



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

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**TO:** Colorado Water Conservation Board Members

**FROM:** Craig Godbout  
Program Manager - Water Supply Reserve Account Grant Program  
Water Supply Planning Section

**DATE:** January 13, 2016

**AGENDA ITEM:** 24 (a-e) WSRA Grant Requests

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### Staff Recommendation - Action Items: WSRA Grant Requests

A summary of staff's recommendation for each WSRA application is provided in the first component of the attached table. If applicable, the table also includes a breakdown of match amounts for applications that include a request for Statewide Account WSRA funds.

Favorable recommendations may be contingent on providing the CWCB with additional information, clarifications, or modifications in the scope of work. Please refer to the Water Activity Summary Sheets contained within this agenda item to find a summary of staff's review and any conditions associated with each recommendation.

### Background:

For this agenda item the Board is provided with a brief overview of applications to the Water Supply Reserve Account (WSRA). Attachments to this memo include:

- Summary spreadsheet detailing funding requests for the basin and statewide accounts;
- Summary spreadsheet displaying current WSRA Balance Summary of Fund Appropriations and Receipts by Fiscal Year, and Fund Distribution by Basin and Statewide Account.
- Water Activity Summary Sheets which provide an overview, discussion, issues/additional needs, and staff recommendation regarding funding, partial funding, or not funding the applications.

Staff's review of the applications involves the following steps:

- 1) Applications are reviewed for completeness based on the information requirements, which are primarily outlined in Part 2 of the Criteria and Guidelines (C&G).
- 2) Applications are reviewed to verify that the water activity meets the eligibility requirements in Section 39-29-108 (III) C.R.S. (C&G, Part 2) and the threshold criteria, which are based on the requirements of Section 39-29-108 (III) C.R.S., and two



sections of the Water for the 21st Century Act (House Bill 1177); Section 37-75-102 and Section 37-75-104(2)(c) (C&G, Part 3). Staff also verifies that the applicant was an eligible entity to receive funding (C&G, Part 2).

- 3) Staff then prepares the Water Activity Summary Sheet which documents the outcome of the review process and contains staff's recommendations.

**Water Supply Reserve Account Balance Summary and Project Status Report:**

To provide the Board updates on the status of specific Water Supply Reserve Account grant applications and projects, staff provides a status report in the CWCB Director's Report. The WSRA status report includes the following information:

- List of completed WSRA projects;
- List of WSRA projects in progress; and
- List of WSRA projects in the contracting and procurement process.



Water Supply Reserve Account Applications for Consideration at the CWCB January 2016 Board Meeting												
Agenda Item	Basin	Applicant	Name of Water Activity	Basin(s) Account Request	Statewide Account Requests	Total Request	Cash Match	In-Kind Match	Total Match	Total Project or Study Costs	Staff Recommendations	PM
24(a)	Colorado	Windy Gap Bypass Committee (Applicant) Trout Unlimited (Fiscal Agent)	Windy Gap Reservoir Modification Project (Bypass Project) - Engineering	\$30,000	\$0	\$30,000	\$355,000	\$0	\$355,000	\$385,000	Staff recommends approval of up to \$30,000 from the Colorado Basin Account	Brent Newman
24(b)	Colorado	Colorado Mesa University	Integrated Water Management Planning Framework	\$43,404	\$0	\$43,404	\$77,942	\$29,256	\$107,198	\$150,602	Staff recommends approval of up to \$43,404 from the Colorado Basin Account	Chris Sturm
24(c)	Metro	Metropolitan State University of Denver - One World One Water Center	Theatre Troupe Water Outreach Project	\$8,300	\$0	\$8,300	\$6,000	\$0	\$6,000	\$14,300	Staff recommends approval of up to \$8,300 from the Metro Account	Kate McIntire
24(d)	Southwest	San Miguel Watershed Coalition & TU	San Miguel River Stream Management Plan Pilot Project	\$32,138	\$0	\$32,138	\$81,413	\$15,000	\$96,413	\$128,551	Staff recommends approval of up to \$32,138 from the Southwest Basin Account	Chris Sturm
24(e)	Southwest	Town of Mancos	Mancos Raw Water Improvements	\$81,765	\$0	\$81,765	\$81,766	\$0	\$81,766	\$163,531	Staff recommends apptoval of up to \$81,765 from the Southwest Basin Account	Craig Godbout
				<b>\$195,607</b>	<b>\$0</b>	<b>\$195,607</b>						

<u>Basin</u>	<u>Basin Account Requests</u>	<u>Statewide Account Requests</u>	<u>Total Requests</u>	<u>Current Basin Account Balances</u>	<u>Remaining Basin Account Balances (if all requests approved)</u>	<u>Current Statewide Account Balance</u>	<u>Remaining Statewide Account Balance (if all requests approved)</u>
<u>Arkansas Basin</u>	\$0	\$0	\$0	\$118,766	\$118,766		
<u>Colorado Basin</u>	\$73,404	\$0	\$73,404	\$415,588	\$342,184		
<u>Gunnison Basin</u>	\$0	\$0	\$0	\$760,961	\$760,961		
<u>Metro Basin</u>	\$8,300	\$0	\$8,300	\$238,494	\$230,194		
<u>North Platte</u>	\$0	\$0	\$0	\$752,257	\$752,257	<b>\$1,898,512</b>	<b>\$1,898,512</b>
<u>Rio Grande</u>	\$0	\$0	\$0	\$318,013	\$318,013		
<u>Southwest</u>	\$113,903	\$0	\$113,903	\$782,849	\$668,946		

<u>South Platte</u>	\$0	\$0	\$0	\$352,213	\$352,213
<u>Yampa/White/Green</u>	\$0	\$0	\$0	\$1,030,785	\$1,030,785
<u>Water Supply Reserve Account</u>					
<u>Total Requests</u>	\$195,607	\$0	\$195,607	\$4,769,926	\$4,574,319



**COLORADO WATER CONSERVATION BOARD**  
**Water Supply Reserve Account - Balance Summary**  
**November 2015**

Updated 01/04/16

<b>Fund Appropriation and Receipts</b>				
<b>Fiscal Year</b>	<b>Legislative Appropriation</b>	<b>Funds Received</b>	<b>Statewide Account</b>	<b>Basin Account</b>
2006/2007	\$10,000,000	\$10,000,000	\$5,500,000	\$4,500,000
2007/2008	\$6,000,000	\$6,000,000	\$4,200,000	\$1,800,000
2008/2009	\$10,000,000	\$7,000,000	\$4,300,000	\$2,700,000
2009/2010	\$5,775,000	\$5,775,000	\$4,215,750	\$1,559,250
2010/2011	\$6,000,000	\$6,000,000	\$4,380,000	\$1,620,000
2011/2012	\$7,000,000	\$7,000,000	\$4,732,000	\$2,268,000
2012/2013	\$10,000,000	\$7,157,724	\$4,580,943	\$2,576,781
2013/2014	\$10,000,000	\$10,091,639	\$6,458,649	\$3,632,990
2014/2015	\$10,000,000	\$10,000,000	\$6,400,000	\$3,600,000
2015/2016	\$10,000,000	\$4,000,000	\$2,560,000	\$1,440,000
Interest	N/A	\$2,857,935	\$1,829,078	\$0
Prior Years Interest Adjustment			\$1,028,856	\$0
2014/2015 Interest	N/A	\$ 240,216	\$240,216	\$0
2015/2016 Interest	N/A	\$ 38,734	\$38,734	\$0
<b>TOTAL</b>	<b>\$74,775,000</b>	<b>\$76,161,247</b>	<b>\$50,464,226</b>	<b>\$25,697,021</b>

Interest diverted to SW per DNR reconciliation

Note: The WSRA is a Severance Tax "Tier II" program with 40% of funds distributed on July 1, 30% on January 1, and the final 30% on April 1.

In FY 2008/2009 the final 30% installment of \$3,000,000 was not received due to the State's budgetary shortfall.

*In January 2012 interest for the program from its inception to date was credited directly to the Statewide Account.*

*Interest from January 2012 on is regularly calculated by the Treasury and credited to the Statewide Account.*

<b>Fund Distribution</b>					
<b>Basin</b>	<b>Approved Basin Grants</b>	<b>Total Basin Funds</b>	<b>Basin Account Balance</b>	<b>Approved State Grants</b>	<b>Statewide Account Balance</b>
Arkansas	\$2,736,459	\$2,855,225	\$118,766	\$8,365,160	
Colorado	\$2,439,637	\$2,855,225	\$415,588	\$5,164,260	
Southwest *	\$2,072,376	\$2,855,225	\$782,849	\$6,757,109	
Gunnison *	\$2,094,264	\$2,855,225	\$760,961	\$3,812,791	
Metro	\$2,616,731	\$2,855,225	\$238,494	\$6,713,284	
North Platte	\$2,102,968	\$2,855,225	\$752,257	\$508,078	
Rio Grande	\$2,537,212	\$2,855,225	\$318,013	\$10,260,323	
South Platte *	\$2,503,012	\$2,855,225	\$352,213	\$6,372,646	
Yampa/White	\$1,824,440	\$2,855,225	\$1,030,785	\$612,063	
<b>TOTAL</b>	<b>\$20,927,099</b>	<b>\$25,697,021</b>	<b>\$4,769,922</b>	<b>\$48,565,714</b>	<b>\$1,898,512</b>
<b>TOTAL APPROVED GRANTS</b>					<b>\$69,492,813</b>

Note: Only includes grants approved by CWCB

\*See Comments - Figures have changes due to grantee's withdrawn funding

**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**January 25-26, 2015**  
**Agenda Item 24(a)**

**Applicants:** Windy Gap Bypass Committee & Trout Unlimited

**Fiscal Agent:** Trout Unlimited

**Water Activity Name:** Windy Gap Reservoir Modification Project (Bypass Project)  
– Engineering

**Water Activity Purpose:** Multipurpose

**County:** Grand

**Drainage Basin:** Colorado

**Water Source:** Colorado River

**Amount Requested/Source of Funds:** \$30,000 Colorado Basin Account (total grant request)

**Matching Funds:** Applicant Match: \$355,500 (cash & in kind) =92.2% of the total project cost of \$385,500  
(refer to *Funding Summary/Matching Funds* section below)

<b>Staff Recommendation:</b>
Staff recommends approval of up to \$30,000 from the Colorado Basin Account to help fund the project titled: Windy Gap Reservoir Modification Project (Bypass Project) – Engineering.

**Water Activity Summary:** WSRA funds, if approved, will be expended to fund the project titled Windy Gap Reservoir Modification Project (Bypass Project) – Engineering. Windy Gap Reservoir is located along the Colorado River approximately 4 miles west of the town of Granby, in Grand County, Colorado. Aquatic habitat of the Colorado River in the vicinity of Windy Gap is suboptimal. The Gold Medal trout fishery appears to be in decline over recent years and fish passage is blocked by the dam and impeded in places by shallow riffles. Water temperatures commonly exceed standards set by the Colorado Department of Public Health and Environment during portions of the summer, and recent studies suggest key bio-indicator species are nearly extirpated for many miles below the reservoir.

The Windy Gap Bypass Committee is a stakeholder group whose goal is to ensure the construction of the Windy Gap Reservoir Bypass, a project designed to re-connect the Colorado River and its habitat by restoring approximately one mile of the river currently inundated by the Windy Gap Dam and Reservoir by constructing a bypass channel around the reservoir. Members of the Bypass Committee include Northern Colorado Water Conservancy District & Municipal Subdistrict, Colorado Parks and Wildlife, Grand County, Colorado River Water Conservation District, Middle Park Water Conservancy District, Upper Colorado River Alliance, and Trout Unlimited.

The primary objective of the Project is to facilitate the recovery of aquatic species by improving existing conditions and physical processes impacted by Windy Gap. Specifically, the primary Project objectives are to:

- Improve sediment transport around or through the reservoir,
- Reduce stream bed armoring downstream of the reservoir,
- Moderate elevated stream temperatures,
- Provide connectivity for aquatic life and fish passage, and
- Enhance aquatic habitat.

The next step in the Project is to conduct field work, preliminary engineering of the major design components, and initiate permitting. Work will include:

- Wetlands delineation, Endangered Species Act assessment, and historic/cultural assessment needed for 404 permit
- Topographic and existing conditions mapping
- Channel design and hydraulic assessments
- Preliminary diversion structure plans
- Refine opinion of probable cost

**Discussion:** The Colorado Basin Roundtable identified this project as a priority project for the Grand County region in the final Basin Implementation Plan (BIP).

Additionally, this project meets several critical actions as identified in Chapter 10 of Colorado's Water Plan:

- **A: Supply – Demand Gap**
  - 1. Support and assist the basin roundtables in moving forward priority municipal, industrial, environmental, and agricultural projects and methods identified in their BIPs through technical, financial and facilitation support when requested by a project proponent and the pertinent BRT.
- **E: Storage**
  - 2. Prioritize grants and loans to support the implementation of BIP-identified multipurpose projects and methods, taking into consideration locally identified geographic and seasonal gaps.
- **F: Watershed Health, Environment, and Recreation**
  - 7: Prioritize and implement projects identified in master planning efforts.

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

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

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Committee members	\$355,500	n/a	\$355,500
WSRA Colorado Basin Account	\$30,000	n/a	\$30,000
<b>Total</b>	<b>\$385,500</b>	<b>n/a</b>	<b>\$385,500</b>

**CWCB Project Manager:** Brent Newman

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

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

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

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

**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**January 25-26, 2015**  
**Agenda Item 24(b)**

**Applicant & Fiscal Agent:** Colorado Mesa University – Ruth Powell Hutchins Water Center

**Water Activity Name:** Integrated Water Management Planning Framework

**Water Activity Purpose:** Multipurpose

**County:** throughout Colorado Basin

**Drainage Basin:** Colorado

**Water Source:** Colorado River and tributaries

**Amount Requested/Source of Funds:** \$43,404 Colorado Basin Account (total grant request)

**Matching Funds:** Applicant Match: \$107,198 (cash & in kind) = 71.1% of the total project cost of \$150,602  
(refer to *Funding Summary/Matching Funds* section below)

<b>Staff Recommendation:</b>
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Staff recommends approval of up to \$43,404 from the Colorado Basin Account to help fund the project titled: Integrated Water Management Planning Framework.
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**Water Activity Summary:** WSRA funds, if approved, will be expended to fund the Colorado Basin Roundtable Integrated Water Management Planning Framework. This project will provide the informational and procedural framework for conducting comprehensive integrated water management plans in the Colorado River Basin. The purpose of these plans will be to identify ways to provide sufficient water for environmental needs while recognizing the needs of agricultural, domestic, and industrial water users.

This project will include the following tasks:

- 1. Information Gathering:** An extensive review and compilation of existing information relevant to the development of integrated water management plans. The resulting compilation will be available in table form and linked to a map of the basin to show spatially which stream reaches have been studied in what ways.
- 2. Information Synthesis:** A detailed GIS map will utilize the information collected in task #1 to depict what available data shows about stream health in each stream segment in the basin.
- 3. Stakeholder Engagement and Education:** Consultation with stakeholders in order to refine the goals and objectives of the basin-wide planning effort; achieve consensus on the recommended tools and processes for developing integrated water management plans; and establish priorities for implementation. Once priorities are established, outreach will be conducted in the priority sub-basins to solicit interest in developing detailed plans.

**4. Develop Framework for Stream Management Planning:** Drawing on the work done in tasks two and three, develop and describe a framework for the creation of integrated water management plans at the sub-basin level that facilitates the integration of discrete plans into a comprehensive tool that can be applied basin-wide.

**Discussion:** The Colorado Basin Roundtable identified a basin-wide stream management plan as a top priority in the final Basin Implementation Plan (BIP). The roundtable has applied for and been approved for a grant in the amount of \$67,947 from the CWCB Stream Management Plan Program to assist in this project.

“Stream management plans can play an important role in identifying both the needs of environmental attributes, and the projects and methods that will benefit those attributes.” – Colorado’s Water Plan, Section 6.6, page 6-168.

Additionally, the development of stream management plans is identified as a critical action for Watershed Health, Environment and Recreation: #3 in chapter 10 of Colorado’s Water Plan, page 10-12.

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

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

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
CWCB Stream Management Plan funds	\$67,947	n/a	\$67,947
In-kind resources of time, project partners	n/a	\$29,256 <sup>(1)</sup>	\$29,256
Cash funds – Colorado Mesa University	\$9,995	n/a	\$9,995
Subtotal Matching Funds	\$77,942	\$29,256	\$107,198
WSRA Colorado Basin Account	\$43,404	n/a	\$43,404
<b>Total</b>	<b>\$121,346</b>	<b>\$29,256</b>	<b>\$150,602</b>

<sup>(1)</sup> In-kind costs broken down in Exhibit A

**CWCB Project Manager:** Brent Newman/Chris Sturm

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

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

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

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

**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**January 25-26, 2016**  
**Agenda Item 24(c)**

**Applicant & Fiscal Agent:** Metropolitan State University of Denver – One World One Water Center for Urban Water Education and Stewardship

**Water Activity Name:** Theatre Troupe Water Outreach Project

**Water Activity Purpose:** Educational

**County:** Front Range

**Drainage Basin:** Metro

**Water Source:** N/A

**Amount Requested/Source of Funds:** \$8,300 Metro Basin Account (total grant request)

**Matching Funds:** Applicant Match: \$6,000 (cash & in kind) = 41.9% of the total project cost of \$14,300  
(refer to *Funding Summary/Matching Funds* section below)

<b>Staff Recommendation:</b>
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Staff recommends approval of up to \$8,300 from the Metro Basin Account to help fund the project titled: MSU Denver Theatre Troupe Water Outreach Project.
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**Water Activity Summary:** This project is a collaboration between the MSU One World One Water Center, the City of Boulder, Aurora Water, and Denver Water. In 2015, Denver Water, the City of Boulder, and Aurora Water collaborated with the One World One Water Center, and the MSU Denver Theater Department, to create a first-of-its-kind theater performance on water conservation and water protection for fifth & sixth-graders in their service areas. The response was phenomenal, and over 3,000 students, and their teachers and parents, attended the performances at several schools and the three utility water festivals in Denver, Boulder, and Aurora. This proposal would allow the troupe to perform again in 2016 for fifth and sixth graders at water festivals in Denver, Boulder, and Aurora. The applicant anticipates connecting with over 4,000 students in 2016, and could use this program as a pilot project for other similar collaborations across the state.

Section 9.5 of Colorado’s Water Plan addresses Outreach, Education and Public Engagement, specifically noting that the Plan “provides technical and financial assistance for high quality, balanced, and grassroots water education and outreach efforts that inform Coloradans about the issues so they engage in determining Colorado’s water future.” The Plan recognizes the extensive work that has occurred to help educate and engage local stakeholders and the ongoing water education activities that advance the plan’s goals.

Section 9.5 of Colorado’s Water Plan charts a path to expand this work in the future, specifically for 2015 and beyond. The Plan proposes the creation of a new outreach, education and public engagement grant fund; this current proposal would be part of the first step towards the sustained educational outreach, education and engagement activities that Colorado’s Water Plan envisions and serve as a precursor to those educational activities in 2016 and beyond, funded by CWCB. This



applicant recognizes the many current effective efforts that are on-going for youth education in this State; this application is focused on university student participation.

The Metro and South Platte Basin Implementation Plan includes a section on “Suggested Activities: 2015 and Beyond” which envisions an educational outreach plan that “maximizes existing opportunities and avoids duplication of efforts.” Key elements identified in the Metro and SP BIP include a focus on developing messages, leveraging existing basin resources, complementing existing state efforts, and establishing success metrics, while expanding public awareness and support. This proposal is intended to be one of the first accomplishments of these key elements while serving as a bridge between the WSRA-funded education efforts and the newly envisioned CWCB-funded education efforts articulated in Colorado’s Water Plan; it builds on existing university water education programs in the State and looks to these students as future water diplomats of the aspirations articulated in Colorado’s Water Plan.

The Colorado State Science Standards for 6th graders specifically requires that students learn about their water supply, the importance of water, and local water issues. This is an excellent program to meet those requirements. We would like to continue this project into the future, but need some financial support.

**Discussion:** No additional discussion is required.

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

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

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Metro Account	\$8,300	n/a	\$8,300
Matching Funds (refer to application)	\$6,000	\$0	\$6,000
<b>Total</b>	<b>\$14,300</b>	<b>\$0</b>	<b>\$14,300</b>

**CWCB Project Manager:** Kate McIntire

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

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

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

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

**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**January 25-26, 2016**  
**Agenda Item 24(d)**

**Applicants:** San Miguel Watershed Coalition & Trout Unlimited  
**Fiscal Agent:** Trout Unlimited  
**Water Activity Name:** San Miguel River Stream Management Plan, Pilot Project  
**Water Activity Purpose:** Nonconsumptive  
**County:** San Miguel  
**Drainage Basin:** San Miguel River Basin  
**Water Source:** San Miguel River  
**Amount Requested/Source of Funds:** \$32,138 Southwest Basin Account (total grant request)  
**Matching Funds:** Applicant Match: \$96,413 (cash & in-kind) = 75% of the total project cost of \$128,551  
(refer to *Funding Summary/Matching Funds* section below)

<b>Staff Recommendation:</b>
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Staff recommends approval of up to \$32,138 from the Southwest Basin Account to help fund the project titled: San Miguel River Stream Management Plan, Pilot Project.
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**Water Activity Summary:** While developing its Basin Implementation Plan (BIP), the Southwest Basin Roundtable (SWBRT) identified a significant gap in information necessary to understand environmental and recreational (E&R) water needs. Understanding E&R water needs is particularly challenging given the size of the area and diversity of the nine basins that make up the SWBRT's area of interest. Given these challenges, the SWBRT voted to support the concept of a pilot project to develop E&R water needs information in one of the basins with the thought that the approach could be replicated, with adjustments to meet local needs, in other basins. The San Miguel basin was proposed for the pilot project. The San Miguel Watershed Coalition (SMWC) is interested in developing an understanding of E&R water needs within the San Miguel River Basin and a stream management plan to help guide cooperative water management efforts. This work should provide a model for conducting cost---effective watershed ---scale evaluations of E & R needs and implementing stream management planning efforts in other areas of the Southwest Basin.

The San Miguel River Pilot Project will assess environmental and recreational water needs within the San Miguel River basin and identify potential approaches to meet identified gaps, if any. The project consists of the following steps:

1. Review E&R attributes within the San Miguel River basin identified in the BIP for completeness;
2. Identify potential water gaps to support those attributes;

3. Assist the project sponsors and other stakeholders in defining desired outcomes for E&R uses within the project area and to identify projects to achieve the desired outcomes in a cooperative setting
4. Evaluate effectiveness of implementation of said projects

**Discussion:** The proposed project aligns well with several Goals and Measurable Outcomes in the Southwest Basin Implementation Plan, such as “Meet Environmental Needs” Goal E2: *Protect, maintain, monitor and improve the condition and natural function of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries, and to support native species and functional habitat in the long term, and adapt to changing conditions* (Section 1 - Basin Goals and Measurable Outcomes, Table 1, page 16). This proposal assists the Southwest Basin achieve these Goals and Measurable Outcomes by implementing a San Miguel-Basin IPP – *San Miguel Watershed Coalition*, ID No. 25-SB, Appendix A, page 18 of 18.

