COLORADO WATER CONSERVATION BOARD

WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: February 1, 2014

Plaza Project – Phase 3: Prairie Ditch Implementation Project

Name of Water Activity/Project

Colorado Rio Grande Restoration Foundation

Name of Applicant

Rio Grande Basin Roundtable

Amount from Statewide Account: $408,500.00

Amount from Basin Account(s): $21,500.00

Total WSRA Funds Requested: $430,000.00

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

FEIN: 75 - 3169057

Application Content

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: 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

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
1580 Logan Street, Suite 200
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.

Water Supply Reserve Account – Application Form
Revised October 2013

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

1. Applicant Name(s): Colorado Rio Grande Restoration Foundation

Mailing address: 623 Fourth Street
Alamosa, CO 81101

FEIN #: 75-3169057

Primary Contact: Heather R. Dutton Position/Title: Executive Director

Email: HeatherRDutton@gmail.com

Phone Numbers: Cell: (719) 850-1480 Office: (719) 589-2230 ex. 12

Alternate Contact: Mike Gibson Position/Title: Secretary

Email: slvwcdco1@qwestoffice.net

Phone Numbers: Cell: (719) 588-0465 Office: (719) 589-2230 ex. 11

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.

[X] Non-governmental organizations – broadly defined as any organization that is not part of the government.

3. Provide a brief description of your organization

The Colorado Rio Grande Restoration Foundation (Foundation), a 501(c)(3) Colorado non-profit organization, is the fiscal agent for the Rio Grande Headwaters Restoration Project (RGHRP). The mission of the Rio Grande Headwaters Restoration Project is "to restore and conserve the historical functions and vitality of the Rio Grande in Colorado for improved water quality, optimal agricultural water use, riparian habitat, wildlife and aquatic species habitat, recreation, and community safety, while meeting the requirements of the Rio Grande Compact."

The RGHRP was formed to implement the recommendations of a study completed in 2001. The 2001 Study was prompted by local stakeholders due to a realized deterioration of the historic functions of the Rio Grande, which include providing high quality water, healthy riparian areas, fish and wildlife habitat, and a functioning floodplain. The 2001 Study analyzed the condition of the riparian area and structures along a 91-mile reach of the Rio Grande and provided recommendations for improvement. The 2001 Study was sponsored by the San Luis Valley Water Conservancy District and funded with a $250,000 grant from the Colorado Water Conservation Board (CWCB). In 2004, the need was identified for a well-defined Rio Grande Watershed Restoration Strategic Plan (Strategic Plan). Completed in 2007, the Strategic Plan highlighted the importance of continued efforts to implement the recommendations from the 2001 Study. Since establishment, the RGHRP has accrued a successful record of performing projects on the Rio Grande through collaboration with landowners and local, state, and federal entities.

The RGHRP has four Programs: The Streambank Stabilization and Riparian Restoration Program, The Diversion and Headgate Repair and Replacement Program, The Watershed Stewardship Program, and The Outreach and Education Program. Through the Streambank Stabilization and Riparian Restoration Program, the RGHRP has administered five (5) cost-share restoration projects on fifty (50) sites with $1.8 million grant funding raised. The projects have improved river function using a multi-faceted approach to riparian restoration and streambank stabilization, and have resulted in the treatment of approximately eleven (11) miles of streambanks. Including contribution from partners and landowners, the total value of these projects is $2.2 million. The techniques used include bank and channel shaping, revegetation, installation of rock and log structures, and implementation of grazing best management practices. Theses Projects reduce sediment loading by stabilizing the streambanks, improve the riparian and upland habitat by increasing willow and riparian vegetation cover, and enhance the fishery. Additionally, the capacity of the Rio Grande to transport sediment that has entered the system from upstream reaches is increased. Finally, improvements to riparian habitat and floodplain function improve the condition of wetlands located throughout the riparian areas within the Project boundaries. The RGHRP works with the Colorado Watershed Assembly's Colorado Measurable Results Program (MRP) to complete long-term monitoring of the Projects.

Through the Diversion and Headgate Repair and Replacement Program, the RGHRP is working with ditch companies to address concerns surrounding aging and inefficient diversion and headgate structures. The first of these projects was the Plaza Planning Project – Phase 1 (Phase 1) in the Sevenmile Plaza area of Rio Grande County. The RGHRP worked with stakeholders to determine the primary issues in the area, identify remediation methods, and develop an implementation plan, The Plaza Plan, to improve the health and function of the Rio Grande in the Sevenmile Plaza area. The identified issues include streambank instability in the 2.8-mile project reach, a degraded wetland, and aging, hazardous, and inefficient diversion structures. The Plaza Project – Phase 2: McDonald Ditch Implementation Project (Phase 2) is the first phase of implementation of the Plaza Plan.

Phase 2 is underway, with completion expected in 2015. Phase 2 includes reclamation of a 2-acre wetland, stabilization of 2,000 feet of streambanks, and replacement of the McDonald Ditch diversion and headgate. The new headgate will contain automated measuring gates, while the diversion will contain automated floodgates. Additionally, the diversion will include passage for fish and boats. The proposed Project, the Plaza Project – Phase 3: Prairie Ditch Implementation Project (Phase 3) will continue implementation of the Plaza Plan and recommendations of the 2001 Study. These efforts will improve continuity and function of the Rio Grande.

