

# COLORADO WATER CONSERVATION BOARD

# WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

## Today's Date: January 4, 2015



Mancos River Habitat and Diversion Project - Phase III

# Name of Water Activity/Project

## Mancos Conservation District

### Name of Applicant

Southwest Basins Roundtable Amount from Statewide Account:

Amount from Basin Account(s):

**Total WSRA Funds Requested:** 

59,000

59,000

0

#### **Approving Basin Roundtable(s)**

(If multiple basins specify amounts in parentheses.)

## FEIN: 84-0614777

## **Application Content**

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## **Required Exhibits**

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

## **Appendices – Reference Material**

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

# **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: <u>http://cwcb.state.co.us</u> 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: <a href="http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf">http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf</a>. In addition, the applicant should also refer to the <a href="https://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf">http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf</a>. In addition, the applicant should also refer to the <a href="https://cwcb.state.co.us/LoansGrants/Documents/WSRACriteriaGuidelines.pdf">https://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf</a>. In addition, the applicant should also refer to the <a href="https://cwcb.state.co.us/LoansGrants/WSRACriteriaGuidelines.pdf">https://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf</a>. In addition, the applicant should also refer to the <a href="https://cwcb.state.co.us/loansgrants/state.co.u

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):	Mancos Conservation District			
	Mailing address:	P O Bo Manco	ox 694 os, CO 81328		
	FEIN #:	84-061	4777		
	Primary Contact:	Gretch	en Rank	Position/Title:	Manager
	Email:	gretche	enr.mancoscd@gmail.com		
	Phone Numbers:	Cell:	970-560-5638	Office:	970-533-7317
	Alternate Contact:	Ann Oliver		Position/Title:	Grant Writer
	Email:	annsol	iver@gmail.com		
	Phone Numbers:	Cell:	970-903-9361	Office:	970-903-9361

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

х

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

Public (Government) – municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities and the local entity should be the grant recipient. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.

Public (Districts) – authorities, Title 32/special districts, (conservancy, conservation, and irrigation districts), and water activity enterprises.

Private Incorporated - mutual ditch companies, homeowners associations, corporations.

Private individuals, partnerships, and sole proprietors are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.

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

#### 3. Provide a brief description of your organization

The Mancos Conservation District (MCD or District) is a public corporation organized under State statute within the Colorado Department of Agriculture. MCD was established on August 30, 1948. The District is located in Montezuma County, with a total acreage of 156,000. The mission of the District is to provide educational, financial, and technical assistance to local land owners to: improve grazing sustainability, foster sound range management, prevent soil erosion, protect water quality and quantity, and prevent the spread of noxious weeds. The MCD generates funding through local, state, and federal sources. Local citizens elect the District board to identify and address local natural resource issues. The board involves locals and experts to help develop strategic plans. Meetings, which are open to the public, are held the second Monday of each month.

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

The Contracting Entity is the same as the Applicant.

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.

MCD has "de-TABORed" and so is not subject to TABOR.

#### 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.

This multi-purpose project will complete two tasks. One task will physically improve the agricultural and ecological function of a 1.5-mile reach of the lower East Mancos River, by installing improved diversion structures at 3 irrigation ditch headings. The improved structures will save irrigators annual maintenance costs, while also allowing fish and sediment passage at higher flows, and promoting channel stability. The other task will integrate existing data into an assessment of the resiliency of the Mancos River in light of a changing climate. This stakeholder assessment will be useful to land owners and managers interested in where/how to invest resources to maintain/improve the value of the Mancos River for multiple uses into the future.

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



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)
1.5 miles	Length of Stream Restored or Protected (linear feet)
	Length of Pipe/Canal Built or Improved (linear feet)
~\$1600/yr/ ditch	Efficiency Savings (acre-feet/year OR dollars/year – circle one)
	Area of Restored or Preserved Habitat (acres)
	Other Explain:

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

Latitude:	37.365825	Longitude:

-108.2414304164

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.