It is CWCB staff’s opinion that this proposal advances the Goals and Measurable Outcomes of Colorado’s Water Plan by reflecting the intent of the Programmatic *Critical Watershed, Environment, and Recreation Actions* #3 (Develop stream management plans for priority streams (identified in a BIP or otherwise) as having environmental or recreational value. As part of this work, the CWCB will provide guidelines and templates for developing stream management plans, and will conduct ongoing analyses through SWSI.), as exhibited in Chapter 10: *Critical Action Plan*, Section 10.3: Critical Goals and Actions, F. Watershed Health, Environment, and Recreation, page 10-12.

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

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

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
CWCB Watershed Restoration Grant	\$64,275	\$0	\$64,275
Southwestern Water Conservation District	\$14,138	\$0	\$14,138
Local Governments & Foundation	\$3,000	\$0	\$3,000
San Miguel Watershed Coalition/TU/American Whitewater	\$0	\$15,000	\$15,000
Subtotal Match	\$81,413	\$15,000	\$96,413
Southwest Basin WSRA Account	\$32,128	n/a	\$32,128
<b>Total</b>	<b>\$113,541</b>	<b>\$15,000</b>	<b>\$128,541</b>

**CWCB Project Manager:** Chris Sturm

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

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

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

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

**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**January 25-26, 2016**  
**Agenda Item 24(e)**

**Applicant & Fiscal Agent:** Town of Mancos  
**Water Activity Name:** Mancos Raw Water System Improvements  
**Water Activity Purpose:** M&I  
**County:** Montezuma  
**Drainage Basin:** Southwest/Mancos River Basin  
**Water Source:** West Fork of the Mancos River & Jackson Gulch Reservoir  
**Amount Requested/Source of Funds:** \$81,765 Southwest Basin Account (total grant request)  
**Matching Funds:** Applicant Match: \$81,766 (cash) = 50% of the total project cost of \$163,531  
(refer to *Funding Summary/Matching Funds* section below)

<b>Staff Recommendation:</b>
------------------------------

Staff recommends approval of up to \$81,765 from the Southwest Basin Account to help fund the project titled: Mancos Raw Water System Improvements.
---

**Water Activity Summary:** WSRA funds, if approved, will be expended to fund replacement of the existing Raw Water Intake System for the Town of Mancos. The current system has very limited means to measure and control water flow from the river and the Water Treatment Plant Operator has to continually monitor the system to ensure that water is flowing to the WTP. Because the flow cannot be accurately metered, water at multiple locations ends up overflowing onto the ground. Additionally, the pipes conveying water to and from the ponds are subject to debris blockage causing more water to be wasted. When the pipe plugs up there is concern with interruption of flow to the treatment plant. More specifically, components of the Raw Water Intake System replacement will consist of:

1. Replace water lines between Pond 1 and Pond 2, and Pond 2 to the Parshall Flume and Control Box;
2. Provide decanter devices at the outlet of Pond 1 and Pond 2 to prevent debris from plugging pipes and causing ponds to overflow;
3. Provide a baffle (curtain) across each of the ponds to reduce short circuiting and improve settling of suspended solids;
4. Provide new Parshall Flume and Control Box and relocate them closer to the raw water pond to allow the Operator to dial in proper flow rates at the river head gate using the new 3" Parshall Flume;
5. Relocation of the Parshall Flume and Control Box further upstream will also provide additional pressure head of the raw water entering the water treatment plant. This will help treatment plant operations;
6. Provide return pipes back to the river to keep water off the ground. Return pipes will be from Pond 1, Pond 2, the control box, and the raw water manhole. These return pipes will provide

the operator with assurance that any excess water flowing through the raw water intake system will quickly be routed back into the River without any of the water spilling onto the ground.

The objectives of these improvements are as follows:

1. Provide accurate metering and control of water entering the pond system;
2. Eliminating extensive water spilling onto the ground and providing return pipes back to the river;
3. Provide better quality raw water going to the water treatment plant by reducing the short circuiting that is happening in the ponds.

**Discussion:** The proposed project aligns well with several Goals and Measurable Outcomes in the Southwest Basin Implementation Plan, such as “Meet Municipal and Industrial Water Needs” Goal C1: *Pursue a high success rate for identified specific and unique IPPs to meet the municipal gap*; and Goal C2: *Provide safe drinking water to Southwest Colorado’s citizens and visitors* (Section 1 - Basin Goals and Measurable Outcomes, Table 1, page 14), while also supporting the achievement of Measurable Outcomes #1: *Complete 40\* IPPs aimed at meeting municipal water needs*; #2: *Consistently meet 100% of residential, commercial and industrial water system demands identified in SWSI 2010 in each sub-basin, while also encouraging education and conservation to reduce demand*; and #3: *Implement at least 1\* IPP that protects or enhances the ability of public water supply systems to access and deliver safe drinking water that meets all health-based standards* (Section 1 - Basin Goals and Measurable Outcomes, Table 1, page 14). This proposal assists the Southwest Basin achieve these Goals and Measurable Outcomes by implementing a Mancos River Basin IPP – *Town of Mancos*, ID No. 14-M, Appendix A, page 13 of 18.

It is CWCB staff’s opinion that this proposal advances the Goals and Measurable Outcomes of Colorado’s Water Plan by reflecting the intent of the Programmatic *Critical Actions to Meet Water Gaps* #1 (Support and assist the basin roundtables in moving forward priority municipal, industrial, environmental, and agricultural projects and methods identified in their BIPs through technical, financial and facilitation support when requested by a project proponent and the pertinent BRT.), as exhibited in Chapter 10: *Critical Action Plan*, Section 10.3, A. Supply-Demand Gap, page 10-9.

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

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

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Southwest RT WSRA Basin Account	\$81,765	n/a	\$81,765
Town of Mancos	\$81,766	\$0	\$81,766
<b>Total</b>	<b>\$163,531</b>	<b>\$0</b>	<b>\$163,531</b>

**CWCB Project Manager:** Craig Godbout

All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn

be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

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

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

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



**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**January 25-26, 2015**  
**Agenda Item 24(a)**

**Applicants:** Windy Gap Bypass Committee & Trout Unlimited

**Fiscal Agent:** Trout Unlimited

**Water Activity Name:** Windy Gap Reservoir Modification Project (Bypass Project)  
– Engineering

**Water Activity Purpose:** Multipurpose

**County:** Grand

**Drainage Basin:** Colorado

**Water Source:** Colorado River

**Amount Requested/Source of Funds:** \$30,000 Colorado Basin Account (total grant request)

**Matching Funds:** Applicant Match: \$355,500 (cash & in kind) =92.2% of the total project cost of \$385,500  
(refer to *Funding Summary/Matching Funds* section below)

<b>Staff Recommendation:</b>
Staff recommends approval of up to \$30,000 from the Colorado Basin Account to help fund the project titled: Windy Gap Reservoir Modification Project (Bypass Project) – Engineering.

**Water Activity Summary:** WSRA funds, if approved, will be expended to fund the project titled Windy Gap Reservoir Modification Project (Bypass Project) – Engineering. Windy Gap Reservoir is located along the Colorado River approximately 4 miles west of the town of Granby, in Grand County, Colorado. Aquatic habitat of the Colorado River in the vicinity of Windy Gap is suboptimal. The Gold Medal trout fishery appears to be in decline over recent years and fish passage is blocked by the dam and impeded in places by shallow riffles. Water temperatures commonly exceed standards set by the Colorado Department of Public Health and Environment during portions of the summer, and recent studies suggest key bio-indicator species are nearly extirpated for many miles below the reservoir.

The Windy Gap Bypass Committee is a stakeholder group whose goal is to ensure the construction of the Windy Gap Reservoir Bypass, a project designed to re-connect the Colorado River and its habitat by restoring approximately one mile of the river currently inundated by the Windy Gap Dam and Reservoir by constructing a bypass channel around the reservoir. Members of the Bypass Committee include Northern Colorado Water Conservancy District & Municipal Subdistrict, Colorado Parks and Wildlife, Grand County, Colorado River Water Conservation District, Middle Park Water Conservancy District, Upper Colorado River Alliance, and Trout Unlimited.

The primary objective of the Project is to facilitate the recovery of aquatic species by improving existing conditions and physical processes impacted by Windy Gap. Specifically, the primary Project objectives are to:

- Improve sediment transport around or through the reservoir,
- Reduce stream bed armoring downstream of the reservoir,
- Moderate elevated stream temperatures,
- Provide connectivity for aquatic life and fish passage, and
- Enhance aquatic habitat.

The next step in the Project is to conduct field work, preliminary engineering of the major design components, and initiate permitting. Work will include:

- Wetlands delineation, Endangered Species Act assessment, and historic/cultural assessment needed for 404 permit
- Topographic and existing conditions mapping
- Channel design and hydraulic assessments
- Preliminary diversion structure plans
- Refine opinion of probable cost

**Discussion:** The Colorado Basin Roundtable identified this project as a priority project for the Grand County region in the final Basin Implementation Plan (BIP).

Additionally, this project meets several critical actions as identified in Chapter 10 of Colorado's Water Plan:

- **A: Supply – Demand Gap**
  - 1. Support and assist the basin roundtables in moving forward priority municipal, industrial, environmental, and agricultural projects and methods identified in their BIPs through technical, financial and facilitation support when requested by a project proponent and the pertinent BRT.
- **E: Storage**
  - 2. Prioritize grants and loans to support the implementation of BIP-identified multipurpose projects and methods, taking into consideration locally identified geographic and seasonal gaps.
- **F: Watershed Health, Environment, and Recreation**
  - 7: Prioritize and implement projects identified in master planning efforts.

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

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

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Committee members	\$355,500	n/a	\$355,500
WSRA Colorado Basin Account	\$30,000	n/a	\$30,000
<b>Total</b>	<b>\$385,500</b>	<b>n/a</b>	<b>\$385,500</b>

**CWCB Project Manager:** Brent Newman

***THE COLORADO BASIN ROUNDTABLE***  
***C/O P.O. BOX 1120***  
***GLENWOOD SPRINGS, COLORADO***  
***81602***

Nov. 30, 2015

**Craig Godbout**  
**Colorado Water Conservation Board**  
**Water Supply Planning Section**  
1313 Sherman Street  
 [\(303\) 866-3441, ext 3210](tel:(303)866-3441) (office)  
 [\(970\) 218-9407](tel:(970)218-9407) (cell)  
[craig.godbout@state.co.us](mailto:craig.godbout@state.co.us)

Dear Craig:

The Colorado Basin Roundtable voted unanimously on Nov. 30, 2015 by email balloting to support the Windy Gap Reservoir Modification Project request for \$30,000 in CBRT WSRA Basin account funds. Trout Unlimited will be the fiscal agent for the Windy Gap Bypass Committee, which seeks to reconnect the Colorado River around the Windy Gap Reservoir in Grand County. The requested money will leverage \$355,500 in other secured funding. The project is a multi-basin effort that has the support of Northern Water and its Municipal Subdistrict. One of the benefits of the project is to improve the Municipal Subdistrict's conveyance of a water supply to Northern Colorado.

At the Basin level, the project advances the CBRT's Basin Implementation Plan by addressing our theme/finding of Ecosystem Health while improving recreational values. The project is designed to re-connect the Colorado River by restoring approximately one mile of the river currently inundated by the Windy Gap Dam and Reservoir by constructing a bypass channel. Aquatic habitat of the Colorado River in the vicinity of Windy Gap is suboptimal. The Gold Medal trout fishery appears to be in decline over recent years and fish passage is blocked by the dam. Water temperatures commonly exceed standards during portions of the summer. This project is listed in the BIP and is one of four priority projects for the Grand County Region.



Jim Pokrandt  
Chair, Colorado Basin Roundtable

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

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

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

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



# COLORADO WATER CONSERVATION BOARD



## WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: **November 4, 2015**

Windy Gap Reservoir Modification Project (Bypass Project) - Engineering

### Name of Water Activity/Project

Windy Gap Bypass Committee: Northern Colorado Water Conservancy District (NCWCD) Municipal Subdistrict, Colorado River Water Conservation District (CRWCD), Grand County, Middle Park Water Conservancy District (MPWCD), Trout Unlimited, Upper Colorado River Alliance (UCRA), Colorado Parks and Wildlife (CPW)

### Name of Applicant

Colorado River Basin Roundtable

Amount from Statewide Account: \$ 0

Amount from Basin Account(s): \$ 30,000

Total WSRA Funds Requested: \$ 30,000

### Approving Basin Roundtable(s)

*(If multiple basins specify amounts in parentheses.)*

FEIN:

### Application Content

Application Instructions	page 2
Part I – Description of the Applicant	page 3
Part II – Description of the Water Activity	page 5
Part III – Threshold and Evaluation Criteria	page 7
Part IV – Required Supporting Material	
Water Rights, Availability, and Sustainability	page 10
Related Studies	page 10
Signature Page	page 12

### Required Exhibits

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

### Appendices – Reference Material

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

## Water Supply Reserve Account – Application Form

Revised October 2013

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### **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>. In addition, the applicant should also refer to the [Supplemental Scoring Matrix](#) applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests .

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

Craig Godbout - WSRA Application  
Colorado Water Conservation Board  
1313 Sherman St., Room 721  
Denver, CO 80203  
[Craig.godbout@state.co.us](mailto: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](mailto: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):	<u>Windy Gap Bypass Committee</u> : NCWCD Municipal Subdistrict, CRWCD, Grand County, MPWCD, Trout Unlimited, UCRA, CPW		
	Mailing address:	TU: 1777 N. Kent Street, Suite 100 Arlington, VA 22209  TU Local contact: P.O. Box 1544, Pagosa Springs, Colorado 81147		
	FEIN #:			
	Primary Contact:	Mely Whiting	Position/Title:	Legal Counsel, Colorado
	Email:	mwhiting@tu.org		
	Phone Numbers:	Cell: 720-470-4758	Office:	
	Alternate Contact:	Lurline Curran	Position/Title:	Grand County Consultant
	Email:	lucurran@co.grand.co.us		
	Phone Numbers:	Cell: 970-531-3714	Office:	

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

- |                                     |  |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | 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. |
| <input checked="" type="checkbox"/> | Public (Districts) – authorities, Title 32/special districts, (conservancy, conservation, and irrigation districts), and water activity enterprises.   |
| <input type="checkbox"/>            | Private Incorporated – mutual ditch companies, homeowners associations, corporations.  |
| <input type="checkbox"/>            | Private individuals, partnerships, and sole proprietors are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.   |
| <input checked="" type="checkbox"/> | Non-governmental organizations – broadly defined as any organization that is not part of the government.   |

## Water Supply Reserve Account – Application Form

Revised October 2013

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3. Provide a brief description of your organization:

The Windy Gap Bypass Committee is a stakeholder group whose goal is to ensure the construction of the Windy Gap Reservoir Bypass, a project designed to re-connect the Colorado River and its habitat by restoring approximately one mile of the river currently inundated by the Windy Gap Dam and Reservoir by constructing a bypass channel around the reservoir. Members of the Bypass Committee include Northern Colorado Water Conservancy District, Municipal Subdistrict, Colorado Parks and Wildlife, Grand County, Colorado River Water Conservation District, Middle Park Water Conservancy District, Upper Colorado River Alliance, and Trout Unlimited.

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

Trout Unlimited will be the contracting entity. Trout Unlimited is a national, non-profit organization with over 150,000 members nation-wide, approximately 11,000 members in Colorado. Our volunteers and staff engage in partnerships and stakeholder driven efforts with the goal of conserving, protecting, and restoring cold water fisheries and their habitat in a cooperative, constructive setting.

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.

Trout Unlimited will be the contracting entity. TU is a non-governmental organization and is not subject to TABOR.



## Water Supply Reserve Account – Application Form

Revised October 2013

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

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

☒ Nonconsumptive (Environmental or Recreational)

☐ Agricultural

☒ Municipal/Industrial

☐ Needs Assessment

☐ Education

☐ Other

Explain:

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

The primary goal and effect of the project is to improve aquatic habitat and the overall health of the Colorado River. However, the project will also improve the efficiency of Windy Gap municipal/industrial diversions.

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

☒ Study

☒ Implementation

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

New Storage Created (acre-feet)

New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)

Existing Storage Preserved or Enhanced (acre-feet)

Length of Stream Restored or Protected (linear feet)

Length of Pipe/Canal Built or Improved (linear feet)

Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)

Area of Restored or Preserved Habitat (acres)

Other -- Explain:

## Water Supply Reserve Account – Application Form

Revised October 2013

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

Latitude: N40° 6' 17.99"

Longitude: E105° 58' 52.95"

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.

Windy Gap Reservoir is located along the Colorado River approximately 4 miles west of the town of Granby, in Grand County, Colorado. Aquatic habitat of the Colorado River in the vicinity of Windy Gap is sub-optimal. The Gold Medal trout fishery appears to be in decline over recent years and fish passage is blocked by the dam and impeded in places by shallow riffles. Water temperatures commonly exceed standards set by the Colorado Department of Public Health and Environment during portions of the summer, and recent studies suggest key bio-indicator species are nearly extirpated for many miles below the reservoir.

The primary objective of the Project is to facilitate the recovery of aquatic species by improving existing conditions and physical processes impacted by Windy Gap. Specifically, the primary Project objectives are to:

- Improve sediment transport around or through the reservoir,
- Reduce stream bed armoring downstream of the reservoir,
- Moderate elevated stream temperatures,
- Provide connectivity for aquatic life and fish passage, and
- Enhance aquatic habitat.

The next step in the Project is to conduct field work, preliminary engineering of the major design components, and initiate permitting. Work will include:

- Wetlands delineation, Endangered Species Act assessment, and historic/cultural assessment needed for 404 permit
- Topographic and existing conditions mapping
- Channel design and hydraulic assessments
- Preliminary diversion structure plans
- Refine opinion of probable cost

The estimated cost of this work is \$385,500. The Bypass Committee has secured funding in the amount of \$355,500 and is requesting \$30,000 from the basin roundtable.

See Exhibit A for a full Statement of Work. See Exhibit C for a Budget and Schedule.

## Water Supply Reserve Account – Application Form

Revised October 2013

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### 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.<sup>1</sup>

The Project is consistent with the statute in that it will not supersede, abrogate or otherwise impair the system of allocating water in the State.

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

See letter from Roundtable Chair

- 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.

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<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.

<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.

## Water Supply Reserve Account – Application Form

Revised October 2013

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This project is listed in the Colorado River Basin Roundtable's Implementation Plan (BIP) and is one of four priority projects for the Grand County Region. Its primary purpose is to protect and restore healthy streams, rivers, lakes and riparian areas (Theme 1). The project is also expected to improve Northern Municipal Subdistrict's conveyance of a water supply to Northern Colorado through the Windy Gap Project. This is a "Tier 1" project in that it is supported by both East and West slope entities.

- 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 but 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)

No funds are being requested from the Statewide Fund. Matching funds for this phase of the project are being provided as follows:

Gates Family Foundation	\$250,000
Grand County	\$ 55,000
Colorado River Water Conservation District	\$ 20,000
Upper Colorado Landowners Alliance	\$ 30,000

The Northern Municipal Subdistrict has contributed over \$300,000 for the feasibility study leading to the selection of the Bypass Project and has committed \$2 million for its construction. The CWCB has committed an additional \$2 million from its construction fund, also for construction.

## Water Supply Reserve Account – Application Form

Revised October 2013

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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.**

N/A

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

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

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

### **Tier 2: Facilitating Water Activity Implementation**

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

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

- f. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.

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- g. The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters.
- h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.
- i. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.
- j. The water activity is complimentary to or assists in the implementation of other CWCB programs.

Continued: Explanation of how the water activity/project meets all applicable **Evaluation Criteria**.

**Please attach additional pages as necessary.**

### Part IV. – Required Supporting Material

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

The Project will occur in the Colorado River and is not expected to impact water rights.

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

The Bypass Project was selected out of several evaluated alternatives to facilitate the recovery of aquatic species below Windy Gap Reservoir. The description of the alternatives, including the Bypass Project, is described in the Final Report for Windy Gap Reservoir Modification Study (Tetra Tech 2015)(Exhibit D).

The Bypass Committee held a preliminary meeting with the U.S. Army Corps of Engineers to discuss 404 permitting. Pending the outcome of required field work, the project may qualify for either a nationwide or a regional 404 permit.

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 see [Exhibit A](#).

## **REPORTING AND FINAL DELIVERABLE**

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

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

## **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.

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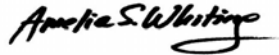
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The above statements are true to the best of my knowledge:

**Signature of Applicant:**

**Print Applicant's Name:** Amelia (Mely) Whiting, Trout Unlimited



**Project Title:** Windy Gap Reservoir Modification (Bypass Project)

**Date:** November 5, 2015

**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](mailto:craig.godbout@state.co.us)



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**BACKGROUND**

This scope of work is based on conclusions and recommendations from the *Final Report, Windy Gap Reservoir Modification Study*<sup>1</sup> (Study) prepared for the Northern Colorado Water Conservancy District and Colorado Division Parks and Wildlife, dated February 2015 (Tetra Tech et al., 2015). In the Study Alternative 3 was identified as the alternative most likely to achieve the project objectives of providing benefit to the Colorado River, while being cost effective compared to the other alternatives. Alternative 3 separates the river from the reservoir with a new channel located through the southern half of the existing reservoir and a diversion structure to route flows from the river into the reservoir.

A preliminary scope of work was prepared and distributed to the TAT for review on May 8, 2015, after which a sub-group of the TAT met with the USACE to discuss permitting. We met with Rena Brand and Kiel Downing at the USACE office in Littleton and they provided guidance on the permit application. This amended scope of work includes services to prepare a 404 permit application in accordance with their guidance and suggestions and is outlined in Task IA.

**OBJECTIVES**

The purpose of this scope of work is to complete the assessment for Alternative 3 and prepare plans to a preliminary level of detail to facilitate review of the major design components of the project. This scope of work generally follows the tasks identified as 'Next Steps' in the Study with some minor modifications as noted below:

1. Evaluate the material in the reservoir for suitability in constructing the berm. Evaluate the need for a cutoff wall in the berm.
2. Extend hydraulic analyses upstream of the railroad bridge to investigate bridge capacity and assess overtopping along the railroad. Assess and route the probable maximum flood (PMF) through the proposed river and modified reservoir.
3. Refine the channel cross section design to incorporate riffles, runs, pools and sinuosity; update and refine the hydraulic analysis for further balancing the high-water overflow with the required flows for sediment transport. In addition, assess the hydraulic conditions for Alternative 3 proposed channel alignment.
4. Collect additional data to verify and refine the inflowing sediment load rating curves.
5. Evaluate potential for utility conflicts. Determine power requirements for operating the diversion structure.
6. Develop preliminary plans, with grading and details. Refine grading as required to balance earthwork.
7. Prepare preliminary technical specifications (limited to materials and the selection of appurtenances only, as required to prepare preliminary opinion of probable costs).
8. Refine opinion of probable costs.
9. Consult with permitting agencies.