Through the Watershed Stewardship Program, the RGHRP works with stakeholders and partners to complete wildfire restoration and hazard mitigation projects. In the summer of 2013, the West Fork Fire Complex severely damaged over 110,00 acres of critical natural resources in the upper watershed. In response, the Rio Grande Watershed Emergency Action Coordination Team (RWEACT) was formed, with the cooperation of over 40 entities. RWEACT includes 5 committees: Hydrology, Emergency Coordination, Communications, Economic Recovery, and Natural Resources. The RGHRP has taken the lead on coordinating the natural resources committee. The natural resources committee worked closely with the US Forest Service's Burned Area Emergency Response (BAER) Team to identify Values at Risk (VARs) associated with human life and safety, cultural and historic resources, and significant natural resources. Currently, the RGHRP is coordinating several forest restoration and hazard mitigation projects through RWEACT's natural resources committee. For example, the RGHRP is working to deploy 6 water quality monitoring probes through the watershed to observe the effects of the wildfire on riparian areas and aquatic health. The RGHRP is also working to protect the historic Little Squaw Resort, built in 1930 by the Civilian Conservation Corps, from flooding and debris flows by constructing overflow channels and a berm. Finally, the RGHRP designed and implemented 10 experimental plots within the burned area to investigate different methods to provide ground cover and increase soil water holding capacity in order to improve vegetative cover and reduce hill slope erosion. Longterm data will be collected from these plots and the results will influence the methods used in future wildfire restoration projects. The implementation of this project was made possible through the donation of several mulch materials and the help of volunteers.

The RGHRP administers a robust Outreach and Education Program. Informative press releases are submitted to local and regional media with notable project updates. Talks and tours are routinely given to local schools, community groups, and water related organizations. Volunteer events encourage community members to get involved and connected with the Rio Grande. The RGHRP website provides project updates and information. Content of the Outreach and Education program includes details about projects, partnerships, funding entities, and the importance of protecting and conserving the Rio Grande.

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

The Colorado Rio Grande Restoration Foundation is the Contracting Entity, on behalf of the Rio Grande Headwaters Restoration Project.

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.

X	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.

The Applicant, The Colorado Rio Grande Restoration Foundation, is not subject to TABOR limitations, as it is a Colorado nonprofit organization operating under Section 501(c)(3) of the U.S. Internal Revenue Code.

Part II. - Description of the Water Activity/Project

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

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

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

The primary purpose of the Project is to improve agricultural irrigation infrastructure. However, riparian areas, aquatic habitat, sediment transport, and recreation potential on the Rio Grande will also be improved.

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

	Study	X	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)
1,000	Length of Stream Restored or Protected (linear feet)
	Length of Pipe/Canal Built or Improved (linear feet)
	Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)
	Area of Restored or Preserved Habitat (acres)
1	Other -- Explain: Headgate and Diversion Replaced

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

Latitude: 37°38′42.30″N Longitude: 106°14′0.34″W

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.

Overall Water Activity: The Plaza Project – Phase 3: Prairie Ditch Implementation Project, (Phase 3), is the third phase of the Plaza Project. The project area is located within the Sevenmile Plaza in Rio Grande County. As designated by the 2001 Study, the project area is located within Subreach C1 of Reach C (Attachment B: Maps - Figure 2). Reach C was ranked "poorest" in channel stability and condition of the floodplain, and was identified as a high priority for restoration.

The Project elements of Phase 3 include the Prairie Ditch headgate and diversion dam, and the surrounding streambanks. The Prairie Ditch has a total decree of 367 cubic feet per second (cfs) and 65 stockholders. Incorporated in 1902, a rich history surrounds this ditch company. The headgate, which was described by the Ditch Company's then Secretary as "One of the best, if not the best, headgate in the Valley," was completed in June of 1920. While it has served well, over 90 years of use and exposure have left the headgate crumbling and worn in places. The diversion dam is composed of rocks and was built in the early 1900s. It was reworked in 1962; railroad iron was driven into the bed of the channel, rocks were placed against the iron, and US Air Force surplus landing mats from World War II were used to fill in gaps and hold the rocks in place. Since this work was done, high flows moved the rocks as far as 130 feet downstream. The Prairie Ditch Board and stockholders have expressed concern that the next big water year may move enough of the remaining rocks the dam would stop effectively pooling water for diversion. Furthermore, the 2001 Study noted the channel in the Project area is impacted by sedimentation, which builds on the current Prairie Ditch diversion dam. Phase 3 will address these issues by improving the condition of the Project elements.

The objectives of Phase 3 are to: (1) Improve diversion efficiency and reduce maintenance by replacing the aging Prairie Ditch headgate, installing automated water gates, and replacing the Prairie Ditch diversion dam; (2) Enhance water quality by reducing erosion and sediment input; (3) Improve riparian condition by stabilizing up to 1,000 feet of streambanks in the project area; (4) Increase the capacity of the Rio Grande to transport sediment; (5) Improve aquatic and wildlife habitat; (6) Enhance local recreation by including fish and boat passage in the new diversion dam; (7) Promote public involvement in water improvement activities through public outreach and education.

Preliminary designs for Phase 3 have been developed by the NRCS. In Phase 3, project engineers will finalize the design for each of the project elements. Phase 3 will be a three-year project with execution of designs in years 1 and 2, and monitoring in years 2 and 3.

Use of Funds: The Foundation is requesting $21,500 from Rio Grande Basin WSRA funds and $408,500 from Statewide WSRA funds, or 44% of the total project cost of $975,000. Matching funds are as follows: $315,000 or 32% from the Cooperative Conservation Partnership Initiative (CCPI) Program; $130,000 or 14% from Landowners; $100,000 or 10% from In-kind services.

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]

   Phase 3 is consistent with Section 37-75-102 C.R.S. because this Project does not supersede, abrogate, or otherwise impair the State's current system of allocating water within Colorado or in any manner repeal or amend the existing water rights adjudication system. This project does not affect the State constitution's recognition of water rights as a private usufructuary property right nor is it 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. Phase 3 protects water users and landowners along the Rio Grande from loss by replacing an aging diversion and headgate, repairing the river channel, and restoring the riparian corridor, thereby helping to ensure that the provisions of Section 37-75-102 C.R.S. are supported and observed.

   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 Inter-Basin Roundtable Chairman, Mike Gibson.

[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 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.[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.

This information is included in the letter from the Rio Grande Inter-Basin Roundtable Chairman, Mike Gibson.

