, the original Sangre de Cristo water right is never taken at its original point, because that ditch no longer exists, so that water is always taken as an APD. The same rule applies to the Jewel Ditch and to a number of the other original water rights because the original point of diversion no longer exists.

This system, described in the attached map, is perhaps one of the most extensive uses of the APD system in the San Luis Valley. It has many advantages and continues to work well. By restoring full operational efficiency to the outlet works at Mountain Home Reservoir, TIC gains much needed operational efficiency, reduces groundwater use, and allows water in Mountain Home Reservoir to be maximized for multiple uses in irrigation, flood control, fishery, recreational boating and fishing, and the preservation of wetlands and wildlife habitat.

In the normal flow regime the Trinchera watershed does not contribute water to the Rio Grande. Only occasionally, during heavy spring runoff flood conditions, does Trinchera Creek ever reach the Rio Grande. Historically there have been a few years in which Trinchera Creek ran from the beginning of spring melt until the end of June, but that was in earlier and wetter times. For this reason, the Trinchera watershed is not looked at as a contributing factor for Compact curtailments.

As this application is being written, the parameters for groundwater subdistricts are still being developed (Ground Water Subdistricts Senate Bill 04-222), with numerous court challenges taking place and grass roots Solutions Subcommittees working between and among water users to resolve many complex issues. Although the Trinchera Ground Water Management District has been technically designated as a court-decreed legal entity, until the actual Plan is in place, discussion of these issues here can be only speculative.

The confined aquifer is only found in a small corner of northwestern Costilla County, where the County line leaves the river and runs toward Mt. Blanca, so the Trinchera Basin is considered upstream from the Closed Basin.

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

There are no permitting issues applicable to this engineering study. Other than TIC's 2014 Phase I Feasibility Study for this project, funded by CWCB, no other study has been made with specific reference to the operation of the outlet works.

The Rio Grande Basin Water Supply Needs Report of 2006 gives an overview of the basin-related issues identified in the SWSI Report and the goals set forth by the Interbasin Compact Process: "The Rio Grande Compact and the effects of sustained drought make new water development very difficult. In the Rio Grande Valley agricultural water use is at unsustainable levels and economic impacts of reducing irrigation use of groundwater supplies will be difficult to address. Groundwater is a key component of water use in the basin."

This project directly addresses five main issues identified in Colorado's Rio Grande Basin Water Plan, providing engineering for a project which:

- Rehabilitates an agriculturally important Basin reservoir to significantly reduce storage loss
- Improves water management and energy efficiency by reducing reliance on groundwater pumping
- Protects fishery and the Colorado Parks and Wildlife Conservation pool by preventing the excessive lowering or emptying of the reservoir during repairs
- Protects this Colorado State Wildlife Area's riparian corridors and wildlife habitat by maintaining historical seasonal flow patterns and irrigation releases
- Mitigates the effects of the past ten years of drought conditions by avoiding the premature release of water from Mountain Home Reservoir during irrigation season
- 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.

The above statements are true to the best of my knowledge: Signature of Applicant: Macy Splerter
Print Applicant's Name: TrAcy S Kester
Project Title: Engineering Service For Min Nome Reservoir DAM Dutlet Date: MASCH 14 2017 War 15

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