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<sup>1</sup> Tetra Tech and HabiTech, Inc., 2015. *Final Report, Windy Gap Reservoir Modification Study*. Prepared for Colorado Division of Parks and Wildlife and Northern Colorado Water Conservancy District. Granby, Colorado, February 2015.

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## **SCOPE OF WORK**

### **Task 1A: Prepare 404 Permit Application**

#### *Consult with state and federal agencies*

Tetra Tech will consult by phone with the USACE, USFWS and CPW prior to fieldwork. Consulting with the USACE will confirm wetland survey designs and the permitting process. USFWS and CPW will be consulted to confirm biological survey design, information on federally listed as threatened and endangered species as well as state species of concern. Communication will be maintained with the agencies to ensure the efficiency of the permitting process.

#### *Field surveys*

Existing information will be reviewed for documented wetlands and the preferred habitats for federally listed as threatened and endangered species as well as state species of concern with the potential to occur in the project prior to the field surveys. Tetra Tech will also prepare field survey maps, data sheets, photo logs, and health and safety protocols prior to field work.

#### *Wetland Determination and Delineation*

A wetland determination and delineation will be conducted for each of the locations listed following USACE guidelines. Wetlands will be delineated following the procedures in the *U.S. Army Corps of Engineers Wetlands Delineation Manual (1987)*. Included in this task will be a determination of the Ordinary High Water Mark (OHWM) for identifying the jurisdictional boundary of waters of the US. The OHWM and any wetlands found will be recorded with datasheets, photos and GPS data. This task is estimated to require a 2-day field effort, plus travel to and from the project area.

#### *Biological Habitat Evaluation*

During the field visit, a biological survey will be conducted to identify the general habitat characteristics and to identify potential federal or state listed threatened or endangered species in the area. This survey is part of the requirement for a USACE permit. The biological field survey will be conducted using meandering transects across the project area, focusing on areas of potential sensitive plant or animal habitat. This task will be conducted during the wetland delineation field survey and is included in that cost estimate.

#### *Wetland and Biological Reports*

Tetra Tech will provide two reports in support of the USACE permit application: Wetland Determination/Delineation OHWM Report and Biological Summary Report. The Wetland Determination/Delineation OHWM Report of the determination and delineation of wetlands within the project will be prepared after the field work is completed. The report will include a description of each wetland delineated including a recommended jurisdictional determination as well as a description of waterbody's encountered with a calculated OHWM. The report will include figures with the locations and sizes of each delineated wetland as well as photographic documentation of each wetland. The Biological Summary Report summarizing the general habitat conditions as well as the potential for impacts to federal or state listed as threatened or endangered species will be prepared upon completion of the field survey.

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*Cultural resource survey and report*

Tetra Tech will conduct a site file search and literature review to determine if previously recorded cultural resources are present within the project area. The site file search will be conducted through the Colorado Historic Society Office of Archaeology and Historical Preservation (OAHP) Colorado Cultural Resource On-line Database (Compass), which includes records of all archaeological investigations that have been conducted and all cultural resources (prehistoric and historic archaeological sites) that have been previously recorded. Also included are records of properties listed on the National Register of Historic Places (NRHP). Tetra Tech will also review historic General Land Office (GLO) records and the Glenn R. Scott Historic Trail Maps to determine whether vestiges of trails, transportation routes, homesteads, or other historic resources may be present in the study corridor.

Following the completion of the site file search, Tetra Tech will conduct a pedestrian survey of the approximately 2.25 mile-long Project area corridor to determine if cultural resources are present and make recommendations of NRHP eligibility and mitigation measures. The pedestrian survey will be conducted in accordance with methods approved by the OAHP. The survey will consist of two staff archaeologists walking the Project area corridor spaced no more than 15 meters apart. Artifacts and archaeological features will be flagged, recorded, measured, photographed, and plotted via a sub-meter GPS recorder.

All potential cultural resource information will be documented on OAHP site forms and summarized in a report that will meet the report guidelines of the OAHP. For purposes of estimation this Scope of Work (SOW) is based upon the anticipation that the survey will require two staff archaeologists, and no more than two new cultural resources (sites and/or isolated finds) will be encountered. No subsurface testing or artifact collection is included in this task.

Following the completion of the above mentioned tasks, a Cultural Resources Inventory Report will be written to document each task's results, including all previously recorded sites, sites visible and identified on cartographic resources, and sites discovered during the pedestrian survey. The report will include results of the inventory and recommendations to avoid, minimize, and/or mitigate impacts to the cultural resources that are recommended as eligible for the NRHP. The report will follow OAHP's recommended format.

*Permit Application*

Upon completion of the field summary reports, a permit application will be prepared for submittal to the USACE. A meeting was held on May 27, 2015 to discuss permitting for this project. Rena Brand and Kiel Downing from the USACE, members of the Technical Advisory Team (project sponsors), and Peggy Bailey from Tetra Tech were present during the meeting. Ms. Brand and Mr. Downing were supportive of the project and under the preliminary design descriptions thought the project could be permitted under either a Nationwide Permit 27 (Aquatic Habitat Restoration, Establishment, and Enhancement Activities), Regional General Permit 12 (Aquatic Habitat Improvement for Stream Channels in Colorado) or a combination of the two. This cost estimate assumes the project will qualify for permitting under one of these options based on this initial preliminary discussion. The use of the nationwide permit will likely require the submittal of a Preconstruction Notification (PCN) in lieu of a permit application. A PCN includes the following items:

- Project description and purpose
- Quantity and type of dredged or fill material (determined with site plan development)

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- Discussions on the direct and indirect effects caused by the activity
- Discussion of the cumulative impacts
- Design drawings
- Location maps
- Wetland delineation
- Cultural resource evaluation
- Threatened and endangered species review
- Explanations for compliance under each of the general conditions under the NWP

Assumptions: This scope assumes the USACE will issue a Nationwide Permit (NWP 27 and/or RGP 12) and mitigation will not be required. This scope also assumes a Biological Assessment will not be required.

Deliverables: A Wetland Determination/Delineation OHWM Report, a Biological Summary Report, a Cultural Resources Inventory Report, and the PCN all as described above will be prepared and submitted to the TAT for review. Final version will be included in the permit application submitted to USACE. We anticipate the USACE will submit the Biological Summary Report to the USFWS and CPW for review. Tetra Tech anticipates one round of review from the agencies prior to submittal of the final PCN.

**Task I: Topographic and existing conditions mapping**

Existing available topographic mapping developed for the previous Study will be utilized, coupled with additional GPS field surveys to extend the base mapping and bathymetric data. The surveyor will also look for existing property corners or rights-of-way monuments in the project area to help confirm property line information, however, a property boundary survey is not part of this scope of services.

We will coordinate with the utility companies that will likely have utilities within the project footprint to obtain their mapping information and incorporate this information into the project base map. Utility locates will also be requested. Survey crews will spend an estimated 5 days in the field collecting additional survey data including the following:

- Topographic data collection along the railroad bed and bathymetric surveys in the river upstream of the railroad bridge for use in the hydraulic analysis,
- Supplemental topographic and bathymetric data at the proposed diversion location for use in detailing the diversion structure,
- Supplemental topographic data downstream of the dam at the downstream tie-in locations,
- Additional survey data in the south floodplain for use in the channel design,
- Survey data at the gaging station to support the fish passage design, and
- Utility locates that are visible above ground, or below ground marked by the utility locator.

Assumptions: This task assumes permission can be obtained from the Railroad and adjacent property owners to access property to complete these surveys. In addition, we are assuming the river flow is low enough for the survey crew to wade and collect bathymetric data around the railroad bridge and immediately upstream of the measurement weir.

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Deliverables: The deliverable for this task includes topographic base mapping, expanded and updated to include the additional surveys.

## **Task II. Channel design and hydraulic assessments**

### *Proposed Channel*

The channel will be developed to a preliminary design level which will include a grading plan with one (1) foot contours and site features. Working with the Colorado Parks and Wildlife, we will refine the channel alignment and cross sectional design; incorporate riffles, runs, pools and sinuosity; develop the grading and site plans and details for the tie-in locations (upstream at the confluence of Fraser and Colorado Rivers and the diversion structure and downstream below the dam where the new channel connects back to the Colorado River). This effort includes the preparation of typical details for cover and pool habitat, bank stabilization and revegetation. Plans and typical details will be submitted to the TAT (and CPW's TAT representatives) for review and comment. Plans and details will be revised based on feedback and input.

This task includes two meetings with CPW. The first meeting will be a work session to discuss plan details and establish objectives. The second meeting will be to review plans and discuss CPW comments.  
grading plans for

### *Hydraulic Analyses*

Using the updated topographic information and river and reservoir grading plans (see Task IV), the proposed conditions hydraulic model (2-dimensional SRH-2D software) will be revised to reflect the configuration of Alternative 3. The proposed Alternative 3 conditions will be modeled over a range of flows and the results will be compared to the previous assessments for incipient motion. The hydraulic parameters of the proposed conditions river channel will be refined to ensure continuity between the existing river channel upstream and downstream of the project.

The 2-yr, 10-yr, 50-yr, 100-yr, 500-yr and PMF will be assessed and modeled through the proposed river channel, modified reservoir, and river channel downstream of the dam face to the County Road 578 Bridge. Additionally, the hydraulic conditions at the diversion structure, lateral weir, and at the confluence of the Fraser and Colorado Rivers will assessed for sediment continuity through the project and possible areas of sediment deposition.

### *Fish Passage Design*

Prepare preliminary plans for fish passage at the gaging station. Develop base mapping from topographic surveys and prepare a preliminary plan and profile of the proposed passageway. Develop conceptual-level details.

Assumptions: This task assumes that CPW will provide general guidance on channel planform and habitat improvements for advancing the channel design. The channel design will be added/represented in the hydraulic model for the assessment of flooding, incipient motion and sediment transport.

Deliverables: A technical memorandum will be developed to document the design of the channel, and the results of the floodplain modeling. Mapping will also be prepared to show the 100-yr flood.

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**Task IIa. Verify and refine the inflowing sediment load rating curves**

*Sediment loading*

Sediment sampling should be performed during spring runoff. Depending on the timing of implementation for the services described herein, the sediment sampling may not be possible until the spring of 2016. Sediment sampling informs on the total load of sediment moving through the system and with this information we are able to estimate the degradation that might occur at the diversion structure, which in turn, informs on the frequency of maintenance. Thus, depending on timing it is our suggestion that we move forward on the hydraulic analysis of Alternative 3, including incipient motion, the flood events and bankfull design, and implement the sediment sampling and sediment analysis when conditions allow.

We propose to collect sediment samples from the cableway at the measuring weir, operated by Northern Colorado Water Conservancy District (with appropriate authorization and assuming the cable trolley can be outfitted with the USGS bedload and suspended load sampling reels). The County Road 57 Bridge (approx. 1.5 miles upstream) could be used as an alternative sediment sampling location if the cableway at the measuring weir cannot be used. Five or six measurements at medium to high flows should provide sufficient data to verify or supplement the 1980 Ward data used for the sediment transport analysis. In addition we will collect suspended sediment samples.

The results of the data collection will be compared to 1980 Ward data (used in the 2014 sediment transport study for Alternative 1) and either used to fill in the gaps in the Ward data or develop an updated sediment transport rating curve. This updated rating curve will be used to define the inflowing sediment load for the hydraulic analysis. The updated sediment transport rating curve developed from the bedload and suspended load sampling will be used to define the inflowing sediment load for the 2D modeling. The proposed Alternative 3 conditions will be modeled over a range of flows and the results will be compared to the previous assessments for both sediment transport.

Assumptions: This task assumes that sediment collection will be performed from either the cable at the measuring weir or upstream from the project at from the County Road 57 Bridge over the Fraser River.

Deliverables: Model results summary including a mapping and report.

**Task III. Geotechnical assessments**

The goal of the geotechnical assessment will be to evaluate the material in the reservoir for suitability in constructing the berm, the floodplain and the river channel; and to evaluate the need for a cutoff wall in/below the berm to address seepage issues.

Samples from the reservoir will be collected and analyzed for required soil properties (sieve analysis, hydrometer test, Atterberg limits, organic content, sulfates, chlorides and pH, standard Proctor, pinhole dispersion, permeability, unconfined compression, and direct shear and/or CU triaxial w/ pore pressure measurements (depending on soil props). Soil boring and subsurface field investigation will rely on published geologic mapping of the area, existing geologic/geotechnical investigations of the site, and other information that is available, particularly from the original Windy Gap design, to estimate the engineering properties of the foundation and embankment soils. This desk top analysis will be combined with gradation and testing of samples taken from the reservoir for further analysis.



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Steady state and transient, finite element seepage models will be constructed using the SEEP/W module of Geostudio. A generalized maximum section will be constructed for high and low flow scenarios, with and without a slurry wall. Vertical and horizontal gradients will be calculated and results will be coupled with a SLOPE/W model to evaluate the berm performance under a range of conditions. Proposed slopes will be evaluated and minimum factors of safety will be calculated for end of construction, steady state, and rapid drawdown conditions, with and without pseudo-static loading.

Assumptions: For the purpose of this proposal we are assuming that the reservoir samples will be collected by the Subdistrict. We recommend a minimum of five samples, each approximately 5 gallons in volume, taken in appropriate and representative locations where sediment accumulation has occurred and should be removed to restore storage. Subsurface borings and investigations will be based on existing available information as discussed above.

Deliverables: A report or technical memorandum will be prepared which will summarize the results of our literature review, present engineering properties of the soils used in our analyses including the input and output values for computer models, and present our opinions, conclusions and recommendations regarding the channel and berm from a geotechnical point of view. If appropriate, our report will present recommendations for additional investigations needed during subsequent design phases.

#### **Task IV. Prepare preliminary site plans**

A preliminary plan set will be developed to a level of sufficient detail to evaluate the major design features, identify issues for advancing to construction-level design and to develop a preliminary ‘opinion of probable cost.’ The plan set and design considerations will likely include the following:

##### *Base Mapping*

Base sheet mapping will be prepared at a scale of 1”=100’ using the topographic surveys and mapping prepared for the original study. Base mapping will show existing features across the project site, including property lines (provided by the County GIS department), utility information, and dam facilities.

##### *Demolition Plan*

A plan sheet will be prepared showing the major site features and reservoir areas that will be removed as part of the project.

##### *Site Plan*

Prepare a site plan showing the proposed improvements including limits of river reconstruction, the diversion structure, limits of dam removal, the existing and proposed facilities and road right of way, lots and easements affected by the project, and the proposed maintenance road. Prepare a typical berm cross section and profile. Develop preliminary grading for the river, floodplain and berm with 2-foot contours and finish grade spot elevations for key elements of the proposed improvements. Finish grade will tie into existing contours around the proposed improvements. Include a preliminary layout plan for the utilities required to operate the proposed diversion structure and other utilities that are required to be relocated for the project.

##### *Channel Layout Plan and Profile*

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Prepare a preliminary channel layout plan with planform geometry, habitat features and details. River profiles will also be set up for the new river alignment at 1"=100 horizontal and 1"=10' vertical. The river plan and profile sheets will show the vertical profile grade of the river thalweg and horizontal location of the river.

*Reservoir Excavation Plans*

Prepare a reservoir excavation plan with proposed contours for excavation in the existing reservoir. Run storage volume calculations and compare to storage requirements established in the Study. Prepare earthwork computations to evaluate cut-and-fill volumes and develop an implementation strategy to allow for staging the work including river diversions and dewatering dredged material. For purposes of this proposal, two revisions are included in order to allow for review by the Technical Advisory Team (TAT) and to develop a plan that best meets the goals of the project while balancing material requirements.

*Access Road Plan and Profile*

Develop a preliminary plan and profile for the access from US Highway 40 to the diversion structure location. Preliminary layout, profile and elevations will be provided as part of this task.

Assumptions: Two plan sets will be prepared. The first will be a draft-level plan set for review and comment from the TAT, permitting agencies and municipalities. The second will be final preliminary plans incorporating comments. No formal approvals from agencies or municipalities is anticipated for this work effort.

Deliverables: Twenty paper copies of the preliminary plan set as well as an electronic copy (pdf) for use in the reproduction of additional copies. A technical memorandum will also be prepared highlighting assumptions made in the development of the plan set and an outline of steps needed to proceed to final design and the preparation of construction drawings.

**Task V. Prepare preliminary diversion structure plans**

A preliminary plan set will be developed to evaluate the structural, mechanical and electrical design features of the diversion structure to a level of detail that will support a preliminary 'opinion of probable cost.' The design will include a layout plan, identification of equipment, and determination of power requirements. The plan set and design considerations will likely include the following:

*Diversion Structure Layout*

Prepare a plan sheet of the diversion structure with the lateral weir diversion, online weirs and the bridge crossing. The plan will show the foundation slab and wall layout for the diversion gate, sluice gates and the access bridge. Cross sections at the diversion gate, a typical sluice gate and access bridge will also be developed showing required wall and slab thicknesses. Foundation piles and wing walls will be shown if required. The drawings will be developed to a preliminary engineering level showing major concrete outlines and used to develop structural concrete quantities to refine the cost estimate. The lateral weir diversion structure will be designed for the PMF and seismic is assumed not to control.

*Diversion and Sluice Gates Mechanical and Electrical Components*

Mechanical and electrical equipment necessary for operation of the diversion and sluice gates will be located on a plan sheet of the diversion structure. Preliminary gate sizes and operator requirements will be



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established and costs will be derived from cut sheets from manufactures/suppliers. Layouts for mechanical equipment and fish screens (for optional installation if needed in the future) will be provided. The electrical layouts will include the basic power and controls interfacing requirements to establish construction costs.

**Task VI. Prepare opinion of probable cost**

A preliminary-level opinion of probable cost will be prepared to determine an approximate anticipated cost for construction. Cost estimates will be prepared using the preliminary designs, construction costs from past projects and other readily available cost information for construction of such facilities.

Assumptions: The opinion of probable costs will be based on unit prices estimates available from recent construction costs, and published data and sources.

Deliverables: A technical memorandum summarizing the opinion of probable costs.

**Task VII. Meetings and coordination**

This task includes time to coordinate efforts with the project team and meet with the TAT. We proposed three progress meetings be conducted with the TAT. The first meeting will be held following the completion of the site plan and reservoir excavation plan, completion of the updated hydraulic assessment, and completion of the geotechnical assessments. The second meeting will be held to review the draft plan set and opinion of probable cost. The final meeting will be held after the final plan set is completed.

This task also includes time to coordinate with Grand County to coordinate on requirements of a 1041 permit, and the Federal Emergency Management Agency (FEMA) to discuss floodplain regulations. Coordination with the State Engineers Office will be handled by the Subdistrict to identify requirements for modifying the dam.

Assumptions: The TAT meetings will be attended by a maximum of three project team members; the project manager, up to two other primary technical members and one junior engineer or support staff. The specific staffing will depend on the focus of the meeting. The meeting location will be in the Front Range, likely at the Tetra Tech Golden, Colorado office.

Deliverables: Schedule and conduct the TAT meeting. Prepare meeting notes and distribute to the TAT for review. Finalize the meeting notes.

**SCHEDULE**

The revised recommended sequence for implementing this work effort is to 1) prepare preliminary channel design and the Section 404 permit application, 2) develop base mapping and conduct the hydraulic assessment for the full range of flows including the PMF, 3) collect and assess the soil properties of the reservoir sediments and review Windy Gap geotechnical information, 4) prepare preliminary plans, and 5) prepare the opinion of probable costs.

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This schedule assumes a start date by or before the fall of 2015. The sediment data collection and sediment transport analysis would be conducted in spring, 2016. Thus loading and discussions on maintenance and sediment removal would be done concurrently with the last several tasks as noted below.

Schedule to be determined

**Exhibit A**  
**Windy Gap Reservoir Modification**  
**Preliminary Design Services**  
**Scope of Work and Fee Estimate**  
**May 8, 2015**  
**Revised June 25, 2015**

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**FEE SUMMARY**

Tetra Tech staff and the entire Project Team are committed to completing this project expeditiously and within the proposed fee estimate. This estimate includes indirect costs for such things as survey equipment, travel, laboratory sampling, etc. A summary is provided below.

**Exhibit A**  
**Windy Gap Reservoir Modification**  
**Preliminary Design Services**  
**Scope of Work and Fee Estimate**  
**May 8, 2015**  
**Revised June 25, 2015**

<b>TASK</b>	<b>total cost by task</b>
<b>TASK IA – 404 PERMIT APPLICATION*</b>	<b>\$ 32,652</b>
Develop preliminary proposed channel alignment and planform (w ith CPW)	
Wetland delineation and permit application	
ESA, historic/cultural/w etlands	
<b>TASK I – TOPOGRAPHIC AND EXISTING CONDITIONS MAPPING</b>	<b>\$ 23,109</b>
Coordination for access, prep for field	
Call for locates, acquire available utility information	
Field surveys	
Update topography mapping	
<b>TASK II – CHANNEL DESIGN AND HYDRAULIC ASSESSMENTS</b>	<b>\$ 70,700</b>
complete preliminary proposed channel alignment and planform (w ith CPW)	
Hydraulic analyses	
Conceptual fish passage design	
<b>Task IIa-Verify and refine the inflowing sediment load rating curves</b>	<b>\$ 18,565</b>
<b>TASK III - GEOTECHNICAL INVESTIGATIONS</b>	<b>\$ 22,817</b>
Test material in reservoir	
Field borings along berm alignment	
Berm design for seepage	
<b>TASK IV – DEVELOP PRELIMINARY DRAWING SET</b>	<b>\$ 37,055</b>
Base mapping	
Draft-level	
<i>Site plan</i>	
<i>Grading and earthwork</i>	
<i>Utility Plan</i>	
<i>Berm plan and profile</i>	
<i>Site plan for diversion</i>	
Final preliminary plans	
<b>TASK V – DEVELOP PRELIMINARY DIVERSION STRUCTURE PLANS</b>	<b>\$ 127,821</b>
Bridge concept design	
<i>Layout and structural design</i>	
<i>Prepare plans, sections, elevations</i>	
Document analysis - bridge	
Gate Design	
<i>Structure selction, loading</i>	
<i>concept design</i>	
<i>Mechanical and electrical drawings</i>	
Document analysis - gates	
<b>TASK VI – OPINION OF PROBABLE COST, IMPLEMENTATION STRATEGIES</b>	<b>\$ 12,834</b>
Quantities and unit price development; prepare opinion of probable cost	
Implementation strategies	
<b>TASK VII – MEETINGS AND COORDINATION</b>	<b>\$ 39,951</b>
Meet and coordinate w ith agencies and municipalities	
Coordination and project management	
Project team meetings	
QAQC	
TAT meetings	
<b>Total</b>	<b>\$ 385,504</b>

**KEY PROJECT TEAM MEMBERS**

**Peggy Bailey, PE**  
**Project Manager**

Peggy Bailey will serve as the project manager for the Windy Gap Reservoir Modification, Preliminary Design Services. Ms. Bailey served at Project Manager for the alternatives development for the Windy Gap Modification study and as such is very familiar with the project, the objectives, stakeholders and design

**Exhibit A**  
**Windy Gap Reservoir Modification**  
**Preliminary Design Services**  
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constraints. Ms. Bailey is a Senior Hydraulic Engineer and Project Manager in the Breckenridge office of Tetra Tech Inc. She has a diverse range of experience specializing in water resources, hydraulic engineering and civil design. Her primary expertise is in hydrology, hydraulics, aquatic restoration, site planning, and civil engineering. Ms. Bailey has assisted and overseen numerous projects involving river restoration, flood control, wetlands creation, hydraulic structures, stormwater runoff analysis, environmental and feasibility studies, comprehensive planning and engineering for multi-phase development, applications for permits, interfacing with municipalities, preparation of construction documents and construction observation.