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 application was submitted to the CWCB. 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)

Matching funds for Phase 3 are as follows: $315,000 or 32% from the Cooperative Conservation Partnership Initiative (CCPI) Program; $130,000 or 14% from Landowners; $100,000 or 10% from In-kind services. Matching funds constitute 56% of the total project cost. The Foundation is requesting $21,500 from Rio Grande Basin WSRA funds and $408,500 from Statewide WSRA funds, or 44% of the total project cost of $975,000. The Rio Grande Basin funds are 5% of the total WSRA request.

[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.

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. 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 1: Phase 3 promotes collaboration and advancements in meeting Rio Grande Basin water management goals:

- Phase 3 will result in both consumptive and non-consumptive improvements: Replacing the Prairie Ditch diversion and headgate will improve irrigators' ability to access their water when in priority while reducing maintenance, which are consumptive benefits. Non-consumptive benefits include, improved streambank stability, water quality, and riparian and aquatic habitat following riparian restoration; improved recreation potential with boat passage; enhanced cold water fishery from improved riparian vegetation cover, reduced turbidity, and fish passage.
- The Plaza Project has experienced a great amount of collaborative planning. More than thirty (30) Plaza Stakeholders jointly developed The Plaza Plan and selected the most favorable alternatives to be implemented in the Sevenmile Plaza reach of the Rio Grande. Stakeholders met in five formal working sessions, participated in numerous tours and site visits, gathered data, and determined the best design for the Prairie Ditch headgate and diversion replacement, and streambank stabilization. San Luis Valley nonprofits and organizations, special Districts, Rio Grande County, State and Federal agencies, and area landowners, farmers, and ranchers were represented in the Plaza Stakeholders. This collaborative approach ensures future implementation aligns with the objectives of stakeholders and interests of landowners in Sevenmile Plaza, one of Colorado's oldest communities.
- As the Rio Grande Basin deals with prolonged drought, the need to allocate water between Basin uses and Rio

Grande Compact obligations, and the development of Groundwater Management Subdistricts, the need for accurate water management becomes more crucial. Phase 3 is the second of many anticipated projects that will improve the water diversion and management efficiency on the Rio Grande. As Phase 3 and similar Projects are completed, water managers will have the ability to better balance water use (both consumptive and nonconsumptive), a priority identified in the Rio Grande Basin Needs Assessment Report.

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 2: Funds from the WSRA will facilitate the implementation of Phase 3:

- The RGHRP and Project partners have raised a significant amount of federal and in-kind funding (56% of Total Project Cost) for this Project: the RGHRP and NRCS secured $315,000 from the federal Cooperative Conservation Partnership Initiative (CCPI) and $100,000 of in-kind contributions. Landowners have pledged $130,000 through a loan from the CWCB. The remaining $430,000, requested from WSRA, is essential non-federal match to the CCPI grant. Without the WSRA funds, the Project partners would not likely be able to raise sufficient dollars out of pocket or from other grant sources in time to retain the grants currently secured. As such, WSRA funds are critical to complete 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.

Tier 3: The Water Activity addresses issues of statewide value and maximizes benefits:

- Phase 3 is a structural project that will improve the ability of the Rio Grande to meet consumptive and non-consumptive needs of the area by replacing a poorly functioning diversion and headgate, stabilizing streambanks, and increasing the ability of the river to transport water. As such, Phase 3 allows for agriculture demands to be met by increasing the ability of irrigators to divert their appropriated water right when they are in priority. Therefore, Phase 3 supports the preservation of the long-term cultural values inherent in this rural area's historic and current agricultural lifestyle.
- Through riparian restoration and improvement of the Prairie Ditch diversion dam, Phase 3 sustains multiple

non-consumptive uses by improving riparian and aquatic conditions, repairing river channel problems, reducing sediment load, and improving opportunity for recreation.

- Phase 3 will assist in administration of the Rio Grande Compact as it includes installation of automated measuring gates in the headgate and a new gauging station in the canal. These improvements will assist the Division Engineer in water management and meeting the Compact.
- The Project Area is located in the management area for the San Luis Valley Regional Habitat Conservation Plan (HCP) for the Southwestern Willow Flycatcher and the Yellow-bill Cuckoo. In accordance with the HCP, the riparian restoration activities will improve streambank habitat for these endangered species and help with recovery efforts.

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 Body Affected: The water body affected by Phase 3 is the Rio Grande. The Rio Grande watershed in Colorado covers 8,200 square miles (Attachment B. Maps – Figure 1). The river flows 200 miles through Colorado, originating near the Continental Divide. Numerous tributaries converge on the east slope of the Continental Divide from elevations near 13,000 feet to form the Rio Grande mainstem. The river flows to the east through the Rio Grande National Forest and then through private property for approximately 55 miles, where it passes near the town of Creede, located at approximately 8,850 feet. The Rio Grande continues its relatively steep descent for another 22 miles to the confluence with the South Fork of the Rio Grande at approximately 8,200 feet elevation, where the town of South Fork is located. The Rio Grande enters the San Luis Valley, the largest intermountain basin in Colorado, at the town of South Fork. The river then flows southeast for approximately 65 miles through Del Norte and Monte Vista to Alamosa, the largest city in the watershed, at an elevation of approximately 7,550 feet. The river turns to the south and flows for another 40 miles to the New Mexico border. The elevation at the New Mexico border is approximately 7,400 feet.

The project area is in Subreach C1 of the Rio Grande, as designated in the 2001 Study (Attachment B. Maps – Figure 2). Subreach C1 includes the area between the Del Norte split flow convergence and the Consolidated Slough. The division of the 2001 Study area into several reaches was based on homogeneous characteristics related to hydrology, floodplain characteristics, geomorphology, and vegetative conditions. One of the key Phase 3 project elements, the Prairie Ditch, diverts 367 cfs from the Rio Grande near the Sevenmile Plaza area, which is 7 miles north and 5 miles west of the town of Monte Vista. The Rio Grande in this reach is primarily used for irrigation, wildlife habitat, ranching, and recreation.