The Mancos River Habitat and Diversion Project – Phase III is a multipurpose project building on and integrating the products of Phases I and II. Phase III will continue to implement the findings developed in the Mancos River Diversion Project- Phase I to improve the ecological and agricultural function of an additional 1.5-mile reach of the lower East Mancos River. In addition, Phase III will integrate existing data into an assessment of the resiliency of the Mancos River to support multiple values and uses, in light of a changing climate.

The objectives of the Mancos River Habitat and Diversion Project – Phase III are:

- 1) To further the efforts begun in the Mancos River Habitat and Diversion Project Phases I and II to decrease the time and costs incurred in diverting irrigation water at 3 irrigation diversions, while also improving channel function and fish passage on the reach of the lower East Mancos River stretching from the West Fork upstream to just above the Middle Fork.
- 2) To complete the effort begun by the Mancos Conservation District, Mountain Studies Institute and the Mancos River Watershed Group in 2015 to integrate existing data into an assessment of the resilience of the Mancos River in meeting multiple uses and values in the face of changing climate conditions.

Many partners have already collaborated with and supported the Mancos Conservation District to lay the foundations for accomplishing these objectives. Among them are the Southwestern Water Conservation District, Mountain Studies Institute, Mesa Verde National Park, Trout Unlimited, the Ute Mountain Ute Tribe, the San Juan National Forest, the Samson, Giles and Graybeal Ditches, private landowners along the Mancos River (see Exhibit C for letters of support), and local volunteers. Objective 1 will implement designs produced with support from the Southwestern Water Conservation District under the Mancos Diversion Project grant. Work on Objective 2 has already begun with a series of five Mancos River Restoration meetings facilitated by Mountain Studies Institute staff with Mancos Valley Watershed Group stakeholders between April and October 2015.

WSRA funds will be used to fund the contracting of technical expertise, the purchase of materials, project management and fiscal administration services.

#### 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>

Task 1 of this project will integrate existing data and information to assess the resiliency of the Mancos River; no water rights will be involved. Task 3 of the project will install more efficient and manageable irrigation diversion structures at three ditch headings. It is our vision that existing water rights of the Samson, Giles, and Graybeal ditches will be enhanced by this project through more efficient diversion structures and more accuracy at the point of diversion.

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.

Evaluation and approval are pending consideration of this application by the Southwest Basin Roundtable on January 13, 2016. A description of the evaluation and approval by the Southwest Basin Roundtable will be provided in a letter from Mike Preston, Roundtable 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 Mancos River Habitat and Diversion Project – Phase III continues implementation of several projects and processes identified in Appendix A of the Southwest Basins Implementation Plan (2015), including the following: Environmental and Recreational Needs (1 and 2-MB); Implementation of the Range-Wide Conservation Agreement and Strategy for Roundtail Chub, Flannelmouth Sucker, and Bluehead Sucker (5-MB); Mancos River Watershed Stakeholders Group (2-M). It will also provide information pertinent to each of the projects and processes included for the Mancos watershed (1 thru 21-M) (e.g.; Mancos Fishing Habitat Improvements (4-M); Habitat Assessment of the Mancos River (5-M), etc.).

The project addresses consumptive needs by constructing improved agricultural irrigation diversion structures that will increase the efficiency and reduce maintenance costs of irrigating a total of 413 acres, and by convening stakeholders to assess and discuss the resiliency of the Mancos River to continue to support multiple uses including agriculture, municipal, environmental and recreational into the future.

The project will compile and assess information on the resilience of the Mancos River to changing conditions, and foster collaboration throughout the watershed, including protection of Colorado Outstanding Waters (Mancos River through Mesa Verde National Park), and the East Fork of the Mancos, for which a TMDL has been issued by the Colorado Department of Public Health and Environment Water Quality Control Division.

The project addresses environmental needs including four CWCB in-stream flow rights in the Mancos watershed and. conservation of habitat supporting aquatic dependent state threatened, endangered and special concern species. Phase III will improve fish passage and aquatic habitat along a reach of the lower East Mancos River. The Mancos River supports roundtail chub, bluehead sucker and flannelmouth sucker as far up at the Town of Mancos (Mancos Valley Watershed Group 2011; Colorado Parks and Wildlife 2012). Roundtail chub, bluehead sucker and flannelmouth sucker are three native fish species addressed by a 6- State Conservation Agreement. Conservation of all three species is identified as a non-consumptive need by the Southwest Basins Roundtable (SWSI 2010), goal and measureable outcome (SW Basin Implementation Plan 2015). In addition, the Mancos River supports bald eagle nesting.