**Robert Mussetter, P.E, PhD**

**Hydraulic and Sediment Transport**

Dr. Bob Mussetter will be responsible for aspects of the project involving hydraulic and sediment transport analysis. Dr. Mussetter has over 30 years of experience in river engineering and fluvial geomorphology in a wide variety of environments throughout the U.S. and internationally. Much of his work has involved eco-hydraulic analysis, the objective of which is to understand and quantify the linkages between hydraulic and sediment transport processes and aquatic habitat. He supported the Windy Gap Reservoir Modifications Study, specifically evaluating sediment transport. Dr. Mussetter is currently Project Manager for a long-term contract to support the California Department of Water Resources and the other members of the Restoration Team that includes the U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, CA Department of Fish and Game and other agencies and stakeholders to implement a settlement agreement to restore habitat for salmonids and other native fish species to a 150-mile reach of the San Joaquin River. He has also had significant involvement over the past two decades in efforts to recover the four endangered fish species in the Upper Colorado River basin, and has completed numerous other studies related to the linkage between hydraulic and sediment transport processes and instream and riparian habitat. It may also be of interest to the review panel that, early in his career, Dr. Mussetter designed the Fraser River measurement weir that is located at the head of the study reach.

**Tom Wesche, PhD**

**Fisheries**

Dr. Thomas A. Wesche, Professor Emeritus of Water Resources at the University of Wyoming and Principal Scientist with HabiTech, Inc. has 40 years of research and consulting experience in river ecology and restoration throughout the western U.S. Dr. Wesche is a Fisheries Professional Emeritus, certified by the American Fisheries Society, and a Professional Hydrologist, certified by the American Institute of Hydrology. Since 1973, he has authored numerous publications regarding trout stream ecology in the Rocky Mountain region, including the evaluation of salmonid habitat, stream flow – habitat relationships, and the influence of stream habitat quality on fish populations. He has also designed, permitted and provided oversight for many trout stream restoration projects. Dr. Wesche has worked with Peggy Bailey and Tetra Tech since 2007 on developing the Grand County Stream Management Plan, with primary responsibilities being the evaluation of aquatic habitat throughout Grand County, the development of environmental flow recommendations, and the identification of stream restoration needs. For the Windy Gap By-Pass Project, Dr. Wesche will continue to lead the aquatic community and habitat evaluation effort and will work closely with the other project scientists and engineers to develop and evaluate alternatives.

**Chris Ansari**

**Biologist**

Mr. Ansari has over 15 years of experience conducting biological resource surveys. Mr. Ansari served as the lead for Section 404 permitting projects and is proficient in USACE protocol wetland delineations

**Exhibit A**  
**Windy Gap Reservoir Modification**  
**Preliminary Design Services**  
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having conducted delineations in Colorado, Wyoming, Idaho, Oregon, Nevada, Arizona, Virginia, and West Virginia. Mr. Ansari conducts biological surveys for threatened and endangered flora and fauna. His experience ranges across the western United States and includes serving as a biologist for the National Park Service as well as the U.S. Forest Service. Mr. Ansari has conducted wildlife surveys for the Mojave desert tortoise, Washington ground squirrel, 3-toed woodpecker, and burrowing owls in addition to presence/absence surveys for migratory birds and raptors. Mr. Ansari has conducted species specific surveys for the federally listed Ute ladies-tresses orchid (*Spiranthes diluvialis*) as well as rare plant habitat surveys in Wyoming, Idaho, Nevada, Arizona, and Oregon.

**Stephen Anderson, M.A. R.P.A**  
**Archaeologist**

Mr. Anderson is a cultural resource specialist for projects in the Intermountain West, Southwest, Great Plains, Midwestern Plains, and the Pacific Northwest. Mr. Anderson has experience working on archaeological projects in Colorado, Wyoming, Montana, Oregon, Idaho, Alaska, Utah, Iowa, South Dakota, North Dakota, Arizona, California, Nevada, Texas, Illinois, Oklahoma, and Kansas. He is a Registered Professional Archaeologist (RPA) and is permitted as a Principal Investigator in eleven western and Midwestern states and/or federal agencies and meets the Secretary of Interior standards. Mr. Anderson has extensive experience working on Federal Energy Regulatory Commission (FERC), US Army Corps of Engineers (USACE), Bureau of Land Management (BLM), US Forest Service (USFS), National Park Service (NPS), Federal Emergency Management Agency (FEMA), and US Department of Agriculture (USDA) Rural Utility Service (RUS) projects. His responsibilities include developing cost estimates and scopes of work for archaeological proposals, conducting site file searches, pedestrian surveys, construction monitoring, recording of sites, obtainment of Smithsonian numbers, assessment of resources for eligibility for inclusion in the National Register of Historic Places, and the mitigation of sites for proposed undertakings. Additionally, he is responsible for the supervision and coordination of the Tetra Tech, Inc. western states survey/excavation crews, managing GIS data and plan map graphics for site forms and reports, and writing technical reports.

**Chris Durluo, PE, LEED BD+C**  
**Civil Engineering**

Mr. Durluo is a civil engineer located in the Breckenridge office of Tetra Tech. He has over 18 years of project experience primarily focused in the mountain region of Colorado. Mr. Durluo has performed as Senior Engineer and Project Manager on many projects for private, governmental and commercial clients. Mr. Durluo has broad experience over various types of civil engineering projects including large scale earthwork and development sites, transportation and utility design. Mr. Durluo will be the civil engineering design lead for the Windy Gap Reservoir project including the design of grading plans, utilities, earthwork and project phasing requirements.

**Erik Flickinger, P.E.**  
**Mechanical Engineering**

Erik Flickinger will provide mechanical engineering support for the specification of the gates and gate operators. Eric is experienced in the field of Mechanical Engineering providing conceptual and detail design services of flood protection, pump stations, water control gates, cranes, hoist and mechanical operating machinery. Eric has experience with multi-disciplinary design integration, design optimization through

**Exhibit A**  
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finite element analysis, designing large-scale mechanical systems, inspection and analysis of existing mechanical machinery, retrofit of ageing mechanical systems, and developing detailed design documents.

**Albert Barnes, P.E.**

**Electrical Engineering**

Albert Barnes will provide electrical engineering for the controls and remote operation of the gates. Albert has experience in the planning, designing, managing, constructing, and commissioning of the electrical and controls portions of multi-discipline industrial projects. His experience includes defining project scope, writing design criteria, estimating capital and labor costs, project management, design calculations, permitting, reviewing budgets, writing specifications, reviewing construction bid documents, reviewing shop drawings, PLC programming, construction supervision, shop and site inspections, and commissioning.

Extensive design experience includes detailed drawings for power distribution including substations, motor controls including variable frequency drives, grounding, lighting, grounding, conduit and cable tray layout, instrumentation and panel layouts, schematics and wiring diagrams. He has provided electrical and controls leadership for design, bid, construction, and commissioning on numerous multi-million dollar projects.

**Brian Twitchell, P.E.**

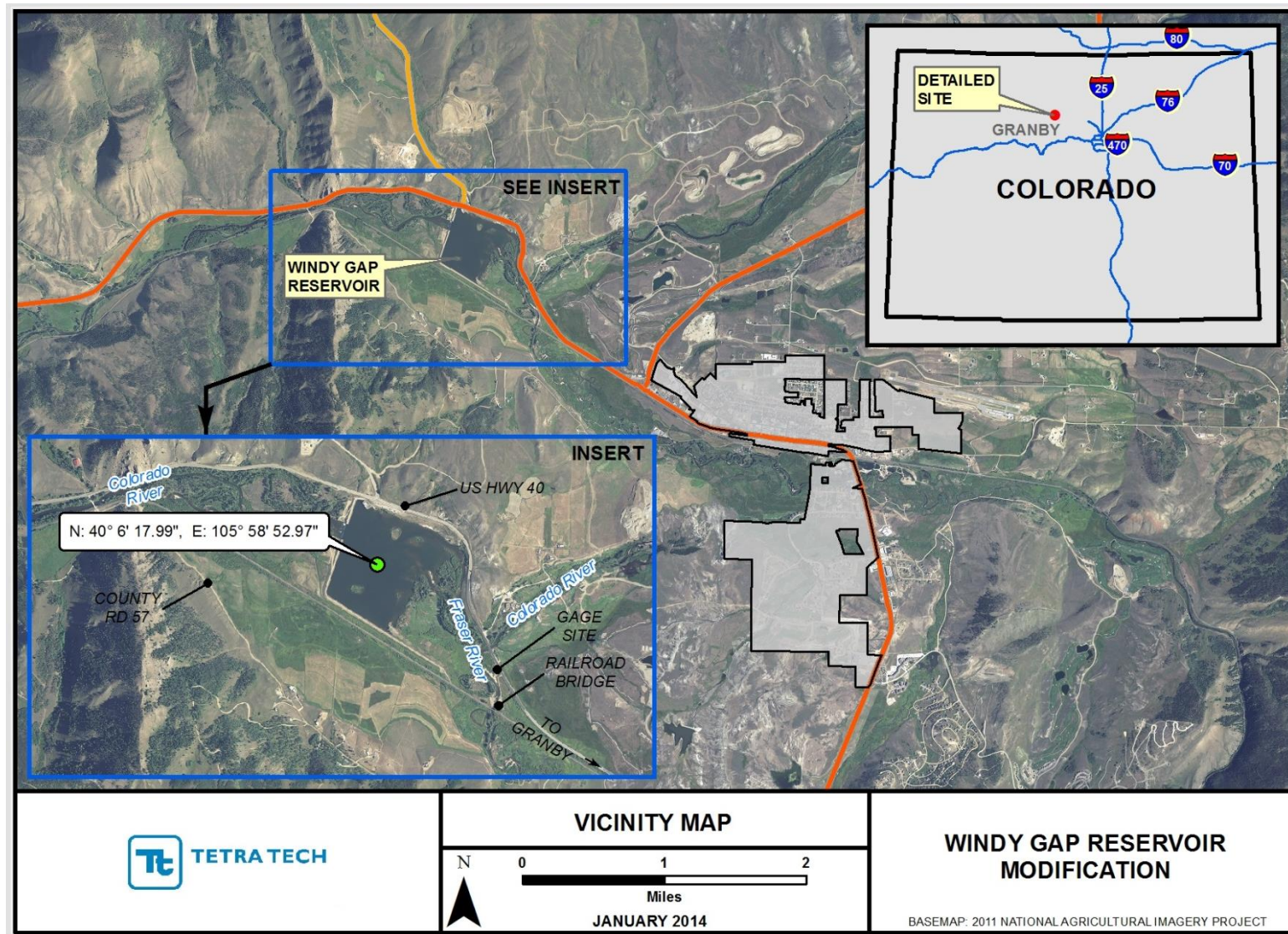
**Structural Engineering**

Brian Twitchell will provide structural engineering for the diversion structure and Access Road Bridge. Brian has structural engineering experience that includes design and analysis of bridges, tunnels, retaining walls, locks, dams and other navigation and flood control structures. Brian specializes in design of hydraulic concrete structures using in-the-wet construction methods and has experience designing steel, concrete, prestressed concrete and post tensioned concrete structures. Brian's analysis and design experience includes conceptual level through final plans and specifications. Brian is also experienced in providing engineering support during construction and performing construction inspection.

[illegible]



## Exhibit B Vicinity Map



**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**January 25-26, 2015**  
**Agenda Item 24(b)**

**Applicant & Fiscal Agent:** Colorado Mesa University – Ruth Powell Hutchins Water Center

**Water Activity Name:** Integrated Water Management Planning Framework

**Water Activity Purpose:** Multipurpose

**County:** throughout Colorado Basin

**Drainage Basin:** Colorado

**Water Source:** Colorado River and tributaries

**Amount Requested/Source of Funds:** \$43,404 Colorado Basin Account (total grant request)

**Matching Funds:** Applicant Match: \$107,198 (cash & in kind) = 71.1% of the total project cost of \$150,602  
(refer to *Funding Summary/Matching Funds* section below)

<b>Staff Recommendation:</b>
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Staff recommends approval of up to \$43,404 from the Colorado Basin Account to help fund the project titled: Integrated Water Management Planning Framework.
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**Water Activity Summary:** WSRA funds, if approved, will be expended to fund the Colorado Basin Roundtable Integrated Water Management Planning Framework. This project will provide the informational and procedural framework for conducting comprehensive integrated water management plans in the Colorado River Basin. The purpose of these plans will be to identify ways to provide sufficient water for environmental needs while recognizing the needs of agricultural, domestic, and industrial water users.

This project will include the following tasks:

1. **Information Gathering:** An extensive review and compilation of existing information relevant to the development of integrated water management plans. The resulting compilation will be available in table form and linked to a map of the basin to show spatially which stream reaches have been studied in what ways.
2. **Information Synthesis:** A detailed GIS map will utilize the information collected in task #1 to depict what available data shows about stream health in each stream segment in the basin.
3. **Stakeholder Engagement and Education:** Consultation with stakeholders in order to refine the goals and objectives of the basin-wide planning effort; achieve consensus on the recommended tools and processes for developing integrated water management plans; and establish priorities for implementation. Once priorities are established, outreach will be conducted in the priority sub-basins to solicit interest in developing detailed plans.

**4. Develop Framework for Stream Management Planning:** Drawing on the work done in tasks two and three, develop and describe a framework for the creation of integrated water management plans at the sub-basin level that facilitates the integration of discrete plans into a comprehensive tool that can be applied basin-wide.

**Discussion:** The Colorado Basin Roundtable identified a basin-wide stream management plan as a top priority in the final Basin Implementation Plan (BIP). The roundtable has applied for and been approved for a grant in the amount of \$67,947 from the CWCB Stream Management Plan Program to assist in this project.

“Stream management plans can play an important role in identifying both the needs of environmental attributes, and the projects and methods that will benefit those attributes.” – Colorado’s Water Plan, Section 6.6, page 6-168.

Additionally, the development of stream management plans is identified as a critical action for Watershed Health, Environment and Recreation: #3 in chapter 10 of Colorado’s Water Plan, page 10-12.

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

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

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
CWCB Stream Management Plan funds	\$67,947	n/a	\$67,947
In-kind resources of time, project partners	n/a	\$29,256 <sup>(1)</sup>	\$29,256
Cash funds – Colorado Mesa University	\$9,995	n/a	\$9,995
Subtotal Matching Funds	\$77,942	\$29,256	\$107,198
WSRA Colorado Basin Account	\$43,404	n/a	\$43,404
<b>Total</b>	<b>\$121,346</b>	<b>\$29,256</b>	<b>\$150,602</b>

<sup>(1)</sup> In-kind costs broken down in Exhibit A

**CWCB Project Manager:** Brent Newman/Chris Sturm

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

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

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

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

***THE COLORADO BASIN ROUNDTABLE***  
***C/O P.O. BOX 1120***  
***GLENWOOD SPRINGS, COLORADO***  
***81602***

Nov. 30, 2015

**Chris Sturm**  
**Stream Restoration Coordinator**  
**Watershed and Flood Protection Section**  
**Colorado Water Conservation Board**  
1313 Sherman St., Room 721  
Denver, CO 80203

**Craig Godbout**  
**Water Supply Planning Section**  
**Colorado Water Conservation Board**

**Dear Chris and Craig:**

The Colorado Basin Roundtable (CBRT) voted unanimously on Nov. 30 by email balloting to support our own WSRA Basin grant request whereby the Roundtable and Colorado Mesa University's Ruth Powell Hutchins Water Center (fiscal agent) endeavor to embark on Integrated Water Management Planning. The WSRA request is for \$43,404 as a cash match to a separate grant request of \$67,947 to the Colorado Watershed Restoration Program, Stream Management Plan Category. There will be \$9,995 in additional cash match from Colorado Mesa University and \$29,256 of in kind match funding.

Our Basin Implementation Plan places a high priority on covering the Colorado River with stream management planning (although we now call it Integrated Water Management Planning to better reflect the nexus with agriculture, the environment and recreation). This initial effort starts us on the road to implementing one of our six BIP themes/findings.

This funding will include the tasks of information gathering of existing, relevant work, GIS mapping to show where there are already studied segments and gaps, stakeholder engagement/education and development of a planning framework for creation of management plans at sub-basin levels.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Jim Pokrandt", with a stylized flourish extending from the end.

Jim Pokrandt  
Chair, Colorado Basin Roundtable



**MEMBER  
JURISDICTIONS**

City of Glenwood  
Springs

City of Steamboat  
Springs

Town of  
Carbondale

**EAGLE COUNTY**

Avon  
Basalt  
Eagle  
Gypsum  
Minturn  
Red Cliff  
Vail

**GRAND COUNTY**

Fraser  
Granby  
Grand Lake  
Hot Sulphur  
Springs  
Kremmling  
Winter Park

**JACKSON  
COUNTY**

Walden

**PITKIN COUNTY**

Aspen

**SUMMIT COUNTY**

Dillon  
Frisco  
Montezuma  
Silverthorne

October 14, 2015

Colorado River Basin Roundtable  
c/o Jim Pokrandt  
Colorado River District  
Glenwood Springs, CO

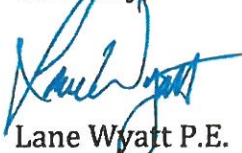
RE: Colorado Basin Roundtable Integrated Water Management Planning  
Framework

Dear Roundtable

The Northwest Colorado Council of Governments Watershed Services Program fully supports the Colorado Watershed Restoration Program Grant Application to develop the informational and procedural framework for conducting comprehensive integrated water management plans in the Colorado River Basin. This information will be invaluable in the effort to complete a basin wide stream management plan as outlined in the Colorado Basin Implementation Plan. Colorado Mesa University is an excellent entity to carry out this project. You can count on our in-kind assistance on this endeavor.

Please let me know if you have any questions regarding this letter of support.

Sincerely,



Lane Wyatt P.E.

Watershed Services program Manager



*Richard Van Gytenbeek, Colorado River Basin Outreach Coordinator, Colorado Water Project*

October 14, 2015

Mr. Chris Sturm  
Stream Restoration Coordinator  
Colorado Water Conservation Board  
1313 Sherman Street, Rm. 718  
Denver, CO 80203

RE: Colorado Basin Roundtable Integrated Water Management Planning Framework Grant Application.

Dear Chris

As a member of the Colorado Basin Roundtable Stream Management Plan (CBRT-SMP) grant application committee and a representative of Trout Unlimited I would like to express support for the CBRT Integrated Water Management Planning Framework grant application being submitted to the Colorado Watershed Restoration Grant Program in the Stream Mgt. Plan category. Using the recent Grand County, Colorado river management plans as an example, the CBRT-SMP committee recognized the need to provide a common starting point for future sub-basin SMP's within the Colorado River basin.

To provide this common starting point the grant seeks to:

- 1) Provide a comprehensive basin wide reference list of studies, scientific papers and other information relevant to the environmental parameters that generally define a healthy aquatic and riparian environment. The list will be spatially displayed on a basin wide map.
- 2) Develop and describe a framework for the SMP process which is informed through stakeholder input.

The reference list is intended to provide an inventory "head-start" necessary for sub-basin SMP's. The SMP framework process will describe the fundamental goals and parameters, participants and process that sub-basins can employ to create an integrated water management plan that recognizes environmental needs and respects the rights of consumptive water users. Finally, by providing a common foundation, each sub-basin's unique and discrete water plan can be integrated into a comprehensive basin wide management plan.

TU believes this type of integrated, community driven water management plans will result in healthier rivers and increased agricultural efficiency and production in western Colorado. We hope that you will positively consider, and choose to fund this application.

Respectfully,

Richard Van Gytenbeek



## MIDDLE COLORADO WATERSHED COUNCIL

P.O. Box 1136  
Glenwood Springs, CO 81602  
Phone: 303-204-4164

October 14, 2015

Colorado Water Conservation Board  
1313 Sherman St., #178  
Denver, CO 80203

Colorado Water Conservation Board Members:

The Middle Colorado Watershed Council (MCWC) is writing today in support of this application for a Colorado Watershed Restoration Program grant for stream management planning work in the Colorado River Basin. If selected, this grant request will be used to gather and synthesize existing technical information, and to support a facilitated stakeholder process that will determine how stream management plans are developed at the sub-basin level, integrated, and applied to assist with decision-making at a variety of scales.

Integrated stream management planning was identified by the Colorado Basin Roundtable as one of its top priority projects that spans the entire basin. Similarly, the MCWC Board has identified stream management planning as a project that will be highlighted in its Watershed Plan (scheduled for release in early 2016). Understanding the individual and cumulative environmentally-based flow needs of the Colorado River is key to our organization's mission to protect and enhance the health of the watershed. The foundational work described in this proposal will set the stage for organizations like the MCWC to undertake stream management planning at the sub-basin level, engaging local and regional stakeholders to participate and help shape the outcomes.

The MCWC pledges its support for this effort through providing in-kind staff time to help direct and provide input as the various tasks are executed. Thank you for your consideration of this proposal.

Sincerely,

Donna Gray  
President and Chair





October 14, 2015

Mr. Chris Sturm  
Colorado Water Conservation Board  
1313 Sherman St., Room 718  
Denver, CO 80203

RE: Colorado Basin Roundtable/Hutchins Water Center at CMU Stream Management Planning Grant application

Dear Chris,

American Rivers, one of the nations largest river conservation organizations, strongly supports this Stream Management Planning application through the Colorado Watershed Restoration Program. As you know Stream Management Planning, or Integrated Water Management Planning is a key basin wide recommendation from the Colorado Basin Roundtable's Basin Implementation Plan. It is also a key recommendation from the Colorado Water Plan.