Water Rights: Landowners in the Sevenmile Plaza area hold some of the most senior water rights in Colorado, which date back to 1866, the first application of water in District 20. Over the years, six generations have accessed the Rio Grande at Sevenmile Plaza. Phase 3 does not change or affect any water rights or their allocation. Phase 3 will improve diversion efficiency and provide increased riparian stability of the Rio Grande through the specific reach being addressed.

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

The 2001 Study: The 2001 Study was prompted by local stakeholders due to a realized deterioration of the functions of the Rio Grande. The 2001 Study analyzed the condition of the riparian area and structures along a 91-mile reach of the Rio Grande from the town of South Fork to the Alamosa – Conejos County line (Attachment B. Maps - Figures 1 and 2). The 2001 Study was sponsored by the San Luis Valley Water Conservancy District and funded with a $250,000 grant from the Colorado Water Conservation Board (CWCB). The study evaluated the condition of the river's functions as they related to:

a. The condition of riparian habitat and fisheries;
b. Accessibility of the river to existing irrigation structures and their condition and performance;
c. The protection of lives and property;
d. The protection of channel and floodplain from flood damage;
e. The maintenance of river channel and over bank capacity;
f. The ability to meet the Rio Grande Compact requirements.

The 2001 Study found the primary cause of degradation to be sedimentation and identified measures that could be implemented to holistically improve the river's functions. These measures were both "structural" in nature, such as riparian restoration or diversion replacement, or "non – structural" measures, such as grazing management practices or land use issues. Phase 3 seeks to implement these actions in order to improve the function of the Rio Grande.

The 2007 Rio Grande Watershed Restoration Strategic Plan: In 2004 the need was identified for a well-defined Rio Grande Watershed Restoration Strategic Plan (Strategic Plan). Completed in 2007, the Strategic Plan outlined priority projects for the entire Rio Grande watershed in Colorado. Priority projects included: flood protection, riparian and headgate improvements, grazing management, flow management, and future studies. The Strategic Plan highlighted the importance of continued efforts to implement the recommendations from the 2001 Study.

The Plaza Project – Phase 1: Plaza Planning Project: In 2011, Phase 1 was funded with a $40,000 grant from the Rio Grande Basin WSRA Account. Phase 1 was a collaborative scoping and feasibility study of potential biological and structural approaches to rehabilitate the streambanks, diversion and headgate structures, and a wetland within the approximately 2.8 mile reach of the Rio Grande near the Sevenmile Plaza. Alternatives for rehabilitation of project elements included different diversion types, incorporation of micro-hydropower generation and automated headgates, and multiple streambank stabilization, riparian rehabilitation, and wetland reclamation techniques. The "Plaza Stakeholders" a diverse group of thirty (30) individuals, analyzed the costs and benefits of each alternative to select the desired alternative for each project element. The product of the study was the Plaza Plan: A restoration plan detailing the selected options for each project element, a timeline for implementation, possible funding mechanisms, and administrative considerations.

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 5 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: Heather R. Dutton

Print Applicant's Name: Heather R. Dutton

Project Title: Plaza Project – Phase 3: Prairie Ditch Implementation Project

Date: February 1, 2014

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

Craig Godbout – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
craig.godbout@state.co.us

Attachment A: Statement of Work

WATER ACTIVITY NAME – Plaza Project - Phase 3: Prairie Ditch Implementation Project

GRANT RECIPIENT – The Colorado Rio Grande Restoration Foundation

FUNDING SOURCE – The State and Rio Grande Basin Water Supply Reserve Accounts

INTRODUCTION AND BACKGROUND
The Plaza Project – Phase 3: Prairie Ditch Implementation Project, (Phase 3), is the third of a multi-phase initiative, which will implement findings and recommendations of the Plaza Plan. Finalized in December 2011, the Plaza Plan is a restoration master plan for the Sevenmile Plaza Reach of the Rio Grande. Through Phase 3, the Prairie Ditch diversion and headgate will be replaced and approximately 1,000 linear feet of streambanks will be stabilized and revegetated. These actions will result in improved diversion efficiency, channel and streambank stabilization, and enhanced aquatic and upland habitat. Phase 3 will be a three-year project with execution of designs in years 1 and 2, and monitoring in years 2 and 3. The Rio Grande Headwaters Restoration Project will complete project administration and oversight, outreach and education, and monitoring.

OBJECTIVES
The objectives of Phase 3 are to:
(1) Improve diversion efficiency and reduce maintenance by replacing the aging Prairie Ditch headgate, installing automated water gates, and replacing the Prairie Ditch diversion dam;
(2) Enhance water quality by reducing erosion and sediment input;
(3) Improve riparian condition by stabilizing up to 1,000 feet of streambanks in the project area;
(4) Increase the capacity of the Rio Grande to transport sediment;
(5) Improve aquatic and wildlife habitat;
(6) Encourage local recreation by including fish and boat passage in the new diversion structure;
(7) Promote public involvement in water improvement activities through public outreach and education.

TASKS

TASK 1 – Finalize Design for Project Elements

Description of Task: Finalize the design for the Project Elements, which include the Prairie Ditch headgate and diversion replacement, and streambank stabilization.

Method/Procedure: Using preliminary designs developed by the NRCS, district, area, and state engineers will complete the designs for the Project Elements. This includes consulting with geology, hydraulic, and vegetation specialists, completing hydraulic modeling, and performing a load analysis for the diversion and headgate structures.

Deliverable: Final designs for the Prairie Ditch headgate and diversion, and 1,000 feet of streambanks in the Project area.

TASK 2 – Prairie Ditch Diversion Replacement

Description of Task: Replace the Prairie Ditch Diversion with a rock diversion rock that allows for fish and boat passage.