The project addresses recreational needs, goals and measureable outcomes identified by the Southwest Basins Roundtable (SWSI 2010; SW Basin Implementation Plan 2015) including boating, fishing and waterfowl hunting and viewing on Jackson Gulch and Joe Moore Reservoirs, and fishing on the West Mancos, East Mancos and

<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.

Middle Mancos Rivers.

d) Matching Requirement: For requests from the Statewide Fund, the applicants will be required to demonstrate a 25 percent (or greater) match of the total grant request from the other sources, including by not limited to Basin Funds. A minimum match of 5% of the total grant amount shall be from Basin funds. A minimum match of 5% of the total grant amount must come from the applicant or 3rd party sources. Sources of matching funds include but are not limited to Basin Funds, in-kind services, funding from other sources, and/or direct cash match. Past expenditures directly related to the project may be considered as matching funds if the expenditures occurred within 9 months of the date the contract or purchase order between the applicant and the State of Colorado is executed. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in Exhibit A of this application)

The following sources are supplying a total match of \$26,646 (45% of the total grant request):

	<u>Cash</u>	<u>In-Kind</u>
Mancos Conservation District	\$15700	\$1348
National Park Service	\$2500	\$877
Mountain Studies Institute	-	\$2148
Other Watershed Partners and Volunteers	-	\$4073

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.** 

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

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

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).

The Mancos River Habitat and Diversion Project – Phase III addresses non-consumptive needs including fish passage, channel bed and channel bank stability, and channel width to depth ratios together with consumptive needs including efficient and cost effective diversion of irrigation water rights, as well as the multiple interest issues of the resilience of the water supply, water quality, habitat and wildlife supported by the Mancos River system, and highly valued by agricultural, municipal, environmental and recreational interests alike.

These issues were identified as needs by several assessments including the Mancos River Basin In-Stream Flow Report: Preliminary Evaluation of Flow Restoration Options (Beatie and Smith 2011), Mancos Watershed Plan (Mancos Valley Watershed Group 2011), Mancos River Watershed Diversions (Lanci 2009), and the Functional Assessment of the Mancos River Watershed: Mancos Valley and Adjacent Areas (Stacey 2007), as well as the Southwest Roundtable Needs Assessment (SWSI 2010) and Basin Implementation Plan (2015). The Mancos Conservation District; Mancos River Watershed Group, Samson; Giles and Graybeal irrigation ditch companies; Natural Resources Conservation Service; Mesa Verde National Park; San Juan National Forest; Tres Rios BLM Area; Trout Unlimited, and Mountain Studies Institute have helped identify these issues as top concerns to be addressed in the Mancos Watershed.

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.

*The Mancos River Habitat and Diversion Project – Phase III involves communication and collaboration among ditch companies and irrigators, traditional consumptive water interests, and traditionally non-consumptive* 

water interests such as Trout Unlimited, as well as entities that inherently represent multiple water interests, both "consumptive" and "non-consumptive" at the same time including the Mancos Conservation District, the Mancos River Watershed Group, the National Park Service, the Ute Mountain Ute Tribe, or that do not necessarily represent any water interest, such as the Mountain Studies Institute. The specific Project activities that will require collaboration and cooperation include a collaborative assessment of the resilience of the Mancos River to meet multiple uses into the future given a changing climate and implementing a project within a 1.5 mile river reach to improve 3 irrigation diversions.

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.

The Mancos River Habitat and Diversion Project – Phase III continues implementation of several projects and processes identified in Appendix A of the Southwest Basins Implementation Plan (2015), including the following: Environmental and Recreational Needs (1 and 2-MB); Implementation of the Range-Wide Conservation Agreement and Strategy for Roundtail Chub, Flannelmouth Sucker, and Bluehead Sucker (5-MB); Mancos River Watershed Stakeholders Group (2-M). It will also provide information useful to each of the projects and processes included for the Mancos watershed (1 thru 21-M) (e.g.; Mancos Fishing Habitat Improvements (4-M); Habitat Assessment of the Mancos River (5-M), etc.).