Such water management planning can be a highly sensitive issue for a number of people. Yet such planning will be essential if we are to achieve the goals for meeting the needs of all the values identified in the Governor's Executive Order for creation of the Water Plan. To make such planning successful we agree with the Colorado Basin Roundtables approach for starting by finding out what we know and what the knowledge gaps are, engaging all stakeholders and communities and developing a framework from which such integrated water plans can be developed. We will need buy in from all stakeholders and communities and this approach will help continue a neutral conversation while laying a foundation of trust and unbiased science based information.

We hope that you and the CWCB will be able to support this grant request. Please do not hesitate to call me if you have any questions or concerns.

Thank you for your consideration and support

Ken Neubecker, Associate Director  
American Rivers Colorado River Basin Program  
Colorado Basin Roundtable Environmental Representative  
24 S. Meadow View Ct.  
Glenwood Springs, CO 81601  
(970) 230-9300 home/office  
(970) 376-1918 cell



# COLORADO WATER CONSERVATION BOARD



## WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: 12/01/2015

Colorado Basin Roundtable Integrated Water Management Planning Framework

### Name of Water Activity/Project

Colorado Mesa University - Ruth Powell Hutchins Water Center

### Name of Applicant

Colorado Basin Roundtable

Amount from Statewide Account:

0

Amount from Basin Account(s):

\$43,404

Total WSRA Funds Requested:

\$43,404

### Approving Basin Roundtable(s)

*(If multiple basins specify amounts in parentheses.)*

FEIN: 84-6001656

### Application Content

Application Instructions	page 2
Part I – Description of the Applicant	page 3
Part II – Description of the Water Activity	page 5
Part III – Threshold and Evaluation Criteria	page 7
Part IV – Required Supporting Material	
Water Rights, Availability, and Sustainability	page 10
Related Studies	page 10
Signature Page	page 12

### Required Exhibits

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

### Appendices – Reference Material

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

## Water Supply Reserve Account – Application Form

Revised October 2013

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### **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>. In addition, the applicant should also refer to the [Supplemental Scoring Matrix](#) applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests .

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

Craig Godbout - WSRA Application  
Colorado Water Conservation Board  
1313 Sherman St., Room 721  
Denver, CO 80203  
[Craig.godbout@state.co.us](mailto: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](mailto: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 Mesa University – Ruth Powell Hutchins Water Center		
	Mailing address:	1100 North Avenue Grand Junction, CO 81501		
	FEIN #:	84-6001656		
	Primary Contact:	Hannah Holm	Position/Title:	Coordinator
	Email:	hholm@coloradomesa.edu		
	Phone Numbers:	Cell: 970-683-1133	Office:	970-248-1968
	Alternate Contact:	Gigi Richard	Position/Title:	Director
	Email:	grichard@coloradomesa.edu		
	Phone Numbers:	Cell: 970-260-5528	Office:	970-248-1689

### 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.

## Water Supply Reserve Account – Application Form

Revised October 2013

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3. Provide a brief description of your organization

Founded in 1925, Colorado Mesa University (CMU) is a comprehensive regional public higher education institution offering liberal arts, professional, and technical programs at the master's, bachelor's, associate and certificate levels. The Ruth Powell Hutchins Water Center was established at CMU in 2011 to perform and facilitate interdisciplinary and collaborative research, education, outreach, and dialogue to address the water issues facing the Upper Colorado River Basin.

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

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

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

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

6. The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.

N/A

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### 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)

☐ Agricultural

☐ Municipal/Industrial

☐ Needs Assessment

☐ Education

☐ Other Explain:

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

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

☒ Study ☐ Implementation

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

New Storage Created (acre-feet)

New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)

Existing Storage Preserved or Enhanced (acre-feet)

Length of Stream Restored or Protected (linear feet)

Length of Pipe/Canal Built or Improved (linear feet)

Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)

Area of Restored or Preserved Habitat (acres)

Other -- Explain:

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

Latitude:

39 N – 40 N  
(roughly)

Longitude:

106 W – 109 W  
(roughly)

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.

### Project Description

This project will provide the informational and procedural framework for conducting comprehensive integrated water management plans in the Colorado River Basin. The purpose of these plans will be to identify ways to provide sufficient water for environmental needs while recognizing the needs of agricultural, domestic and industrial water users.

This project will include the following tasks:

1. **Information Gathering:** An extensive review and compilation of existing information relevant to the development of integrated water management plans. The resulting compilation will be available in table form and linked to a map of the basin to show spatially which stream reaches have been studied in what ways.
2. **Information Synthesis:** A detailed GIS map will utilize the information collected in task #1 to depict what available data shows about stream health in each stream segment in the basin.
3. **Stakeholder Engagement and Education:** Consultation with stakeholders in order to refine the goals and objectives of the basin-wide planning effort; achieve consensus on the recommended tools and processes for developing integrated water management plans; and establish priorities for implementation. Once priorities are established, outreach will be conducted in the priority sub-basins to solicit interest in developing detailed plans.
4. **Develop Framework for Stream Management Planning:** Drawing on the work done in tasks two and three, develop and describe a framework for the creation of integrated water management plans at the sub-basin level that facilitates the integration of discrete plans into a comprehensive tool that can be applied basin-wide.

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### 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.<sup>1</sup>

This project falls under the following eligible category: *Studies or analysis of structural, nonstructural, consumptive, and nonconsumptive water needs, projects, or activities.*

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

See attached letter of support from the Colorado Basin Roundtable, noting unanimous endorsement.

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

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<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.

<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



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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 project will not affect the current system for allocating water in Colorado, nor will it impact any water rights.

- 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)

This project is not seeking statewide funds. We propose to fund the project costs as follows:

\$ 43,404 - WSRA Basin Funds (this application)

\$ 67,947 – CWCB Stream Management Plan grant funds (app pending)

\$ 29,256 – In-kind resources of time committed by project partners

\$ 9,995 – Cash funds held by Colorado Mesa University

\$150,602

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other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

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

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

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

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

### Tier 2: Facilitating Water Activity Implementation

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

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

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

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- 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.**

Although we are not applying for funds from the Statewide Account, we have still provided information on how this project meets the evaluation criteria.

This project meets all the tier 1 criteria because it:

- Will develop the informational and procedural framework for meeting nonconsumptive and consumptive needs together.
- Has been developed and will be overseen by the Colorado Basin Roundtable's Integrated Water Management Planning subcommittee, which includes representatives of both consumptive and nonconsumptive interests.
- Will facilitate implementation of integrated water supply management plans to meet nonconsumptive and consumptive needs through out the basin.

This project meets both tier 2 criteria because:

- Approval of this application will provide matching funds for thos applied for under the CWCB's Colorado Watershed Restoration Program, Stream Management Plan Category.
- The commitment to provide matching cash and in-kind support by the project partners indicates broad and significant stakeholder commitment to the project.

This project meets tier 3 criteria because:

- It will provide a framework for planning to meet both environmental flow needs and traditional consumptive water needs.
- It will provide great benefits for the amount of funds requested.
- It is complimentary to the CWCB Stream Management Plan program.

### 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.

No water rights or water right issues will be affected by this project.

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

One of the primary purposes of the project is to gather and synthesize studies that can illuminate integrated water management planning; there are no permitting issues related to this activity.

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.

Our statement of work, detailed budget and project schedule are attached in Exhibit A.

### REPORTING AND FINAL DELIVERABLE

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

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

### 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

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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:** 

**Print Applicant's Name:** Tim Foster, President, Colorado Mesa University

**Project Title:** Colorado Basin Roundtable Integrated Water Management Planning Framework

**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](mailto:craig.godbout@state.co.us)

**Exhibit A**  
**Statement of Work**  
**Date: 12/01/2015**

**WATER ACTIVITY NAME**

Colorado Basin Roundtable Integrated Water Management Planning Framework

**GRANT RECIPIENT**

Colorado Mesa University Ruth Powell Hutchins Water Center

**FUNDING SOURCE**

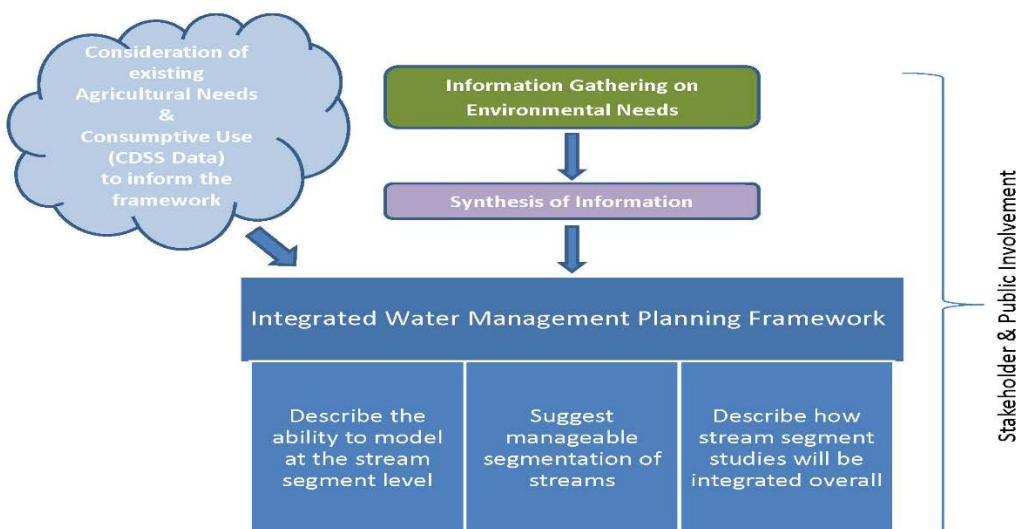
WSRA Basin Funds – Colorado Basin Roundtable

**INTRODUCTION AND BACKGROUND**

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

The Colorado Basin Roundtable (CBRT) has identified a basin-wide stream management plan (SMP) as a top priority in its Basin Implementation Plan. The CBRT feels that such planning is vital to providing sufficient water for environmental needs among the many competing uses and demands for water, and thereby restoring and protecting ecological processes that connect land and water while ensuring that streams also serve the needs of human populations.

The CBRT views SMPs as comprehensive in the sense that they need to consider both consumptive and non-consumptive uses, which is why we are calling this project an “integrated water management planning framework.” Tasks one and two focus on information gathering and synthesis related to environmental needs. This body of work and its integration into a planning framework will be considered during tasks three and four, which involve stakeholder engagement and developing a framework for the creation of integrated water management plans at the sub-basin level. This framework will facilitate the integration of discrete plans into a comprehensive tool that can be applied basin-wide. This graphic describes the overall process for this project:



## **OBJECTIVES**

List the objectives of the project

The objective of this project is to develop an integrated water management planning framework for the watershed area within the purview of the Colorado Basin Roundtable (CBRT). The proposed work will lay the necessary groundwork for entities to develop detailed integrated water management plans (IWMPs) that address local and/or regional needs while also providing information and output that can be used for basin-level planning and management purposes. While this proposal initially focuses on quantifying non-consumptive needs, the CBRT foresees the use of IWMP tools that integrate both consumptive and non-consumptive uses to ensure that all existing and future uses are considered.

## **TASKS**

Provide a detailed description of each task using the following format

### **TASK 1 – Information Gathering**

#### Description of Task

Complete a targeted review and compilation of existing information relevant to the development of IWMP tools specific to the CBRT study area. This task will focus on the collection of literature, studies, reports and documented management actions and strategies that address or can inform, in whole or in part, one or more of the following questions:

- What flows are adequate to support the life stages of the fish native to the stream segments (i.e., magnitude, frequency and duration);
- What flows are necessary to provide adequate sediment flushing;
- What flows are necessary for channel, floodplain and riparian area maintenance;
- Is the stream healthy (i.e., what do indicators such as macroinvertebrate indices, fish population data, riparian condition assessments, etc. suggest); and
- What is known about the contribution of agricultural return flows as it relates to instream flows?

#### Method/Procedure

The Ruth Powell Hutchins Water Center (Water Center) at Colorado Mesa University (CMU) will conduct the inventory work. Recognizing that considerable work has been completed to date with regards to literature searches in the study area, the first step will include the assembling and querying of existing inventories from the following sources:

- CBRT Basin Implementation Plan;
- Watershed Flow Evaluation Tool Report;
- CBRT Non-consumptive Needs Assessment;
- Grand County Stream Management Plan; and
- Upper Colorado River Basin Resource Guide (CMU).

Following an initial querying of the existing inventories, the Water Center will complete its information gathering through reviewing the relevant scientific journals and communication with the various watershed groups in the study area; resource management, planning and regulatory agencies; academic institutions; and local governments.

### Deliverable

The inventory will be compiled in a database format with identifying attributes that include information source, applicable sub-basin or stream reach(es), and data type. This database will be dynamically linked to the web-based interface “Upper Colorado River Basin Resource Guide”, which is currently under construction and resides at the Water Center. This guide includes maps to show spatially what stream reaches have been studied in what ways.

## **TASK 2 – Information Synthesis**

### Description of Task

Information collected in Task 1 will be synthesized for the purpose of identifying what is already known, what information gaps exist and where, and what resources and technical expertise will be needed to fill those information gaps. This task will go beyond task 1 by depicting what available data shows about stream health in each stream segment in the basin. This task will be undertaken in tandem with Tasks 3 and 4, recognizing the need to have a basic framework described in order to determine: 1) where existing information is adequate and appropriate and 2) what types of additional information are needed and at what level of detail.

### Method/Procedure

From the inventory compilation, a contractor will extract, interpret and categorize information relevant to the five questions posed in Task 1. Results will be displayed and examined spatially to develop a better understanding, at a high scale of resolution, of what is known, how the information interrelates, where key information is lacking, and to determine optimization strategies for additional data collection.

### Deliverable

A spatial geodatabase will be developed in GIS format to display results of the analysis.

## **TASK 3 – Stakeholder Education and Engagement**

### Description of Task

A stakeholder process will be conducted through the CBRT for the purposes of:

- Refining the objectives and goals of the basin-wide IWMP process;
- Achieving consensus on the recommended tools, how they will be applied, and how results could be used utilized; and
- Establishing priorities for implementation.



As described in Task 2, outcomes from stakeholder discussions will be used to inform work completed in Tasks 2 and 4. Once priorities are established, the CBRT will conduct outreach within the priority sub-basins to solicit interest for developing detailed IWMPs.

#### Method/Procedure

The CBRT IWMP subcommittee will carry out the planning while the Water Center will provide the facilitation for conducting the stakeholder process. A total of four stakeholder meetings are anticipated. Additional community outreach will be conducted by CMU and the subcommittee as needed.

#### Deliverable

Four stakeholder meetings and an estimated twelve community-based meetings.

### **TASK 4 – Develop Framework for Stream Management Planning**

#### Description of Task

The goal of this task is to develop and describe a framework for the creation of IWMPs at the sub-basin level that allows for the integration of discrete plans into a comprehensive tool that can be applied basin-wide.

The framework will:

- Establish the underlying goals and objectives as determined at the basin-wide level;
- Suggest a process for refining region-specific goals and objectives;
- Describe data needs, acceptable protocols for data acquisition, tools for data interpretation, and models for developing and testing management scenarios;
- Consider how to integrate systems and models that quantify consumptive uses (e.g., Colorado Decision Support System, West Slope Joint Roundtable Framework Study, etc.) so that both consumptive and non-consumptive uses are considered as part of management modeling; and
- Establish the methods by which sub-basin IWMPs could be integrate for use in basin-wide planning and management.

#### Method/Procedure

A contractor will be utilized to develop the framework. Some work on data collection protocols and acceptability of modeling tools has already occurred through the CBRT process. The contractor's work will consider those discussions and outcomes while recommending additional, suitable protocols and tools.

#### Deliverable

Draft and final guidance document that draws on work completed in Tasks 1 through 4 to articulate how to developing IWMPs at the sub-basin level that allows for the integration of discrete plans into a comprehensive tool that can be applied basin-wide.

## **TASK 5 – Project Management/Administration, including Reporting and Final Deliverable**

### Description of Task

This task includes contract and fiscal management, solicitation of and management of project consultants, and coordination with the CBRT and its subcommittees involved in project execution.

### Method/Procedure

CMU's Water Center will be the fiscal agent and administrative reporting agency for this grant. The Water Center will designate Hannah Holm as the Project Representative. The IWMP Subcommittee of the CBRT will advise on project management elements throughout the term of the project. Hannah's resume and a list of IWMP Subcommittee members is contained in Attachment A.

### Deliverable

Twice-yearly progress reports (three estimated) that describe the completion or partial completion of Tasks 1 through 4 including a reporting of any major issues that have arisen and the corrective action taken to address those issues. A final report will be submitted at project completion, summarizing the project, all documents and other deliverables, and how the project was completed.

### **Applicant Qualifications and Organizational Capacity**

The Colorado Basin Roundtable, its IWMP subcommittee and the Water Center will provide strong leadership for this project, with the Roundtable and the subcommittee providing oversight and the Water Center managing the project.

The Colorado Basin Roundtable has a proven ability to successfully guide major collaborative projects to fruition, having successfully solicited and overseen several rounds of the Water and Energy Study and the development of the Watershed Flow Evaluation Tool, as well as the Colorado Basin Implementation Plan. The IWMP subcommittee includes several members that were deeply involved in these earlier efforts. Members have diverse skill sets and perspectives, which will help ensure that the resources and framework developed through this process are relevant and sensitive to the diverse stakeholders in the Colorado Basin.

The Water Center has established itself as a trusted, neutral entity with a strong record of inclusiveness and collaboration with diverse stakeholders in developing programs that address water challenges in western Colorado and the rest of the Upper Colorado River Basin. Water Center staff have worked with the Colorado Basin Roundtable for several years on outreach and education efforts and are familiar with the principal issues and interests in the basin.

Water Center Director Dr. Gigi Richard, a hydrologist and civil engineer with a strong background in GIS, will provide technical oversight for this project. Water Center Coordinator Hannah Holm will conduct most of the day-to-day management of this project and the majority of the literature review and facilitation work. Hannah has significant experience in project management and facilitation, having coordinated the process of establishing the Water Center, as well as its operations since its founding in 2011. The Water Center will also draw on the financial and legal contract management infrastructure of the University, as well as the expertise of

its own staff to ensure that this project is competently administered. Access to assistance from student workers will also facilitate the cost-effective completion of this project.

The Water Center is also well-positioned to make the information generated through this project broadly available to all interested parties. This project will build on and make use of the ongoing effort of the Water Center to establish and maintain a web-based Upper Colorado River Basin Resource Guide to increase access to water-related reports developed and housed by diverse entities across the Upper Colorado River Basin. Working with technology and protocols managed by CMU's library, the basic infrastructure of this guide has already been developed. Task 1 of this project will help populate this guide, and the existing infrastructure of the resource guide will make the contents of the literature database developed for this project easily accessible to all. The information synthesis and guidance documents will also be made available through the Resource Guide.

### **Proposal Effectiveness**

Knowledge and stakeholder acceptance/engagement from the myriad water users are key for any IWMP to work in the Colorado Basin. The project team will measure success in achieving its objective to develop an IWMP framework by tracking the successful completion of the deliverables for each task and the degree of stakeholder participation and response to the developing and final framework guidance document, as well as the number of more localized plans that are developed as a result. Participation and response to project reports will be tracked by the applicant.

### **REPORTING AND FINAL DELIVERABLE**

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

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

## BUDGET and SCHEDULE

<i>task</i>	<i>target start date</i>	<i>target finish date</i>	<i>Responsible parties</i>	<i>WSRA CBRT funds</i>	<i>CWCB CWRP \$ (pending)</i>	<i>CMU \$ in hand</i>	<i>In- Kind</i>	<i><b>Total</b></i>
Task 1 - lit review/ compilation	Mar- 16	Dec- 16	Water Center, Watershed Groups, Agencies	10,524	13,482	9,995	5,060	<b>39,061</b>
Task 2 - information synthesis	Dec- 16	May- 17	Contractor		45,000			<b>45,000</b>
Task 3 - Facilitation/ outreach - 16 mtgs	Oct- 16	Nov- 17	Water Center, Roundtable, Subcommittee	12,880			14,720	<b>27,600</b>
Task 4 - Develop Framework	Jun-17	Nov- 17	Contractor	20,000				<b>20,000</b>
Task 5 - Project Management	Mar- 16	Nov- 17	Water Center, Subcommittee		9,465		9,476	<b>18,941</b>
<b>TOTALS</b>				<b>43,404</b>	<b>67,947</b>	<b>9,995</b>	<b>29,256</b>	<b>150,602</b>

Additional budget detail can be found in Exhibit C.