Method/Procedure: The landowners and RGHRP will hire contractors to remove the current diversion dam, clear and shape the channel, and enact pollution control. Contractors will then complete the foundation work, earthwork, reinforcement, and rock installation for the diversion.

Deliverable: Improved water diversion efficiency, aquatic habitat and passage, and recreation from boat passage. Reduced maintenance and sediment input from the current diversion and streambank erosion.

TASK 3 – Prairie Ditch Headgate Replacement

Description of Task: Replace the Prairie Ditch headgate with a concrete headgate that includes automated gates.

Method/Procedure: The landowners and RGHRP will hire contractors to remove the current headgate structure, clear and shape the channel, and enact pollution control. Contractors will then complete the foundation work, earthwork, and concrete and reinforcement for the headgate. Additionally, pipe conduits, structural work, and automated gate installation will be completed.

Deliverable: Improved water diversion efficiency due to improved gate precision and reduced headgate maintenance.

TASK 4 – Channel and Streambank Stabilization

Description of Task: Implement channel and streambank stabilization techniques upstream and downstream of the Prairie Ditch diversion and headgate structure.

Method/Procedure: NRCS will design channel and streambank stabilization measures. A contractor will implement the design, which may include bank shaping, channel reconfiguration, rock or log structure installation, and bioengineering. Bioengineering techniques include, but are not limited to willow clump plantings, bareroot shrub plantings, and grass and forb seeding. Upland areas disturbed during onsite activities will be reseeded with appropriate species.

Deliverable: Stabilized streambanks, reduced sediment loading, reconfigured stream channel, reestablished riparian vegetation, increased streambank stability, and reduced erosion.

TASK 5 – Monitoring

Description of Task: Monitor the site for two years using the RGHRP Sampling and Analysis Plan (SAP).

Method/Procedure: Monitoring will consist of several assessments that include documenting changes in streambank locations and hence erosion rates, photographic documentation, visual stream assessments, and structure assessment. Pre-construction, post-construction, and long-term surveys will map locations and features of the streambanks, diversion, and headgate over time. Photographic documentation will be used to track conditions of the riparian and shoreline plant communities, bank stabilization, and overall visual condition of the Project area. The United States Department of Agriculture's Stream Visual Assessment Protocol II (SVAP II) will be used to assess the sites. Project engineers will complete an annual

check sheet that classifies the condition and function of the headgate and diversion structure. This monitoring strategy is used in other RGHRP projects. The RGHRP will be responsible for monitoring.

Deliverable: Annual Reports will compare current data to prior data in order to demonstrate the relative stability of the stream bank and to evaluate the degree of improvement in the riparian condition.

TASK 6 – Outreach and Education

Description of Task: Conduct a public outreach and education program to raise awareness of Phase 3 activities, CWCB and the Roundtable, and the RGHRP.

Method/Procedure: Develop visual aids and written materials showing the specific sites and proposed work. Make presentations at the SLV Wetlands Area Focus Committee; Rio Grande Inter-basin Roundtable; quarterly Board Meetings of the Rio Grande Water Conservancy District; Board Meetings of the San Luis Valley Water Conservancy District, and to specific public meetings. In addition, give interviews and status reports on local radio stations. Conduct tours to demonstrate the applied techniques. RGHRP staff and volunteers will complete this task.

Deliverable: A public that is better informed and more aware of river related issues, especially regarding the work of the RGHRP, the role of the CWCB and Roundtable, and the restoration program in general, including site-specific methodologies used to achieve Project objectives. Outreach and education efforts will impress upon the public the importance of improving the condition of the Rio Grande and will raise awareness, gain support and increase participation in future projects.

TASK 7 – Project Administration

Description of Task: Complete all necessary contracts, status reports, and internal and external documents. Ensure Tasks are completed within approved costs and timelines.

Method/Procedure: The RGHRP will administer Phase 3. This includes completing contracts with the CWCB, NRCS, Project partners, landowners, and contractors; obtaining the necessary environmental permits; managing budgets and reimbursement requests; and completing semi-annual and final reports. Additionally, the RGHRP will perform Project oversight; making certain project design and implementation are timely and accurate. The RGHRP will organize outreach and education efforts and complete site monitoring in accordance the SAP.

Deliverable: All appropriate contracts, external and internal reports, and on-site Project activities completed within planned period and anticipated costs.

Project Budget – Page 1 of 2

Detailed Budget for the Plaza Project - Phase 3: Prairie Ditch Implementation Project