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).

Funding from the WSRA account will enable the Mancos Conservation District to purchase the materials and contract the construction, technical facilitation and project management services necessary to complete the Mancos River Habitat and Diversion Project – Phase III.

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.

Direct contributions by Mancos Conservation District and Mesa Verde National Park, and in-kind contributions by the Mancos Conservation District, National Park Service, Mountain Studies Institute, Trout Unlimited, Ute Mountain Ute Tribe, Dr. Peter Stacey of New Mexico State University, Wild Utah Project, CO Natural Heritage Program, CO Division of Reclamation Mining and Safety, CO Cooperative Extension, and San Juan National Forest, and three professional volunteers, allow the Mancos River Habitat and Diversion Project – Phase III to complete the project with 21% (\$18,200) of the total project cost in direct cash contributions and 10% (\$8,446) in-kind contributions. This total match represents 45% of our total Basin Account request.

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.

The water activity not only helps meet environmental needs but also helps sustain agriculture. Assessments including the Mancos River Basin In-Stream Flow Report: Preliminary Evaluation of Flow Restoration

Options (Beatie and Smith 2011), Mancos Watershed Plan (Mancos Valley Watershed Group 2011), Mancos River Watershed Diversions (Lanci 2009), and the Functional Assessment of the Mancos River Watershed: Mancos Valley and Adjacent Areas (Stacey 2007) have identified improvement of diversions and channel and riparian improvements as a priority strategy for improving the rivers functional condition. Improving diversions will assist in sustaining agriculture by reducing annual diversion maintenance costs by approximately \$1600/year/ditch.

Climate Change in Colorado: A Synthesis to Support Water Resources Management and Adaptation (CWCB, CIRES, and WWA 2008) reported that Colorado has grown warmer by two degrees Fahrenheit in the last three decades and this trend is anticipated to continue. The Phase III Project's collaborative Mancos River Resilience Assessment will enable MCD and stakeholders to anticipate changes in the timing of snowmelt, runoff, and use of water by crops, and consider how to improve resilience in the face of these changes.

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.

#### Not applicable.

h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.

The Mancos River Habitat and Diversion Project – Phase III will assist in improving fish passage and aquatic habitat along a reach of the Mancos River situated upstream of a reach near the Colorado/New Mexico State line where roundtail chub, a Federal Candidate Species and Colorado State Species of Special Concern, bluehead sucker and flannelmouth sucker were found to be present by US Fish and Wildlife Service sampling in August 1990 (Mancos Valley Watershed Group 2011). Roundtail chub is a Colorado State Species of Special Concern, and together with bluehead sucker and flannelmouth sucker are species addressed by a 6 State Conservation Agreement.

- 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.

In 2009, the Southwest Basins Roundtable granted \$24,753 to the Mancos River Diversion Project – Phase I to map diversion structures within the Mancos River Watershed, to evaluate options for restoring flows, and to produce designs for new diversion structures. In 2011, CWCB's Watershed Restoration Program granted \$19,900 to install two of the structures designed under the Phase I project. In 2012, the CWCB granted \$119000 to the Mancos River Habitat and Diversion Project Phase II to complement the outcomes of these previous grants by implementing the designs developed under Phase I, and by designing and installing three additional diversion structures in a reach that lies immediately downstream of the structures installed under the Watershed Restoration Grant. Phase III proposes to build upon these successful projects by continuing to improve irrigation structures identified as problematic in the Phase I grant, and to maintain the momentum of the

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

Mancos Valley Watershed Group and community focus on watershed issues through collaboration in assessing the river's resilience in the face of a changing climate.