## SCHEDULE

See **Budget and Schedule** above

## 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.

**BUDGET DETAIL BY TASK**

	party	hrs	rate	total	notes	CWCB CWRP SMP \$	CWCB WSRA \$	CMU \$	In-Kind	Total
<b>Task 1 - lit review and compilation</b>										
	CMU	520	40	20,930	Hannah (sal + ben)	8,452	6,982	5,495		20,930
	CMU	300	15	4,500	students			4,500		4,500
	WGs	100	25	2,500	5 watershed grps*20 hrs	2,500				2,500
	CMU	220	51	11,132	Gigi (sal + ben)	2,530	3,542		5,060	11,132
<b>task 1 total</b>	<b>CMU</b>	<b>1140</b>		<b>39,061</b>		<b>13,482</b>	<b>10,524</b>	<b>9,995</b>	<b>5,060</b>	<b>39,061</b>
<b>Task 2 - information synthesis</b>										
	Cont			45,000		45,000				45,000
<b>Task 3 - Facilitation/ outreach - 16 mtgs</b>										
	CMU	320	40	12,880	Hannah		12,880			12,880
	comm	400	23	9,200	5 people * 5 hrs * 16				9,200	9,200
	CBRT	240	23	5,520	20 people*4 mtgs*3 hrs				5,520	5,520
<b>task 3 total</b>				<b>27,600</b>		-	<b>12,880</b>		<b>14,720</b>	<b>27,600</b>
<b>Task 4 - Develop Framework</b>										
	Cont			20,000			20,000			20,000
<b>Task 5 - Project Management</b>										
	CMU	30	40	1,208	Hannah	1,208	-			1,208
	CMU	120	40	4,830	Hannah	4,830				4,830
	comm	180	23	4,140	5 people * 3 hrs * 12 mtg				4,140	4,140
	CMU	60	40	2,415	Hannah	2,415				2,415
	CMU	80	51	4,048	Gigi	1,012			3,036	4,048
	comm	100	23	2,300	5 people * 2 cont * 10 hrs				2,300	2,300
<b>task 5 total</b>				<b>18,941</b>		<b>9,465</b>	<b>-</b>		<b>9,476</b>	<b>18,941</b>
<b>TOTAL</b>										
				<b>150,602</b>		<b>67,947</b>	<b>43,404</b>	<b>9,995</b>	<b>29,256</b>	<b>150,602</b>

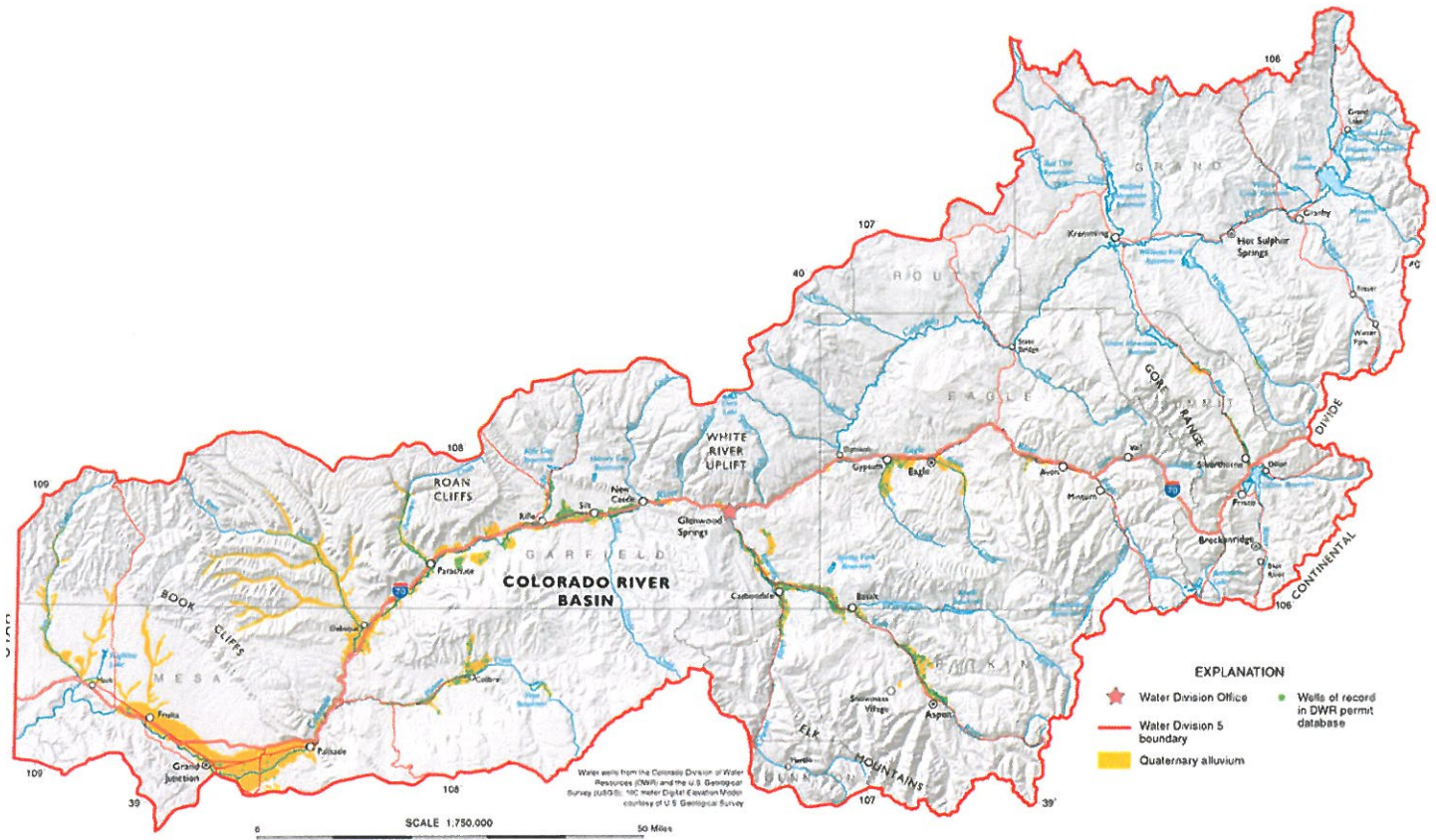


### BUDGET DETAIL BY BUDGET CATEGORY

Budget Categories	Total Project Cash	CWCB CWRP SMP Grant (Cash)	Shell Grant (CMU Cash)	CWCB WSRA Grant (Cash)	In-Kind Match	TOTAL Project
<b>Salary &amp; Wages</b>						
Hannah Holm (\$35 hr x 1050 hrs)	36,750	14,700	4,778	17,272		36,750
Gigi Richard (\$44 hr x 140 hrs)	6,160	3,080		3,080		6,160
Gigi Richard (\$44 hr x 160 hrs)						
Academic Year					7,040	7,040
Students (\$15 hr x 300 hrs)	4,500		4,500			4,500
Watershed Groups (\$25 hr * 100 hrs)	2,500	2,500				2,500
Co Basin RT committee (5 people x 5 hrs x 16 meet x \$23 hr)					9,200	9,200
Co Basin RT committee (5 people x 3 hrs x 12 meet x \$23 hr)					4,140	4,140
Co Basin RT committee (5 people x 10 hrs x 2 meet x \$23 hr)					2,300	2,300
CO Basin RT members (20 people x 3 hrs x 4 meet x \$23 hr)					5,520	5,520
<b>Total Salary &amp; Wages</b>	<b>49,910</b>	<b>20,280</b>	<b>9,278</b>	<b>20,352</b>	<b>28,200</b>	<b>78,110</b>
<b>Fringe Benefits</b>						
Hannah Holm @15%	5,512	2,205	717	2,590		5,512
Gigi Richard @ 15%	924	462	-	462		924
Gigi Richard @ 15%					1,056	1,056
<b>Total Fringe Benefits</b>	<b>6,436</b>	<b>2,667</b>	<b>717</b>	<b>3,052</b>	<b>1,056</b>	<b>7,492</b>
<b>Consultants/Contractors</b>						
Task 2 - Information Synthesis	45,000	45,000				45,000
Task 4 - Develop Framework	20,000			20,000		20,000
<b>Total Consultants/Contractors</b>	<b>65,000</b>	<b>45,000</b>	<b>-</b>	<b>20,000</b>	<b>-</b>	<b>65,000</b>
<b>Total Direct Costs</b>	<b>121,346</b>	<b>67,947</b>	<b>9,995</b>	<b>43,404</b>	<b>29,256</b>	<b>150,602</b>

Funding Source Percentage Table		
CWCB CWRP SMP Funds	67,947	45%
CWCB WSRA Funds	43,404	29%
<b>Subtotal CWCB Funds</b>	<b>111,351</b>	<b>74%</b>
Private Grant Funds	9,995	
In Kind Contributions	29,256	
<b>Subtotal Non CWCB Funds</b>	<b>39,251</b>	<b>26%</b>
<b>Total Project Costs</b>	<b>150,602</b>	<b>100%</b>

## Exhibit B: Map



**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**January 25-26, 2016**  
**Agenda Item 24(c)**

**Applicant & Fiscal Agent:** Metropolitan State University of Denver – One World One Water Center for Urban Water Education and Stewardship

**Water Activity Name:** Theatre Troupe Water Outreach Project

**Water Activity Purpose:** Educational

**County:** Front Range

**Drainage Basin:** Metro

**Water Source:** N/A

**Amount Requested/Source of Funds:** \$8,300 Metro Basin Account (total grant request)

**Matching Funds:** Applicant Match: \$6,000 (cash & in kind) = 41.9% of the total project cost of \$14,300  
(refer to *Funding Summary/Matching Funds* section below)

<b>Staff Recommendation:</b>
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Staff recommends approval of up to \$8,300 from the Metro Basin Account to help fund the project titled: MSU Denver Theatre Troupe Water Outreach Project.
--

**Water Activity Summary:** This project is a collaboration between the MSU One World One Water Center, the City of Boulder, Aurora Water, and Denver Water. In 2015, Denver Water, the City of Boulder, and Aurora Water collaborated with the One World One Water Center, and the MSU Denver Theater Department, to create a first-of-its-kind theater performance on water conservation and water protection for fifth & sixth-graders in their service areas. The response was phenomenal, and over 3,000 students, and their teachers and parents, attended the performances at several schools and the three utility water festivals in Denver, Boulder, and Aurora. This proposal would allow the troupe to perform again in 2016 for fifth and sixth graders at water festivals in Denver, Boulder, and Aurora. The applicant anticipates connecting with over 4,000 students in 2016, and could use this program as a pilot project for other similar collaborations across the state.

Section 9.5 of Colorado’s Water Plan addresses Outreach, Education and Public Engagement, specifically noting that the Plan “provides technical and financial assistance for high quality, balanced, and grassroots water education and outreach efforts that inform Coloradans about the issues so they engage in determining Colorado’s water future.” The Plan recognizes the extensive work that has occurred to help educate and engage local stakeholders and the ongoing water education activities that advance the plan’s goals.

Section 9.5 of Colorado’s Water Plan charts a path to expand this work in the future, specifically for 2015 and beyond. The Plan proposes the creation of a new outreach, education and public engagement grant fund; this current proposal would be part of the first step towards the sustained educational outreach, education and engagement activities that Colorado’s Water Plan envisions and serve as a precursor to those educational activities in 2016 and beyond, funded by CWCB. This



applicant recognizes the many current effective efforts that are on-going for youth education in this State; this application is focused on university student participation.

The Metro and South Platte Basin Implementation Plan includes a section on “Suggested Activities: 2015 and Beyond” which envisions an educational outreach plan that “maximizes existing opportunities and avoids duplication of efforts.” Key elements identified in the Metro and SP BIP include a focus on developing messages, leveraging existing basin resources, complementing existing state efforts, and establishing success metrics, while expanding public awareness and support. This proposal is intended to be one of the first accomplishments of these key elements while serving as a bridge between the WSRA-funded education efforts and the newly envisioned CWCB-funded education efforts articulated in Colorado’s Water Plan; it builds on existing university water education programs in the State and looks to these students as future water diplomats of the aspirations articulated in Colorado’s Water Plan.

The Colorado State Science Standards for 6th graders specifically requires that students learn about their water supply, the importance of water, and local water issues. This is an excellent program to meet those requirements. We would like to continue this project into the future, but need some financial support.

**Discussion:** No additional discussion is required.

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

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

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Metro Account	\$8,300	n/a	\$8,300
Matching Funds (refer to application)	\$6,000	\$0	\$6,000
<b>Total</b>	<b>\$14,300</b>	<b>\$0</b>	<b>\$14,300</b>

**CWCB Project Manager:** Kate McIntire

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

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

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

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

October 22, 2015

Mr. Craig Godbout  
Colorado Water Conservation Board  
Water Supply Planning Section  
1313 Sherman Street, Suite 718  
Denver, CO 80203

Re: Letter of Support for the One World One Water Center - MSU Denver WSRA application titled *MSU Denver Theatre Troupe Water Outreach Project*.

Dear Craig,

The Metro Roundtable has received a presentation regarding the WSRA application from the One World One Water (OWOW) Center at MSU Denver from the Metro Basin Roundtable and Statewide funds to assist in the implementation of the MSU Denver Theatre Troupe Water Outreach Project.

In 2015, Denver Water, the City of Boulder, and Aurora Water collaborated with the One World One Water Center, and the MSU Denver Theater Department, to create a first-of-its-kind theater performance on water conservation and water protection for fifth & sixth-graders in their service areas. The response was phenomenal, and over 3,000 students, and their teachers and parents, attended the performances at several schools and the three utility water festivals in Denver, Boulder, and Aurora. The Colorado State Science Standards for 6th graders specifically requires that students learn about their water supply, the importance of water, and local water issues. This is an excellent program to meet those requirements.

Upon review and consideration of this proposal by the Metro Roundtable, a motion was made and seconded to supply this letter of support for the application. A quorum of the Metro Roundtable unanimously approved that motion at its October 14, 2015 meeting.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Barbara Biggs', with a stylized flourish at the end.

Barbara Biggs, Chair  
Metro Roundtable



# COLORADO WATER CONSERVATION BOARD



## WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: September 21, 2015

MSU Denver Theatre Troupe Water Outreach Project

### Name of Water Activity/Project

Metropolitan State University of Denver - One World One Water  
Center for Urban Water Education and Stewardship

### Name of Applicant

Metro Basin Roundtable

Amount from Statewide Account:

\$0

Amount from Basin Account(s):

\$8,300

Total WSRA Funds Requested:

\$8,300

### Approving Basin Roundtable(s)

*(If multiple basins specify amounts in parentheses.)*

FEIN: 84-0559160;DUNS:835449125

# Water Supply Reserve Account – Application Form

Revised October 2013

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

1.	Applicant Name(s):	Metropolitan State University of Denver - One World One Water Center for Urban Water Education and Stewardship		
	Mailing address:	Campus Box 8 P.O. Box 173362 Denver, CO 80217-3362		
	FEIN #:	84-0559160		
	Primary Contact:	Tom Cech	Position/Title:	Director, OWOW
	Email:	tcech@msudenver.edu		
	Phone Numbers:	Cell: 970-371-9598	Office:	303-352-7400
	Alternate Contact:	Nona Shipman	Position/Title:	Manager, OWOW
	Email:	nshipman@msudenver.edu		
	Phone Numbers:	Cell: 703-409-1013	Office:	303-352-7400

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

- ☒ **xx** 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.

## Water Supply Reserve Account – Application Form

Revised October 2013

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3. Provide a brief description of your organization

Metropolitan State University of Denver (MSU Denver) provides students with a transformative academic experience and serves the community as a courageous change agent and a gateway to opportunity. The University's broad access, affordable tuition, quality academic experience, and excellent outcomes add up to a high value education.

The One World One Water Center for Urban Water Education & Stewardship at MSU Denver strives to prepare an educated, empowered, solution-oriented Colorado citizenry to protect and preserve our precious water resources. MSU Denver fulfills the mission in three ways:

- Offer an interdisciplinary, hands-on Water Studies minor for students from diverse backgrounds and in any major;
- Provide co-curricular enrichment activities to the entire student population of the Auraria Campus, which includes MSU Denver, the University of Colorado – Denver, and the Community College of Denver;
- Enhance water stewardship on and beyond campus for the effective use of water resources.

The Water Studies Minor will provide students with skills necessary to become more knowledgeable of Colorado's limited water resources, and how to preserve this most precious resource.

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

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

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

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

6. The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant. NA

## Water Supply Reserve Account – Application Form

Revised October 2013

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### 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)

☐

Agricultural

☐

Municipal/Industrial

☐

Needs Assessment

☒

Education

☐

Other

Explain:

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

It will address education opportunities for the State's university students and dissemination of information on water conservation in the Metropolitan Denver region.

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

☐

Study

☒

Implementation

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

New Storage Created (acre-feet)

New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)

Existing Storage Preserved or Enhanced (acre-feet)

Length of Stream Restored or Protected (linear feet)

Length of Pipe/Canal Built or Improved (linear feet)

Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)

Area of Restored or Preserved Habitat (acres)

☒

Other -- Explain:

The Metrics similar to those in 9.5 of State Plan

## Water Supply Reserve Account – Application Form

Revised October 2013

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

Latitude: 39.7392 N.

Longitude: 104.9847 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.

Section 9.5 of the Colorado State Water Plan addresses Outreach, Education and Public Engagement, specifically noting that the Water Plan “provides technical and financial assistance for high quality, balanced, and grassroots water education and outreach efforts that inform Coloradans about the issues so they engage in determining Colorado’s water future.” The Plan recognizes the extensive work that has occurred to help educate and engage local stakeholders and the ongoing water education activities that advance the plan’s goals.

Section 9.5 charts a path to expand this work in the future, specifically for 2015 and beyond. The Plan proposes the creation of a new outreach, education and public engagement grant fund; this current proposal would be the first step towards the sustained educational outreach, education and engagement activities that the State Plan envisions and serve as a precursor to those educational activities in 2016 and beyond, funded by CWCB. This applicant recognizes the many current effective efforts that are on-going for youth education in this State; this application is focused on university student participation.

The Metro and South Platte Basin Implementation Plan includes a section on “Suggested Activities: 2015 and Beyond” which envisions an educational outreach plan that “maximizes existing opportunities and avoids duplication of efforts.” Key elements identified in the Metro and SP BI include a focus on developing messages, leveraging existing basin resources, complementing existing state efforts, and establishing success metrics, while expanding public awareness and support. This proposal is intended to be one of the first accomplishments of these key elements while serving as a bridge between the WSRA-funded education efforts and the newly envisioned CWCB-funded education efforts articulated in the State Plan; it builds on existing university water education programs in the State and looks to these students as future water diplomats of the aspirations articulated in the State Plan.

In 2015, Denver Water, the City of Boulder, and Aurora Water collaborated with the One World One Water Center, and the MSU Denver Theater Department, to create a first-of-its-kind theater performance on water conservation and water protection for fifth & sixth-graders in their service areas. The response was phenomenal, and over 3,000 students, and their teachers and parents, attended the performances at several schools and the three utility water festivals in Denver, Boulder, and Aurora. The Colorado State Science Standards for 6th graders specifically requires that students learn about their water supply, the importance of water, and local water issues. This is an excellent program to meet those requirements.

We would like to continue this project into the future, but need some financial support. Below is the proposed budget for 2016 for the troupe to perform again for fifth and sixth graders at water festivals in Denver, Boulder, and Aurora. We anticipate connecting with over 4,000 students in 2016, and could use this program as a pilot project for other similar collaborations across the state.



## Water Supply Reserve Account – Application Form

Revised October 2013

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### 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.<sup>1</sup>

This educational activity is consistent with C.R.S, Section 37-75-102.

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

The proposal was presented to the Metro Basin Roundtable on Wednesday, September 9, 2015. The Metro Roundtable will consider funding at their October 14, 2015 meeting.

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<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.

## Water Supply Reserve Account – Application Form

Revised October 2013

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- 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.

This application intends to carry forth the goals and objectives articulated in the Metro Basin Roundtable Implementation Plan as it addresses education and community engagement.

The Metro Basin Implementation Plan includes a section on "Suggested Activities: 2015 and Beyond" which envisions an educational outreach plan that "maximizes existing opportunities and avoids duplication of efforts." Key elements identified in the Metro BI include a focus on developing messages, leveraging existing basin resources, complementing existing state efforts, and establishing success metrics, while expanding public awareness and support. This proposal is intended to be one of the first accomplishments of these key elements while serving as a bridge between the WSRA-funded education efforts and the newly envisioned CWCB-funded education efforts articulated in the State Plan; it builds on existing university water education programs in the State and looks to these students as future water diplomats of the aspirations articulated in the State Plan.

- 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)

Total grant request: \$8,300

Total Statewide Funds Requested: \$0

Total Matching Funds provided by Denver Water, Aurora Water and the City of Boulder: \$6,000

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<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.

## Water Supply Reserve Account – Application Form

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Actor rehearsals (11 actors for 30 hours of rehearsal)	\$ 6,600
15 performances at three water festivals	\$ 4,950
Director time (rehearsals, scheduling & performances)	\$ 2,000
Administrative costs	\$ 500
Actor costumes (t-shirts)	\$ 250
TOTAL	\$14,300

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

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

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

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

### **Tier 2: Facilitating Water Activity Implementation**

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

## Water Supply Reserve Account – Application Form

Revised October 2013

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### 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.
- Explanation of how the water activity/project meets all applicable **Evaluation Criteria**.

**Please attach additional pages as necessary.**

**Tier 1: a) This educational activity will promote collaboration and cooperation across the State and throughout the basins because its objectives are in-line with those articulated in Section 9.5 of the State Water Plan that recognizes that “[t]o achieve a sustainable water future, Coloradans must be sophisticated water users” and that “community discourse around balanced water solutions” must be promoted. This activity will engage the State’s university students in being champions of that discourse and of becoming informed messengers of the State’s efforts in meeting our water gap. Because the Applicant is Metropolitan State University of Denver, the Metro Roundtable has been requested to be the basin fund sponsor; the South Platte Basin Roundtable has been asked for a letter of support. Although students from the Colorado Basin will be participating in the conference, the Applicant did not approach the Colorado Basin Roundtable and instead foresees a reciprocal conference in the Spring of 2016 at Colorado Mesa University at which time the Colorado Basin Roundtable would be involved. The applicant foresees an ongoing revolving conference modeled on this one that would repeat every fall.**

**b) The various universities across the State who will be involved in this water activity include Metropolitan State University of Denver (Metro Rdtable), Colorado Mesa University (Colorado Basin), Colorado State University (South Platte Basin Rdtable), Colorado School of Mines and the University of Colorado (Metro and South Platte Basin). The very essence of the educational conference is to promote communication, cooperation and collaboration among the future leaders of this State. Transparent and trusting communications across the State is essential for the effective achievement of the goals of the State Water Plan.**

**Tier 2: d) Funding from the Metro Basin Roundtable and the State-wide Account will reduce distrust and fear that still exists between the basins because it will embolden university students to understand the fact that “what is good for Colorado is good” for each and every basin. Spreading knowledge on the facts of the Plan and the current challenges meeting the State’s water supply and demands will lay the ground work for the “outreach, education, and public engagement” for which the State Plan calls. 30 university students will participate in this activity and will be key voices when they return to their respective universities and communities. The current budget of the OWOW Center and MSU Denver does not allow for this kind of an in-depth field work and “boot camp” focused on the State Water Plan without external funding. The September 2015 date is critical in order to engage some of these students who will be graduating before the CWCB grant framework outlined in 9.5 is put in place in 2016 and beyond.**

**Tier 3: j) The water activity is complimentary to on-going efforts of PEPO and CFWE; it addresses key issues presented in the educational considerations of both the State Plan and the Metro/SP Basin Implementation Plan. It is of Statewide Value because it will bring together 30 students-future**

## **Water Supply Reserve Account – Application Form**

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**leaders—from diverse backgrounds and communities across the State. It also will foster collaboration and communication between state campuses and faculty from a variety of disciplines.**

## Water Supply Reserve Account – Application Form

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### 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.

No water supply sources are involved in this activity. No water rights will be affected.

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

No permitting issues involved. Related studies include ongoing water study programs at MSU Denver.

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.  
**See Exhibit A attached.**

## **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

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

**Signature of Applicant:** *Tom Cech*

**Print Applicant's Name:** Tom Cech, Director, OWOW Center, Metropolitan State University of Denver  
c/o: Gwendolyn M. Mami, M.A., J.D.

Executive Director, Office of Sponsored Research and Programs

Campus Box 4, P.O. Box 173362

Denver, CO 80217 Phone: (303) 352-7004 gmami@msudenver.edu

**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](mailto:craig.godbout@state.co.us)



Exhibit A:

**Name of Water Activity:** MSU Denver Theatre Troupe Water Outreach Project

**Applicant:** Metropolitan State University of Denver, One World One Water Center for Urban Water Education and Stewardship

**WSRA Grant Requested:** \$8,300

**Scope of Work: Summary of water activity; description of the goals of the water activity and how the water activity will accomplish these goals. Description of how the work will be accomplished and major deliverables.**

Summary of water activity: In 2015, Denver Water, the City of Boulder, and Aurora Water collaborated with the One World One Water Center, and the MSU Denver Theater Department, to create a first-of-its-kind theater performance on water conservation and water protection for fifth & sixth-graders in their service areas. The response was phenomenal, and over 3,000 students, and their teachers and parents, attended the performances at several schools and the three utility water festivals in Denver, Boulder, and Aurora. The Colorado State Science Standards for 6th graders specifically requires that students learn about their water supply, the importance of water, and local water issues. This is an excellent program to meet those requirements.