Project Tasks	Year 1: 2014	Year 2: 2015	Year 3: 2016	Year 4: 2017	Total	Sources of Funds					Total
						Cash Contribution			In-Kind Contribution		
						CCPI	WSRA	Landowners	NRCS	RGHRP	
Task 1: Finalize Design											
NRCS District, Area, and State Engineers will complete the Project design - in-kind contribution is a NRCS Estimate.	90,000	-	-	-	90,000	-	-	-	90,000	-	90,000
Total Task 1	90,000	-	-	-	90,000	-	-	-	90,000	-	90,000
Task 2: Diversion Replacement *											
Site Preparation: Includes clearing and grubbing, removal of the old structure, channel clearing and shaping, pollution control, mobilization, and traffic control.	49,000	-	-	-	49,000	-	-	49,000	-	-	49,000
Foundation Work: Includes removal of water and installation of steel sheet piles.	14,000	-	-	-	14,000	-	-	14,000	-	-	14,000
Earthwork: Includes excavation, earthfill and drainfill.	20,000	-	-	-	20,000	-	-	20,000	-	-	20,000
Rock Rip Rap: Rock Diversion Dam	340,000	-	-	-	340,000	200,000	140,000	-	-	-	340,000
Radial Sluice Gate	31,000	-	-	-	31,000	-	31,000	-	-	-	31,000
Structural Work: Includes metal fabrication of the trash rack and catwalk.	12,000	-	-	-	12,000	-	12,000	-	-	-	12,000
Landowner Contingency	15,000				15,000	-	-	15,000	-	-	15,000
Total Task 2	481,000	-	-	-	481,000	200,000	183,000	98,000	-	-	481,000
Task 3: Headgate Replacement *											
Site Preparation: Includes clearing and grubbing, removal of the old structure, channel clearing and shaping, pollution control, mobilization, and traffic control.	16,500	-	-	-	16,500	-	-	16,500	-	-	16,500
Foundation Work: Includes removal of water.	6,500	-	-	-	6,500	-	1,000	5,500	-	-	6,500
Earthwork: Includes earthfill.	10,000	-	-	-	10,000	-	-	10,000	-	-	10,000
Concrete and Reinforcement: Includes concrete headgate and steel reinforcement of the headgate.	230,000	-	-	-	230,000	115,000	115,000	-	-	-	230,000
Conventional and Automated Water Control Gates and Valves	69,000	-	-	-	69,000	-	69,000	-	-	-	69,000
Total Task 3	332,000	-	-	-	332,000	115,000	185,000	32,000	-	-	332,000
Task 4: Channel Shaping and Streambank Stabilization*											
Channel clearing and shaping.	7,000	-	-	-	7,000	-	7,000	-	-	-	7,000
Revegetation: Includes seeding, sprigging, and mulching disturbed sites.	-	5,000	-	-	5,000	-	5,000	-	-	-	5,000
Total Task 4	7,000	5,000	-	-	12,000	-	12,000	-	-	-	12,000

**** Denotes costs based on "Means Heavy Construction Cost Data" utilized by NRCS.***

Project Budget – Page 2 of 2

Detailed Budget for the Plaza Project - Phase 3: Prairie Ditch Implementation Project

Project Tasks	Year 1: 2014	Year 2: 2015	Year 3: 2016	Year 4: 2017	Total	Sources of Funds					Total
						Cash Contribution			In-Kind Contribution		
						CCPI	WSRA	Landowners	NRCS	RGHRP	
Task 5: Monitoring											
Field Personnel - RGHRP Personnel will coordinate and complete post-construction monitoring of Project sites. These hours include monitoring preparation, data collection, and data analysis.	-	2,000	1,500	500	4,000	-	4,000	-	-	-	4,000
Field Volunteer - One volunteer will assist in data collection. The volunteer will contribute approximately 12 hours per year for two years at an in-kind value of $20.85 per hour.	-	250	250	-	500	-	-	-	-	500	500
Total Task 6	-	2,250	1,750	500	4,500	-	4,000	-	-	500	4,500
Task 6: Outreach and Education											
Project Outreach and Education; press, tours, production of materials, and volunteer coordination by the RGHRP.	1,000	1,500	1,000	-	3,500	-	3,500	-	-	-	3,500
Total Task 7	1,000	1,500	1,000	-	3,500	-	3,500	-	-	-	3,500
Task 7: Administration											
Cost for the RGHRP to administer the Project at the average rate of $32.50.	20,000	12,000	5,500	5,000	42,500	-	42,500	-	-	-	42,500
Office Support In-Kind Match: office space and utilities are donated by the San Luis Valley Water Conservancy District. The value is $140.00 per month. Because the RGHRP has 3 active Projects, the in-kind match for the Project is 1/3 of total office support.	550	550	550	350	2,000	-	-	-	-	2,000	2,000
Project Administration In-kind Match: The President and Secretary of the Colorado Rio Grande Restoration Foundation contributes 1 volunteer hours per week each to assist in Project Administration. The value of this time is $20.85 per hour at 52 hours per year.	2,150	2,150	2,150	1,050	7,500	-	-	-	-	7,500	7,500
Total Task 8	22,700	14,700	8,200	6,400	52,000	-	42,500	-	-	9,500	52,000
TOTAL	$ 933,700	$ 23,450	$ 10,950	$ 6,900	$ 975,000	$ 315,000	$ 430,000	$ 130,000	$ 90,000	$ 10,000	$ 975,000
Percent of Project Cost						32%	44%	14%	9%	1%	100%

Summary Project Budget

Summary Budget for the Plaza Project - Phase 3: Prairie Ditch Implementation Project								
Project Tasks	Total	Sources of Funds						Total
		CCPI (RGHRP/NRCS)	WSRA (RGHRP/CWCB)	Landowners	In-Kind			
					NRCS	RGHRP		
Task 1: Finalize Design	90,000	-	-	-	90,000	-		90,000
Task 2: Diversion Replacement	481,000	200,000	183,000	98,000	-	-		481,000
Task 3: Headgate Replacement	332,000	115,000	185,000	32,000	-	-		332,000
Task 4: Channel Shaping and Streambank Stabilization	12,000	-	12,000	-	-	-		12,000
Task 5: Monitoring	4,500	-	4,000	-	-	500		4,500
Task 6: Outreach and Education	3,500	-	3,500	-	-	-		3,500
Task 7: Administration	52,000	-	42,500	-	-	9,500		52,000
TOTAL	$ 975,000	$ 315,000	$ 430,000	$ 130,000	$ 90,000	$ 10,000		$ 975,000
Percent of Project Cost		32%	44%	14%	9%	1%		100%

Project Schedule

Milestone Table for the Plaza Project - Phase 3: Prairie Ditch Implementation Project

Project Tasks	Year 1 - 2014				Year 2 - 2015				Year 3 - 2016				Year 4 - 2017			
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Task 1: Finalize Design																
Task 2: Diversion Replacement																
Task 3: Headgate Replacement																
Task 4: Channel Shaping and Streambank Stabilization																
Task 5: Monitoring																
Task 6: Outreach and Education																
Task 7: Administration																