Continued: Explanation of how the water activity/project meets all applicable **Evaluation Criteria**. **Please attach additional pages as necessary.** 

#### Part IV. – Required Supporting Material

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

The water bodies affected by the water activity are the Mancos River and a small stretch of the East Mancos River. Diversion structures used by three irrigation ditches irrigating a total of 413 acres will be improved. The three ditches and their total decrees are the Samson Ditch (3.33 cfs) irrigation 125 acres, Giles Ditch (6.80 cfs) irrigating 227 acres, and the Graybeal Ditch (2.75 cfs) irrigating 61 acres.

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

The Mancos Conservation District and Mancos Valley Watershed Group have completed of several studies and plans to assess the condition of the Mancos River Watershed and to identify management priorities. These include: the Mancos River Basin In-Stream Flow Report: Preliminary Evaluation of Flow Restoration Options (Beatie and Smith 2011), Mancos Watershed Plan (Mancos Valley Watershed Group 2011), Mancos River Watershed Diversions (Lanci 2009), and the Functional Assessment of the Mancos River Watershed: Mancos Valley and Adjacent Areas (Stacey 2007). In additions, the Ute Mountain Ute Tribe and the Colorado Water Quality Control Division have documented water quality conditions in the upper and lower reaches of the watershed.

The CO Water Quality Control Commission has identified the East Mancos River as impaired for dissolved copper since 2002 and for dissolved manganese since 2012. In 2012, the CO Water Quality Control Division issued a **Total Maximum Daily Load (TMDL)** for the East Mancos River. The TMDL document allocates levels of dissolved copper and manganese to identify load reductions necessary to meet current standards The TMDL finds that the sources of pollutants in the East Mancos are related to both natural geology and historic mine activity. As the TMDL explains, "the East Mancos River is classified as abandoned mine lands through EPA nomenclature, and a Comprehensive Environmental Response, Compensation and Liability Action (CERCLA ID CO0012947186) and site assessment has been performed to characterize, or assess, the abandoned mine lands in the East Mancos River drainage."

*The Ute Mountain Ute Tribe's* **Mancos River Water Quality and Trends Assessment: 2011** – **2012** *summarizes water quality sampling conducted at various sites along the Mancos River within the tribal boundary. The sampling "confirmed historic, longstanding (presumably since irrigation and grazing were initiated in the area circa 1880)* 

trends in water quality impairment for selenium, salinity and bacteria persist. Post-fire water quality impacts to the River from the Weber Fire were significant and resulted in the complete elimination of what had been a healthy and recovering (since the last major fires in the watershed in 2002) population of native fish. High organic content and resulting low dissolved oxygen levels, along with the high levels of several metals at toxic concentrations (copper, zinc, manganese, iron, aluminum)."

The Mancos River Basin In-Stream Flow Report: Preliminary Evaluation of Flow Restoration Options (Beatie and Smith 2011) conducted preliminary water rights and hydrologic analyses of the Mancos River, outlined some potential tools for protecting or restoring flows and recommended some next steps. The four recommendations were 1) examine potential for new instream flow appropriations, 2) examine potential for instream flow acquisitions, 3) continue efficiencies projects, and 4) consider other projects (eradication of non-native phreatophytes, stream channel modifications, etc.) as appropriate.

The Mancos Watershed Plan (Mancos Valley Watershed Group 2011) is based on the EPA's nine minimum elements and includes methods to develop an educational/informational component, to finance the work required and monitoring methods to assess the effectiveness of the programs implemented. The plan identified eight priority management measures to be implemented: restore reaches impacted by historical levees; install new structures at 12 priority diversions along with riparian restoration and improvement of hydrogeomorphology; acquire water for in-stream flows; reduce salinity loads; reduce selenium; close, improve and maintain roads on National Forest lands; reduce sediment loads from burn areas; and rehabilitate habitat in Mancos Canyon. One of the three diversions (the Graybeal Ditch) to be treated by the Mancos River Habitat and Diversion Project – Phase III were among the 12 diversions prioritized in Appendix 1 of this plan.

The Mancos River Watershed Diversions (Lanci 2009) report mapped, photographed and described diversion structures throughout the watershed. All three of the diversions to be addressed in this project were mapped and described in this report.