We anticipate connecting with over 4,000 students in 2016, and could use this program as a pilot project for other similar collaborations across the state.

**Program Schedule:**

Rehearsals would begin in January 2016, with performances occurring in Denver, Aurora and Boulder in April & May 2016.

**Participants: Metropolitan State University of Denver:**

**One World One Water Center:** Tom Cech, Director, and Nona Shipman, Manager, OWOW Center; Dr. Marilyn Hetzel, Professor, MSU Denver Theater Department

**City of Boulder:** Russ Sands, Director, Water Conservation Program

**Aurora Water:** Natalie Brower-Kirton, Senior Program Specialist

**Denver Water:** Matt Bond, Youth Education Program Manager

**Budget:**

Actor rehearsals (11 actors for 30 hours of rehearsal)	\$ 6,600
15 performances at three water festivals	\$ 4,950
Director time (rehearsals, scheduling & performances)	\$ 2,000
Administrative costs	\$ 500
Actor costumes (t-shirts)	\$ 250
TOTAL	\$14,300

**Project Schedule Milestones:**

January – March 2016: Preparation and rehearsals

April – May 2016: School performances

June 30, 2016: Final report to WSRA

**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**January 25-26, 2016**  
**Agenda Item 24(d)**

**Applicants:** San Miguel Watershed Coalition & Trout Unlimited  
**Fiscal Agent:** Trout Unlimited  
**Water Activity Name:** San Miguel River Stream Management Plan, Pilot Project  
**Water Activity Purpose:** Nonconsumptive  
**County:** San Miguel  
**Drainage Basin:** San Miguel River Basin  
**Water Source:** San Miguel River  
**Amount Requested/Source of Funds:** \$32,138 Southwest Basin Account (total grant request)  
**Matching Funds:** Applicant Match: \$96,413 (cash & in-kind) = 75% of the total project cost of \$128,551  
(refer to *Funding Summary/Matching Funds* section below)

<b>Staff Recommendation:</b>
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Staff recommends approval of up to \$32,138 from the Southwest Basin Account to help fund the project titled: San Miguel River Stream Management Plan, Pilot Project.
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**Water Activity Summary:** While developing its Basin Implementation Plan (BIP), the Southwest Basin Roundtable (SWBRT) identified a significant gap in information necessary to understand environmental and recreational (E&R) water needs. Understanding E&R water needs is particularly challenging given the size of the area and diversity of the nine basins that make up the SWBRT's area of interest. Given these challenges, the SWBRT voted to support the concept of a pilot project to develop E&R water needs information in one of the basins with the thought that the approach could be replicated, with adjustments to meet local needs, in other basins. The San Miguel basin was proposed for the pilot project. The San Miguel Watershed Coalition (SMWC) is interested in developing an understanding of E&R water needs within the San Miguel River Basin and a stream management plan to help guide cooperative water management efforts. This work should provide a model for conducting cost---effective watershed ---scale evaluations of E & R needs and implementing stream management planning efforts in other areas of the Southwest Basin.

The San Miguel River Pilot Project will assess environmental and recreational water needs within the San Miguel River basin and identify potential approaches to meet identified gaps, if any. The project consists of the following steps:

1. Review E&R attributes within the San Miguel River basin identified in the BIP for completeness;
2. Identify potential water gaps to support those attributes;

3. Assist the project sponsors and other stakeholders in defining desired outcomes for E&R uses within the project area and to identify projects to achieve the desired outcomes in a cooperative setting
4. Evaluate effectiveness of implementation of said projects

**Discussion:** The proposed project aligns well with several Goals and Measurable Outcomes in the Southwest Basin Implementation Plan, such as “Meet Environmental Needs” Goal E2: *Protect, maintain, monitor and improve the condition and natural function of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries, and to support native species and functional habitat in the long term, and adapt to changing conditions* (Section 1 - Basin Goals and Measurable Outcomes, Table 1, page 16). This proposal assists the Southwest Basin achieve these Goals and Measurable Outcomes by implementing a San Miguel-Basin IPP – *San Miguel Watershed Coalition*, ID No. 25-SB, Appendix A, page 18 of 18.

It is CWCB staff’s opinion that this proposal advances the Goals and Measurable Outcomes of Colorado’s Water Plan by reflecting the intent of the Programmatic *Critical Watershed, Environment, and Recreation Actions #3* (Develop stream management plans for priority streams (identified in a BIP or otherwise) as having environmental or recreational value. As part of this work, the CWCB will provide guidelines and templates for developing stream management plans, and will conduct ongoing analyses through SWSI.), as exhibited in Chapter 10: *Critical Action Plan*, Section 10.3: Critical Goals and Actions, F. Watershed Health, Environment, and Recreation, page 10-12.

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

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

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
CWCB Watershed Restoration Grant	\$64,275	\$0	\$64,275
Southwestern Water Conservation District	\$14,138	\$0	\$14,138
Local Governments & Foundation	\$3,000	\$0	\$3,000
San Miguel Watershed Coalition/TU/American Whitewater	\$0	\$15,000	\$15,000
Subtotal Match	\$81,413	\$15,000	\$96,413
Southwest Basin WSRA Account	\$32,128	n/a	\$32,128
<b>Total</b>	<b>\$113,541</b>	<b>\$15,000</b>	<b>\$128,541</b>

**CWCB Project Manager:** Chris Sturm

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

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

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

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

**SOUTHWEST BASINS ROUNDTABLE**

**Michael Preston, Chair**

**c/o Dolores Water Conservancy District**

**P.O. Box 1150**

**Cortez, Colorado 81321**

**970-565-7562**

October 20, 2015

Mr. Craig Godbout  
Water Supply Management Section  
Colorado Water Conservation Board  
1580 Logan Street, Suite 600  
Denver, Colorado 80203

SUBJECT: San Miguel River Stream Management Plan, Pilot Project - \$32,138 from  
Basin Account

Dear Mr. Godbout:

The Southwest Basin Roundtable recommends funding of \$32,138 from the Southwest Basin Account for the San Miguel River Stream Management Plan Pilot Project submitted by the San Miguel Watershed Coalition and Trout Unlimited. The application was considered in detail and approved at the October 14, 2015 meeting of the Southwest Basin Roundtable. There was a quorum of Roundtable members present.

The proposed project is an IPP. The challenge of interfacing non-consumptive and consumptive needs in SWBRT sub-basins is a strategy and outcome put forward in the Southwest Basin Implementation Plan. This pilot is a conscious effort to move forward with a ripe opportunity on the San Miguel River to apply this strategy and adapt to what is learned in implementing this pilot.

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

Sincerely,



Michael Preston  
Southwest Basin Roundtable Chair



# COLORADO WATER CONSERVATION BOARD



## WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: October 5, 2015

San Miguel River Stream Management Plan, Pilot Project

### Name of Water Activity/Project

San Miguel Watershed Coalition and Trout Unlimited

### Name of Applicant

Southwest Basin Roundtable

Amount from Statewide Account: \$ 0

Amount from Basin Account(s): \$ 32,138

Total WSRA Funds Requested: \$ 32,138

### Approving Basin Roundtable(s)

*(If multiple basins specify amounts in parentheses.)*

FEIN:

### Application Content

Application Instructions	page 2
Part I – Description of the Applicant	page 3
Part II – Description of the Water Activity	page 5
Part III – Threshold and Evaluation Criteria	page 7
Part IV – Required Supporting Material	
Water Rights, Availability, and Sustainability	page 10
Related Studies	page 10
Signature Page	page 12

### Required Exhibits

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

### Appendices – Reference Material

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

## Water Supply Reserve Account – Application Form

Revised October 2013

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### **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>. In addition, the applicant should also refer to the [Supplemental Scoring Matrix](#) applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests .

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

Craig Godbout - WSRA Application  
Colorado Water Conservation Board  
1313 Sherman St., Room 721  
Denver, CO 80203  
[Craig.godbout@state.co.us](mailto: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](mailto:craig.godbout@state.co.us).

## Water Supply Reserve Account – Application Form

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

1.	Applicant Name(s):	San Miguel Watershed Coalition & Trout Unlimited		
	Mailing address:	<i>Coalition:</i> P.O. Box 1601, Telluride, Colorado 81435; <i>Trout Unlimited:</i> P.O. Box 1544, Pagosa Springs, Colorado 81147		
	FEIN #:			
	Primary Contact:	Jenny Russell	Position/Title:	Board Member
	Email:	jenny.russell@lawtelluride.com		
	Phone Numbers:	Cell:	Office:	970-239-1972
	Alternate Contact:	Mely Whiting	Position/Title:	Legal Counsel
	Email:	mwhiting@tu.org		
	Phone Numbers:	Cell:	Office:	

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

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



## Water Supply Reserve Account – Application Form

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3. Provide a brief description of your organization:

*San Miguel Watershed Coalition:* The Coalition's purpose is to give communities and stakeholders in the watershed a voice to direct the future management of watershed resources. The Coalition's mission is to advance the ecological health and promote the economic vitality of the watershed through the collaborative efforts of the entire community. The Coalition's goal is to realize a watershed that is healthy in every respect, while offering a sustainable and quality lifestyle for all who live within it.

*Trout Unlimited:* Trout Unlimited is a national, non-profit organization with over 150,000 members nationwide, approximately 12,000 members in Colorado. Our volunteers and staff engage in partnerships and stakeholder driven efforts with the goal of conserving, protecting, and restoring cold water fisheries and their habitat in a cooperative, constructive setting.

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

N/A

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.

Both the Coalition and TU are non-governmental organizations and are not subject to TABOR.

## Water Supply Reserve Account – Application Form

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### 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)

☐ Agricultural

☐ Municipal/Industrial

☐ Needs Assessment

☐ Education

☐ Other Explain:

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

The information developed through the project can be used for the development of multiple-purpose projects

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

☒ Study ☐ Implementation

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

New Storage Created (acre-feet)

New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)

Existing Storage Preserved or Enhanced (acre-feet)

Length of Stream Restored or Protected (linear feet)

Length of Pipe/Canal Built or Improved (linear feet)

Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)

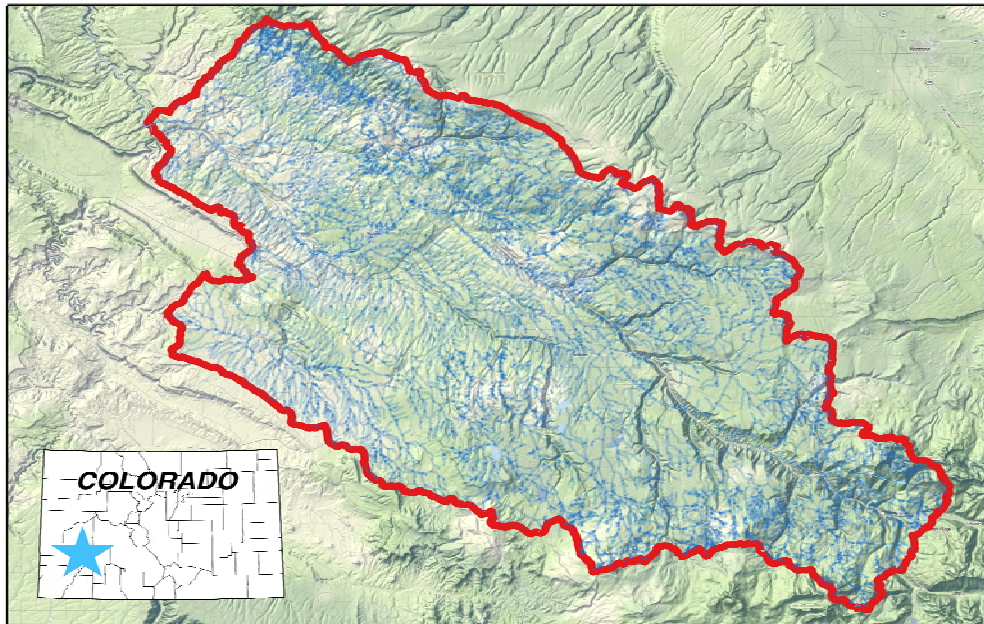
Area of Restored or Preserved Habitat (acres)

☒ Other -- Explain:  Up to 10 potential E&R or multi-purpose projects identified

## Water Supply Reserve Account – Application Form

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



Latitude:

32.29 N.

Longitude:

108.39 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.

The San Miguel River Pilot Project will assess environmental and recreational water needs within the San Miguel River basin and identify potential approaches to meet identified gaps, if any. The project consists of the following steps:

1. Review E&R attributes within the San Miguel River basin identified in the BIP for completeness
2. Identify potential water gaps to support those attributes
3. Assist the project sponsors and other stakeholders in defining desired outcomes for E&R uses within the project area and to identify projects to achieve the desired outcomes in a cooperative setting
4. Evaluate effectiveness of implementation of said projects

See [Exhibit A](#) for a full Statement of Work, including a detailed budget and schedule.

## Water Supply Reserve Account – Application Form

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### 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.<sup>1</sup>

The Project is consistent with the statute in that it will not supersede, abrogate or otherwise impair the system of allocating water in the State.

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

See letter from Roundtable Chair

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<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.

## Water Supply Reserve Account – Application Form

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- 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 Project will help to meet the nonconsumptive needs of the San Miguel River Basin by evaluating the gaps in data and understanding regarding flows and other conditions necessary to sustain the identified environmental and recreational ("E&R") values in the Basin. Specifically, the Project will identify locations across the watershed where E&R gaps exist, including the magnitude, timing and persistence of observed gaps for maintenance of fisheries health, riparian recruitment, channel form, and recreational opportunities. The Project will provide a stream management plan that will provide a decision framework during future water planning efforts and for potential nonconsumptive or multiple use projects.

- 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)

No funds are being requested from the Statewide Fund. A detailed budget is attached as Exhibit B and shows all expected matching sources of funds.

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<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.

## Water Supply Reserve Account – Application Form

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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.**

N/A

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

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

- a. The water activity addresses multiple needs or issues, including consumptive and/or non-consumptive needs, or the needs and issues of multiple interests or multiple basins. This can be demonstrated by obtaining letters of support from other basin roundtables (in addition to an approval letter from the sponsoring basin).

The SWBRT BIP identified a significant gap in information necessary to understand E&R water needs. Given the size and complexity of its area of interest, the SWBRT supported the concept of developing a pilot E&R needs assessment pilot project in the San Miguel basin. If successful, the approach could be used in other basins within the SWBRT with adjustments to account for local factors.

- 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.

Applicants have sought and will continue to seek input from the SWBRT E&R subcommittee as the project develops. In addition, the project calls for stakeholder outreach in confirming desired E&R attributes and in the conceptualization of potential projects to meet identified gaps.

- 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 project will assist in the development of E&R and/or multi-purpose projects to meet the needs identified by the SWBRT.



## Water Supply Reserve Account – Application Form

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### 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).

Applicants are non-profit, non-taxing entities which offer in-kind contributions but cannot finance the project. The project would not proceed absent the requested funding. See [Exhibit B](#) for a budget description, including sources of funding.

- 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.

Please see [Exhibit B](#).

### 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.

The project will provide information that can be used for projects designed to meet multi-purpose needs.

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 Project will occur in the San Miguel River Basin. This is a study and, therefore, no water rights will be affected by the Project.

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

The Project will utilize and verify the nonconsumptive values identified in the Roundtable's nonconsumptive needs analysis and BIP. The information developed could be used by the state in future SWSI efforts.

## Water Supply Reserve Account – Application Form

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### 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 see [Exhibit A](#) and [Exhibit B](#).



## **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

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

**Signature of Applicant:**

**Print Applicant's Name:** Jenny Russell, San Miguel Watershed Coalition



Mely Whiting, Trout Unlimited

**Project Title:** San Miguel River Stream Management Plan, Pilot Project

**Date:** October 5, 2015

**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](mailto:craig.godbout@state.co.us)

**Exhibit A**  
**Statement of Work**  
**Date: October 5, 2015**

**WATER ACTIVITY NAME** – San Miguel River Stream Management Plan, Pilot Project

**GRANT RECIPIENT** – San Miguel Watershed Coalition and Trout Unlimited

**FUNDING SOURCE** – Southwest Basin Roundtable (SWBRT)

**INTRODUCTION AND BACKGROUND**

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

The San Miguel River Stream Management Plan Pilot Project will assess environmental and recreational (E&R) water needs within the San Miguel River basin, identify water gaps, and develop a cooperative process to find ways to meet those gaps in a collaborative manner. The project is the first step in addressing the informational gap identified in the SWBRT's Basin Implementation Plan (BIP), using the specific steps outlined in the BIP to develop the information in a cooperative manner.

**OBJECTIVES**

List the objectives of the project

1. Characterize important ecosystem attributes
2. Identify potential water gaps to support those attributes
3. Evaluate recreational use water gaps
4. Assist project proponents and stakeholders in identifying management actions and projects to address gaps
5. Evaluate effects of management actions and projects on ecosystem

**TASKS**

Provide a detailed description of each task using the following format

**TASK 1 – Verify E&R attributes**

Description of Task

Review list of E&R attributes for the San Miguel basin identified in the BIP for completeness. Ensure that proposed project objectives and tasks will adequately evaluate needs gaps for each high-priority attribute.

Method/Procedure

Review BIP and other pertinent documents; interview individuals within the San Miguel basin

Deliverable

E&R attributes list; findings included in Technical Report; list incorporated in San Miguel Stream Management Plan.

## **TASK 2 – Evaluate ecosystem variables and environmental water gaps**

### Description of Task

Assess changes in hydrology over the last 30 years and compare to fishery, riparian, and channel maintenance needs

### Method/Procedure

Changes in hydrology will be evaluated using the CDSS for the Southwest Basin. Fishery needs evaluation will rely on information provided through the CWCB instream flow appropriation filings. Riparian zone needs will use the “Recruitment Box” model. Channel maintenance needs assessment will rely on the frequency analysis approach outlined by Schimdt and Potyondy (2004).

### Deliverables

All modeling and assessment results as CSV files, spreadsheets, photographs, and GIS files. Information to be included in the Technical Report and used as part of the San Miguel Stream Management Plan.

## **TASK 3 – Characterize recreational water gaps**

### Description of Task

Using existing recreational survey information, identify optimal flow preferences for boaters and anglers and correlate to hydrology analysis described in Task 2 to assess increases or reductions in “boatable days” and “fishing days.”

### Method/Procedure

Use existing recreational survey information for stream and rivers in the San Miguel watershed to identify user preferences and CDSS model to evaluate hydrological changes.

### Deliverables

All modeling and assessment results as CSV files, spreadsheets, photographs, and GIS files. Information to be included in the Technical Report and used as part of the San Miguel Stream Management Plan.

## **TASK 4 – Identify alternative management actions and projects to address gaps**

### Description of Task

Identify up to ten (10) structural projects or management actions to address identified gaps.

### Method/Procedure

A stakeholder group representing a variety of water interests will be assembled. Using information developed in the previous tasks and any other pertinent information, the group will select up to ten (10) priority reaches for more detailed assessment. Quantifiable, desirable E&R use outcomes will

be identified and up to ten (10) structural projects or management actions will be selected for implementation.

Deliverables

Identified priority reaches and projects and/or management actions will be incorporated in the San Miguel Stream Management Plan.

**TASK 5 – Evaluate effectiveness of projects and/or management actions**

Description of Task

Model the effects of implementation of the selected structural projects and/or management actions on E&R water need gaps.

Method/Procedure

Use the tool identified in Tasks 2 and 3 to simulate the impact of each proposed management action or project on fish habitat, riparian zones, channel maintenance, and recreation.

Deliverables

All modeling and assessment results as CSV files, spreadsheets, photographs, and GIS files. Information to be included in the Technical Report and used as part of the San Miguel Stream Management Plan.

**TASK 6 – Grant Administration and Outreach**

Description of Task

Administer various aspects of the CWCB grant and provide reports as needed; assemble stakeholder group to develop proposal for cooperative management actions and projects.

Method/Procedure

Oversee consultant, submit bills to the CWCB, report; seek out key stakeholders and coordinate stakeholder meetings to develop cooperative management actions and projects proposals.

Deliverable

Bills and written reports; proposed cooperative management actions and projects will be included in the San Miguel Stream Management Plan.

**REPORTING AND FINAL DELIVERABLE**

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

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

## BUDGET

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

Total Costs				
	Labor	Other Direct Costs	Matching Funds (If Applicable)	Total Project Costs
Task 1 - Verify Attributes	\$ 3,500	\$250		\$ 3,750
Task 2 - Environmental Gap	\$37,975	\$845		\$38,820
Task 3 – Recreational Gap	\$ 6,250	0		\$ 6,250
Task 4 – Mgt actions & Projects	\$13,000	\$560		\$13,560
Task 5 – Effectiveness Eval.	\$38,950	\$420		\$39,370
Task 6 – Grant administration	\$11,800	0		\$11,800
In-Kind Contributions	\$0	0	\$15,000	\$15,000
Total Costs:	\$111,475	\$2,075	\$15,000	\$128,550

### Labor Costs

Project Personnel:	Project Manager	Project Engineer	Watershed Scientist	Field Technician	Grant Admin.	Clerical	Outreach Coordinator		Total Costs
Hourly Rate:	\$125	\$125	\$110	\$90	\$60	\$25	\$40		
Task 1	28								\$ 3,500
Task 2	100	115	60	50					\$37,975
Task 3	40	10							\$ 6,250
Task 4	60		50						\$13,000
Task 5	120	130	70						\$38,950
Task 6					120	40	90		\$11,800
Total Hours:	348	255	180	50	120				
Cost:	\$43,500	\$31,875	\$19,800	\$4,500	\$7,200	\$1,000	3,600		\$111,475

Other Direct Costs					
Item:	Copies	Materials	Equipment/ Supplies	Mileage	Total
.Units: Unit Cost:	No. \$0.10			Miles @ \$0.57	
Task 1 -				435	
Task 2 -				1,485	
Task 3 -				0	
Task 4 -				985	
Task 5 -				735	
Task 6 -				0	
Total Units:				3,640	
Total Cost:				\$2,075	\$2,075

<b>In-Kind Contributions (If Applicable)</b>				
Project Personnel:	TU, Coalition	American Whitewater		
Hourly Rate:	\$50	\$50		Total
Task 3	60	200		\$13,000
Task 4	40			\$ 2,000
Total Hours:	100	200		
Total Cost:	\$5,000	\$10,000		\$15,000

## SCHEDULE

Provide a project schedule including key milestones for each task and the completion dates or time period from the Notice to Proceed (NTP). This dating method allows flexibility in the event of potential delays from the procurement process. Sample schedules are provided below. Please note that these schedules are examples and will need to be adapted to fit each individual application.