Attachment B: Maps

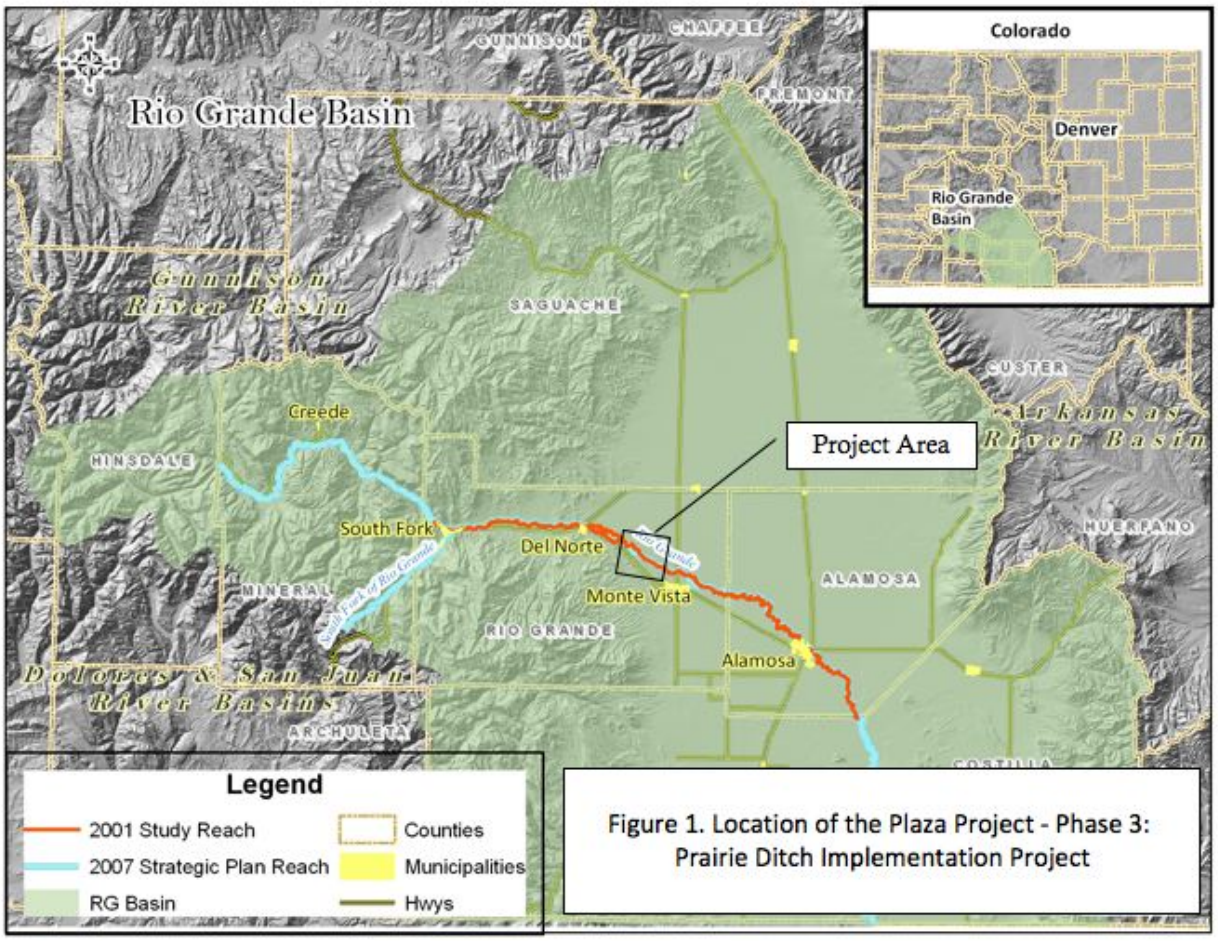

Figure 1. Location of the Plaza Project - Phase 3: Prairie Ditch Implementation Project