The Functional Assessment of the Mancos River Watershed: Mancos Valley and Adjacent Areas (Stacey 2007) conducted field assessments of 17 reaches throughout the Mancos Watershed. At each reach, 38 parameters were rated using the Rapid Stream Riparian Assessment Protocol to characterize the reach's Water Quality, Hydrogeomorphology, Fish/Aquatic Habitat, Riparian Vegetation, and Terrestrial Wildlife Habitat. These ratings were then combined to provide an overall score of the functional condition of that reach. One of the reaches assessed in 2007, the Reddert Ranch Reach, falls within the reach where Phase III project proposes to install three improved diversions. The overall score for this reach in 2007 was 3.8 out of a maximum possible overall score of 5. The reach was resurveyed on June 9, 2012 as part of the Phase II project, with an overall score of 3.5.

The Climate Change in Colorado: A Synthesis to Support Water Resources Management and Adaptation Report (Lukas et al, 2014) provides a synthesis of climate science for all of Colorado. Mountain Studies Institute prepared the Climate Change Assessment for the San Juan Mountains, Southwest Colorado (Nydick et al. 2012) integrating climate research specifically targeting the San Juan Mountains and their watersheds. Mean annual temperatures in Southwestern Colorado have risen almost 2°C in only three decades (Rangwala and Miller 2010), a rate of warming greater than the western U.S., or any other region of the U.S. except Alaska (Ray et al. 2008). The timing of snowmelt has shifted two weeks earlier in Western Colorado and this earlier seasonal release of water resources is of particular concern to all western states (Clow 2010). Fire and disturbance regimes are considered to be outside of the historic range of variability in some forest types (Romme et al 2009). Current challenges for the region include changes in forests due to pests and diseases, drought challenges for agriculture,

intensive recreation use, fire management for natural and prescribed fires, and increasing development in the wildland-urban interface. Communities are vulnerable to changes from a warmer and dryer climate that would affect frequency and intensity of wildfires, shift vegetation and range of forest types, and increase pressures on water supplies.

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

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

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

# **REPORTING AND FINAL DELIVERABLE**

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

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

# PAYMENT

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

# Water Supply Reserve Account – Application Form Revised October 2013

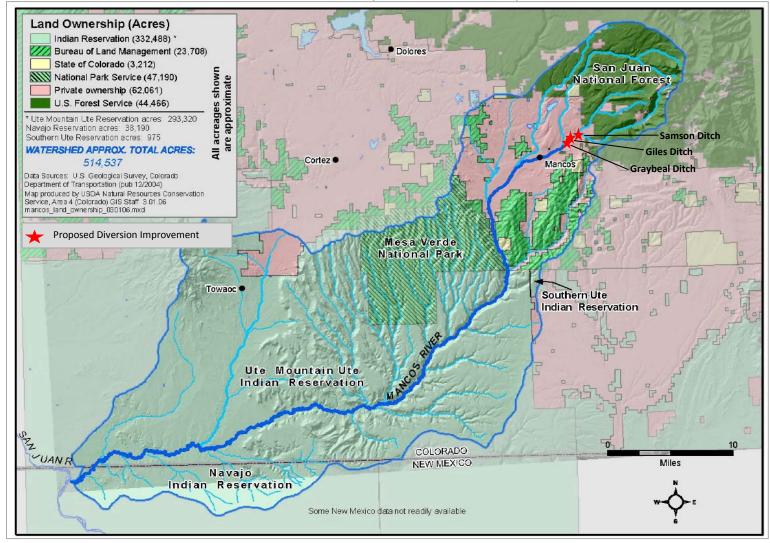
The above statements are true to the best of my knowledge: Signature of Applicant:	fad 1 fan 1 an 1 an 1 an 1 an 1 an 1 an 1 a
Print Applicant's Name: Ann Oliver, Grant Writer for Mancos Conservation District	
Project Title: Mancos River Habitat and Diversion Project Phase III Date: January 4, 2016	

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

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

# Exhibit B <u>Mancos Habitat and Diversion Improvement Project Phase III Map</u>

Mancos Watershed and Proposed Diversion Improvements



Photos of Existing Irrigation Diversion Structures



Samson Diversion



Graybeal Diversion