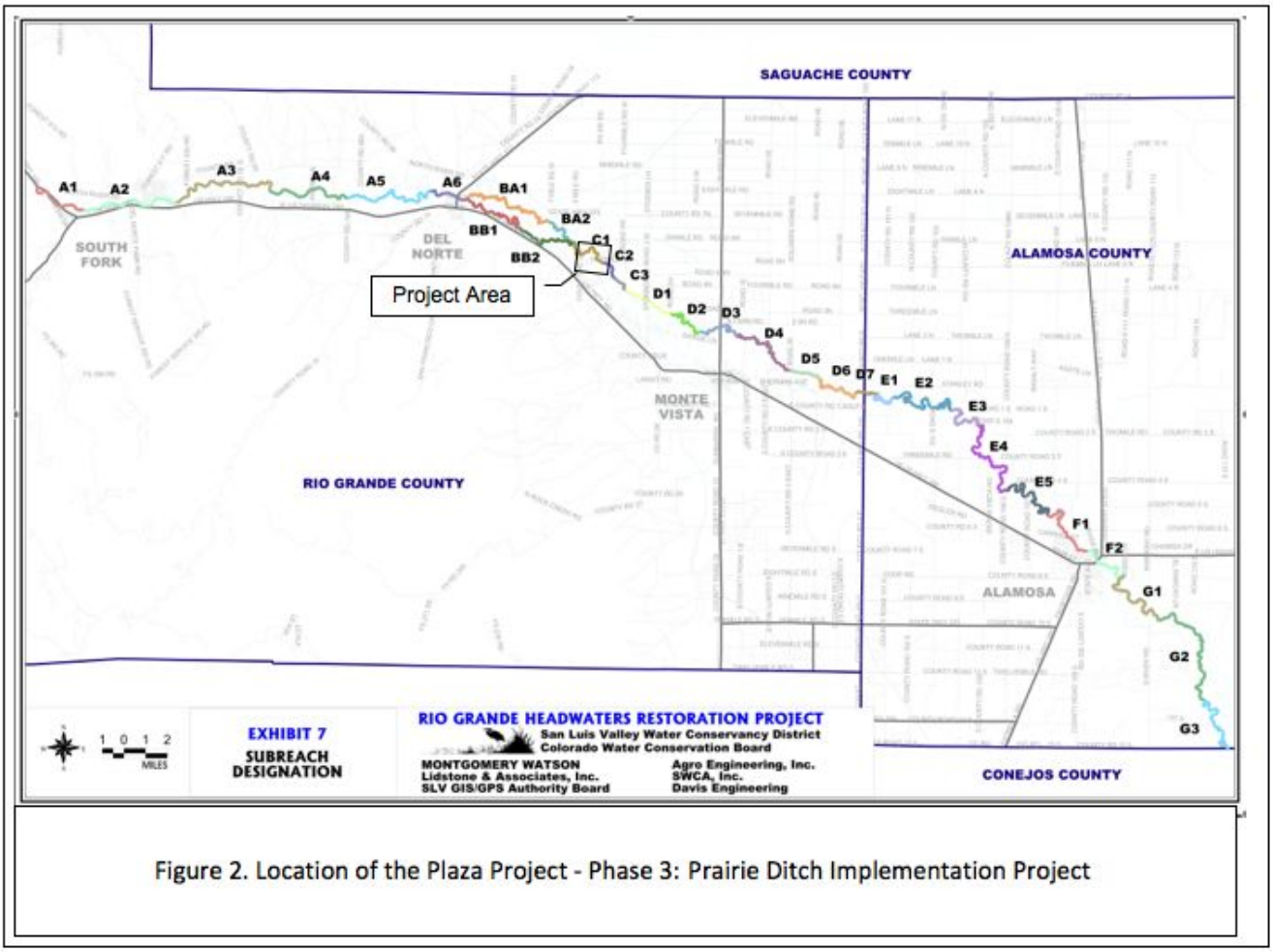

Figure 2. Location of the Plaza Project - Phase 3: Prairie Ditch Implementation Project

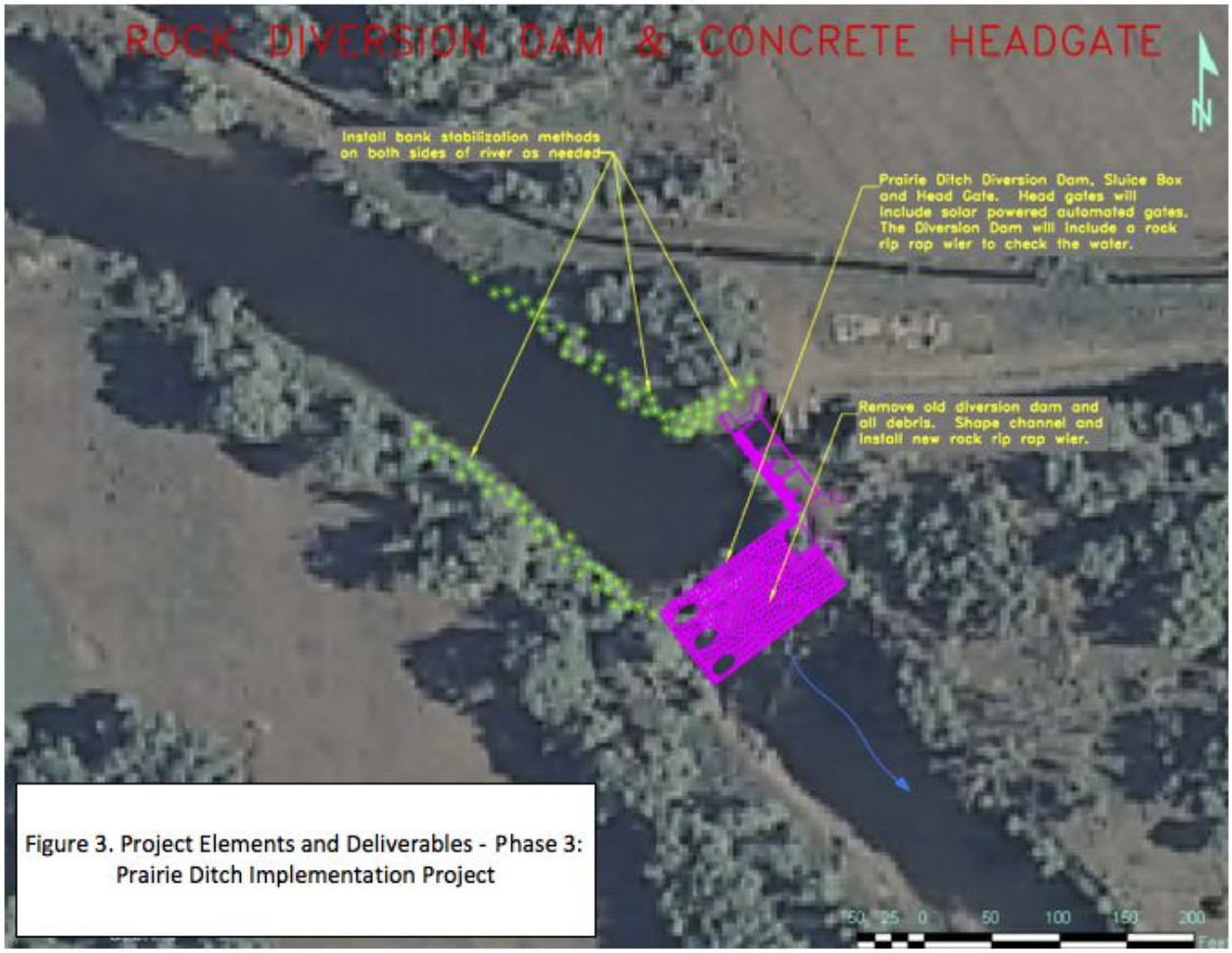

Figure 3. Project Elements and Deliverables - Phase 3: Prairie Ditch Implementation Project