### San Miguel River Stream Management Plan Pilot Project

Tasks	Start Date	Finish Date
1: characterize ecosystem attributes	Upon NTP	NTP + 30 days
2: evaluate ecosystem state variables	Upon NTP	NTP + 150 days
3: evaluate recreational user preferences	NTP + 120 days	NTP + 180 days
4: identify alternative management actions and projects	NTP + 150 days	NTP + 210 days
5: evaluate effects of mgmt. actions and projects on ecosystem state variables	NTP + 210 days	NTP + 330 days

NTP = Notice to Proceed

### San Miguel River Stream Management Plan Pilot Project

Tasks	First 6 Months						Second 6 Months					
1: characterize ecosystem attributes												
2: evaluate ecosystem state variables												
3: evaluate recreational user preferences												
4: identify alternative management actions and projects												
5: evaluate effects of mgmt. actions and projects on ecosystem state variables												

**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.



**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**January 25-26, 2016**  
**Agenda Item 24(e)**

**Applicant & Fiscal Agent:** Town of Mancos  
**Water Activity Name:** Mancos Raw Water System Improvements  
**Water Activity Purpose:** M&I  
**County:** Montezuma  
**Drainage Basin:** Southwest/Mancos River Basin  
**Water Source:** West Fork of the Mancos River & Jackson Gulch Reservoir  
**Amount Requested/Source of Funds:** \$81,765 Southwest Basin Account (total grant request)  
**Matching Funds:** Applicant Match: \$81,766 (cash) = 50% of the total project cost of \$163,531  
(refer to *Funding Summary/Matching Funds* section below)

<b>Staff Recommendation:</b>
------------------------------

Staff recommends approval of up to \$81,765 from the Southwest Basin Account to help fund the project titled: Mancos Raw Water System Improvements.
---

**Water Activity Summary:** WSRA funds, if approved, will be expended to fund replacement of the existing Raw Water Intake System for the Town of Mancos. The current system has very limited means to measure and control water flow from the river and the Water Treatment Plant Operator has to continually monitor the system to ensure that water is flowing to the WTP. Because the flow cannot be accurately metered, water at multiple locations ends up overflowing onto the ground. Additionally, the pipes conveying water to and from the ponds are subject to debris blockage causing more water to be wasted. When the pipe plugs up there is concern with interruption of flow to the treatment plant. More specifically, components of the Raw Water Intake System replacement will consist of:

1. Replace water lines between Pond 1 and Pond 2, and Pond 2 to the Parshall Flume and Control Box;
2. Provide decanter devices at the outlet of Pond 1 and Pond 2 to prevent debris from plugging pipes and causing ponds to overflow;
3. Provide a baffle (curtain) across each of the ponds to reduce short circuiting and improve settling of suspended solids;
4. Provide new Parshall Flume and Control Box and relocate them closer to the raw water pond to allow the Operator to dial in proper flow rates at the river head gate using the new 3" Parshall Flume;
5. Relocation of the Parshall Flume and Control Box further upstream will also provide additional pressure head of the raw water entering the water treatment plant. This will help treatment plant operations;
6. Provide return pipes back to the river to keep water off the ground. Return pipes will be from Pond 1, Pond 2, the control box, and the raw water manhole. These return pipes will provide

the operator with assurance that any excess water flowing through the raw water intake system will quickly be routed back into the River without any of the water spilling onto the ground.

The objectives of these improvements are as follows:

1. Provide accurate metering and control of water entering the pond system;
2. Eliminating extensive water spilling onto the ground and providing return pipes back to the river;
3. Provide better quality raw water going to the water treatment plant by reducing the short circuiting that is happening in the ponds.

**Discussion:** The proposed project aligns well with several Goals and Measurable Outcomes in the Southwest Basin Implementation Plan, such as “Meet Municipal and Industrial Water Needs” Goal C1: *Pursue a high success rate for identified specific and unique IPPs to meet the municipal gap*; and Goal C2: *Provide safe drinking water to Southwest Colorado’s citizens and visitors* (Section 1 - Basin Goals and Measurable Outcomes, Table 1, page 14), while also supporting the achievement of Measurable Outcomes #1: *Complete 40\* IPPs aimed at meeting municipal water needs*; #2: *Consistently meet 100% of residential, commercial and industrial water system demands identified in SWSI 2010 in each sub-basin, while also encouraging education and conservation to reduce demand*; and #3: *Implement at least 1\* IPP that protects or enhances the ability of public water supply systems to access and deliver safe drinking water that meets all health-based standards* (Section 1 - Basin Goals and Measurable Outcomes, Table 1, page 14). This proposal assists the Southwest Basin achieve these Goals and Measurable Outcomes by implementing a Mancos River Basin IPP – *Town of Mancos*, ID No. 14-M, Appendix A, page 13 of 18.

It is CWCB staff’s opinion that this proposal advances the Goals and Measurable Outcomes of Colorado’s Water Plan by reflecting the intent of the Programmatic *Critical Actions to Meet Water Gaps* #1 (Support and assist the basin roundtables in moving forward priority municipal, industrial, environmental, and agricultural projects and methods identified in their BIPs through technical, financial and facilitation support when requested by a project proponent and the pertinent BRT.), as exhibited in Chapter 10: *Critical Action Plan*, Section 10.3, A. Supply-Demand Gap, page 10-9.

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

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

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:**

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Southwest RT WSRA Basin Account	\$81,765	n/a	\$81,765
Town of Mancos	\$81,766	\$0	\$81,766
<b>Total</b>	<b>\$163,531</b>	<b>\$0</b>	<b>\$163,531</b>

**CWCB Project Manager:** Craig Godbout

All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn

be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

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

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

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

**SOUTHWEST BASINS ROUNDTABLE**

**Michael Preston, Chair**

**c/o Dolores Water Conservancy District**

**P.O. Box 1150**

**Cortez, Colorado 81321**

**970-565-7562**

October 20, 2015

Mr. Craig Godbout  
Water Supply Management Section  
Colorado Water Conservation Board  
1580 Logan Street, Suite 600  
Denver, Colorado 80203

SUBJECT: Mancos Raw Water Improvements - \$81,765 from Basin Account

Dear Mr. Godbout:

The Southwest Basin Roundtable recommends funding of \$81,765 from the Southwest Basin Account for the Mancos Raw Water Improvements submitted by the Town of Mancos. The application was considered in detail and approved at the October 14, 2015 meeting of the Southwest Basin Roundtable. There was a quorum of Roundtable members present.

The proposed project is an IPP with leverage from other funding sources including resources from the Town made possible by steady incremental increases in water rates.

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

Sincerely,

A handwritten signature in blue ink, appearing to be 'MP', is written over the printed name.

Michael Preston  
Southwest Basin Roundtable Chair



# COLORADO WATER CONSERVATION BOARD



## WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: 11-30-15

Mancos Raw Water Improvements

### Name of Water Activity/Project

Town of Mancos

### Name of Applicant

Southwest Basin  
Roundtable

Amount from Statewide Account:

0

Amount from Basin Account(s):

\$81,765.00

Total WSRA Funds Requested:

0

### Approving Basin Roundtable(s)

*(If multiple basins specify amounts in parentheses.)*

FEIN: 84-6000691

### Application Content

Application Instructions	page 2
Part I – Description of the Applicant	page 3
Part II – Description of the Water Activity	page 5
Part III – Threshold and Evaluation Criteria	page 7
Part IV – Required Supporting Material	
Water Rights, Availability, and Sustainability	page 10
Related Studies	page 10
Signature Page	page 12

### Required Exhibits

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

### Appendices – Reference Material

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

## Water Supply Reserve Account – Application Form

Revised October 2013

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### **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>. In addition, the applicant should also refer to the [Supplemental Scoring Matrix](#) applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests.

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

Craig Godbout - WSRA Application  
Colorado Water Conservation Board  
1313 Sherman St., Room 721  
Denver, CO 80203  
[Craig.godbout@state.co.us](mailto: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](mailto: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):	Town of Mancos		
	Mailing address:	P.O. Box 487 Mancos, CO 81328		
	FEIN #:	84-6000691		
	Primary Contact:	Heather Alvarez	Position/Title:	Town Clerk/Treasurer
	Email:	halvarez@mancoscolorado.com		
	Phone Numbers:	Cell:	Office:	(970) 533-7725
	Alternate Contact:	Robin Schmittel	Position/Title:	Public Works Director
	Email:	rschmittel@mancoscolorado.com		
	Phone Numbers:	Cell:	Office:	(970) 533-7725

### 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.

## Water Supply Reserve Account – Application Form

Revised October 2013

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3. Provide a brief description of your organization

***The Town of Mancos is a statutory Town located in the southwest corner of Colorado. We were incorporated in 1894. Our population as of the 2010 census is 1,336 within Town limits and approximately 3,000 citizens in the Mancos Valley. The Town serves customers both inside and outside the municipal limits.***

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

***N/A***

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

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

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

6. The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.

***TABOR does not apply to this project because the project and funds will be handled through the Town's Enterprise Fund.***



## Water Supply Reserve Account – Application Form

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### 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)

☐

Agricultural

☒

Municipal/Industrial

☐

Needs Assessment

☐

Education

☐

Other

Explain:

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

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

☐

Study

☒

Implementation

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

New Storage Created (acre-feet)

New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)

Existing Storage Preserved or Enhanced (acre-feet)

Length of Stream Restored or Protected (linear feet)

Length of Pipe/Canal Built or Improved (linear feet)

Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)

Area of Restored or Preserved Habitat (acres)

Other -- Explain:

## Water Supply Reserve Account – Application Form

Revised October 2013

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

Latitude:

37.374062N

Longitude:

108.256239W

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 proposed project is the “Mancos Water Projects” with three components located in or near the Town of Mancos (see Exhibit B for more information on locations). The improvements that have been identified specifically for this grant request is are identified as Raw Water Intake System Improvements. For information purposes, the other components of the Mancos Water Projects are replacement of the Town’s Main pressure reducing valve (PRV) and vault, and replacement of an older section of the Town’s water distribution system.*

*The Raw Water Intake System Improvements is the focus of this grant application from the Colorado Water Conservation Board. The Town has been dealing with extensive water leakage at the raw water intake system on the West Mancos River that feeds the town’s water treatment plant. The current system has limited means to measure and control water from the River, into the settling ponds, then into the raw water transmission going to the water treatment plant (WTP). Additionally, the pipes conveying water to and from the ponds are subject to debris blockage. The result is that water is spilling and being wasted onto the ground.*

*There are very limited records on the town water system including the raw water intake system. Based upon what was found the raw water intake system and PRV was last worked on in 1960. The proposed improvements will renovate the existing system in a very cost effective manner. Components of the intake system improvements are elaborated in Exhibit A. Goals of the project are to:*

- 1. Provide accurate water flow measurement allowing the operator to better manage water coming from the River.*
- 2. Provide return pipes back to the river to keep water off the ground.*
- 3. Prevent debris from blocking piping using decant devices.*

*The WSRA funding in addition to Southwest Water Conservation Funds will be used for design and construction of the Raw Water Intake System Improvements. The replacement of the PRV/Vault and older portions of the distribution system are proposed to be funded with a matching DOLA grant and Town Water Funds. The Town will provide funding through water rate increases implemented based upon a “Recommended Water Rate Structure Study” conducted in 2014 (see appendices).*

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### 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.<sup>1</sup>

***Because the project does not include an increase in water right demand above existing water rights utilized by the Town, it is compliant with Section 37-75-102 of the Colorado Revised Statutes. The intent of the project is to reduce water loss through replacement of leaking facilities in the system. No new water rights are required as a result.***

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

***Please see letter from Michael Preston, Chair, of the Southwest Basin Roundtable to Craig Godbout, Dated October 20, 2015 recommending funding of \$81,765 by a quorum of Roundtable Members at the October 14, 2015 meeting.***

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<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.

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- 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.

***In reducing leakage from Raw Water Intake System Improvement conveyance structures, as well as in the water distribution system and a pressure reducing vault, this project will reduce water loss in all three areas of the project.***

- 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 but 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 Town of Mancos is not seeking statewide funds for this project.***

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.**

***The Town of Mancos is not seeking statewide funds for this project.***

**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

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<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.

## Water Supply Reserve Account – Application Form

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Evaluation Criteria if the grant request is part of a CWCB loan/WSRA grant package. For these CWCB loan/WSRA grant packages, the applicant must have a CWCB loan/WSRA grant ratio of 1:1 or higher. Preference will be given to those with a higher loan/grant ratio.

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

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

### Tier 2: Facilitating Water Activity Implementation

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

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

- f. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.
  - g. The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters.
  - h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.
  - i. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.
  - j. The water activity is complimentary to or assists in the implementation of other CWCB programs.
- Continued: Explanation of how the water activity/project meets all applicable **Evaluation Criteria**.  
**Please attach additional pages as necessary.**

## **Part IV. – Required Supporting Material**

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

## Water Supply Reserve Account – Application Form

Revised October 2013

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and water rights issues, and the name/location of water bodies affected by the water activity.

*Water supplies affected by this project fall under existing water rights utilized by the Town of Mancos for their domestic water supply. The Town's raw water supply primarily consists of two sources of water: 1) 1.6 cubic foot per second cubic feet per second (cfs) adjudicated water right decreed from the West Fork of the Mancos River, and 2) 420 Acre-Feet (AF) of Jackson Gulch Reservoir storage water. In addition, the Town acquired the Weston and Jarrett Ditch, which is decreed for 0.967 cfs for irrigation. The Town uses water from the Mancos River, unless their water rights are curtailed by drought or other reason.*

*The Raw Water Intake System Improvements will involve the West Fork of the Mancos River diversion. The two other project tasks will involve whichever water right is being used for provision of domestic supply at any particular time of the year.*

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

*Attached to this application, please find as Appendices A and B, the Town's "Water Rate Study" and "Infrastructure Needs List" which both identify the proposed project as an urgent need for the Town. No permitting issues should be associated with the project.*

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

*Please see the attached Exhibit A for the Statement of Work, Detailed Budget, and Project Schedule.*

## **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

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

**Signature of Applicant:**

**Print Applicant's Name:**

**Project Title:**

**Date:**

**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](mailto:craig.godbout@state.co.us)



## TOWN OF MANCOS

### Exhibit A.1 - Cost Breakdown - Raw water System Improvements

Southwest Water Conservation District - Southwest Basin Reserve

Water Supply Reserve Account Grant Application

<b>TASKS<sup>1</sup></b>	<b>TASK DESCRIPTION</b>	<b>Water Supply Reserve Account Grant</b>	<b>Matching Funds<sup>2</sup></b>	<b>TASK TOTALS</b>
<b>TASK 1</b>	Replace Raw Water Lines, Install Return Lines, Install Decant Devices	<b>\$43,735</b>	\$43,735	\$87,470
<b>TASK 2</b>	Install Baffles (Curtains) Across Pond 1 and Pond 2	<b>\$10,338</b>	\$10,339	\$20,677
<b>TASK 3</b>	Replace Parshall Flume/Control Box and Raw Water Manhole	<b>\$27,692</b>	\$27,692	\$55,384
<b>TOTALS</b>		<b>\$81,765</b>	\$81,766	\$163,531
Note <sup>1</sup>	Tasks include a prorated percentage for Mobilization, Bonding, Insurance/Permits, Clear & Grub, Surveying, Potholing, Re-vegetation, Design, Environmental Clearances, Construction Management			
Note <sup>2</sup>	Matching Funds: Southwestern Water Conservation District and Town of Mancos			

**Exhibit A**  
**Statement of Work**  
**Date: November 30, 2015**

**WATER ACTIVITY NAME** – “**Mancos Water Projects**” – **Raw Water Intake Improvements**

**GRANT RECIPIENT** – Town of Mancos

**FUNDING SOURCE** – Water Supply Reserve Account (Basin Funds Only)

**INTRODUCTION AND BACKGROUND**

**Introduction:**

The proposed project is the “**Mancos Water Projects**” with three components located in or near the Town of Mancos (see Exhibit B for more information on locations). **The improvements that have been identified specifically for this grant request is are identified as Raw Water Intake System Improvements.** For information purposes, the other components of the Mancos Water Projects are replacement of the Town’s Main pressure reducing valve (PRV) and vault, and replacement of an older section of the Town’s water distribution system.

**The Raw Water Intake System Improvements** is the focus of this grant application from the Colorado Water Conservation Board. The Town has been dealing with extensive water leakage at the raw water intake system on the West Mancos River that feeds the town’s water treatment plant. The current system has limited means to measure and control water from the River, into the settling ponds, then into the raw water transmission going to the water treatment plant (WTP).

Additionally, the pipes conveying water to and from the ponds are subject to debris blockage. The result is that water is spilling and being wasted onto the ground. This is an ongoing problem as the water treatment plant operator has very limited means to monitor and adjust flows. The Operator has to make multiple trips to modulate water flows as a result of the configuration of the existing system.

**Scope of work:**

The proposed plan is to continue to utilize the head gate and water line from the West Mancos River in to Pond 1, and replace the remaining water lines in the raw water system. This included the water line from Pond 1 into Pond 2, the water line from Pond 2 to the Parshall Flume/Control Box Structure, and the water line from the Parshall Flume/Control Box Structure to the manhole that conveys raw water to the water treatment plant (WTP). The current system has very limited means to measure and control water flow from the river and the Water Treatment Plant Operator has to continually monitor the system to ensure that water is flowing to the WTP. Because the flow cannot be accurately metered, water at multiple locations ends up overflowing onto the ground. Additionally, the pipes conveying water to and from the ponds are subject to debris blockage causing more water to be wasted onto the ground. When the pipe plugs up there is concern with interruption of flow to the treatment plant.

There are very limited records on the town water system including the raw water intake system. Based upon what was found, the raw water intake system was last worked on in 1960. The proposed

improvements will renovate the existing system in a very cost effective manner. Components of the intake system improvements include:

1. Replace water lines between Pond 1 and Pond 2, and Pond 2 to the Parshall Flume and Control Box.
2. Provide decanter devices at the outlet of Pond 1 and Pond 2 to prevent debris from plugging pipes and causing ponds to overflow.
3. Provide a baffle (curtain) across each of the ponds to reduce short circuiting and improve settling of suspended solids.
4. Provide new Parshall Flume and Control Box and relocate them closer to the raw water pond to allow the Operator to dial in proper flow rates at the river head gate using the new 3" Parshall Flume.
5. Relocation of the Parshall Flume and Control Box further upstream will also provide additional pressure head of the raw water entering the water treatment plant. This will help treatment plant operations.
6. Provide return pipes back to the river to keep water off the ground. Return pipes will be from Pond 1, Pond 2, the control box, and the raw water manhole. These return pipes will provide the operator with assurance that any excess water flowing through the raw water intake system will quickly be routed back into the River without any of the water spilling onto the ground.

The CWCB WSRA funding in addition to Southwest Water Conservation District (SWCD) Funds will be used for design and construction of these Raw Water Intake System Improvements. The PRV/Vault and Distribution Line replacements items are proposed to be funded with a matching DOLA grant and Town water funds. Town will provide these funds through water rate increases implemented based upon a "Recommended Water Rate Structure Study" conducted in 2014 (see appendices).

## **OBJECTIVES**

**Raw Water Intake System Improvements** objectives are to:

1. Provide accurate metering and control of water entering the pond system.
2. Eliminating extensive water spilling onto the ground and providing return pipes back to the river.
3. Provide a better quality raw water going to the water treatment plant by reducing the short circuiting that is happening in the ponds.

## **DESCRIPTION OF TASKS - FOR THE RAW WATER INTAKE SYSTEM IMPROVEMENS**

### **TASK 1 – Replace Raw Water Lines, Install Return Lines, Install Decant Devices.**

#### **Description of Task**

The existing water line that connects Pond 1 and Pond 2 is poorly located resulting in a reduction of detention time in the ponds. Blockage of this line is frequent and causes pond 1 to over flow wasting water onto the ground. The water line from Pond 2 to the existing Parshall Flume/Control Box can plug and the water surface elevation in both Pond 1 and Pond 2 increases causing Pond 1 to overflow. The water line between the Parshall Flume/Control Box to the raw water intake manhole should be replaced with the rest of the pipes when the system is offline, as it is at least 55 years old.

Install new water return lines from Pond 1 to River, Pond 2 to River, Control Box to River, and Raw Water manhole to River. These return lines will ensure there is not water being wasted on the ground.

Install decant device on Pond 1 outlet and Pond 2 outlet. The decant device will ensure that debris (sticks, grass, etc.) will not block the water lines.

**Method/Procedure**

Selected contractor will replace the raw water lines to the design invert elevations.

**Deliverable**

New raw water lines, return lines, and decant devices.

**TASK 2 – Install Baffles (curtains) across Pond 1 and Pond 2**

**Description of Task**

Placement of a baffle or curtain across each of the raw ponds will improve the detention time of the ponds and allow more suspended solids to settle out of the water. This will improve the raw water quality going into the Town's water treatment plant (WTP).

**Method/Procedure**

Selected contractor will install the baffles per design requirements. Each baffle will have flaps cut into the baffle at specific locations to allow water to flow through the baffle to the other side.

**Deliverable**

Installation of the improvements described above.

**TASK 3 – Replace Parshall Flume/Control Box and Raw Water Manhole**

**Description of Task**

The existing 9" Parshall flume is too large and does not allow the Operator to accurately measure water flow and thereby properly adjust the river head gate appropriately. The Flume has also settled adding to inaccuracies. The Control Box valves are rusty and do not work properly. As a result water flows onto the ground at this location. The raw water manhole is where the water feeds into the raw water line to the water treatment plant (WTP). Currently, there is no means to prevent water from overflowing onto the ground. A goal of this project is to replace the Flume with a new 3" Parshall Flume which will give the Operator the ability to adjust the river head gate with confidence. Replace the Control Box with new valves and a return line back to the river, thereby keeping water contained and not spilling onto the ground. Replace the raw water manhole with one that has a return line back to the river. The proposed Parshall Flume/Control Box and raw water manhole will be located further upstream, closer to the Pond 2 outlet. This will shorten the distance the operator has to walk back to the River head gate to make adjustments. This new location will also provide additional pressure head to the water treatment plant.

**Method/Procedure**

While the raw water system is off line, replace the Parshall Flume/Control Box, raw water manhole and water lines to the elevations identified in the design plans.

**Deliverable**

Improvements described above.

## **REPORTING AND FINAL DELIVERABLE**

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

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

## **BUDGET**

**A detailed budget for Raw Water Intake System Improvements is presented in Exhibit A.1.**

## **SCHEDULE**

Provide a project schedule including key milestones for each task and the completion dates or time period from the Notice to Proceed (NTP). This dating method allows flexibility in the event of potential delays from the procurement process. Sample schedules are provided below. Please note that these schedules are examples and will need to be adapted to fit each individual application.

### **Raw Water Intake Improvements - Schedule**

1. The Design will commence as soon as funding has been approved and contracts are in place. A topographic survey will be needed to aid in determining necessary invert elevations for the system. The design phase is relatively straight forward.
2. The "Mancos Water Projects" will then be advertised for construction bids, and awarded to the lowest qualified bidder.
3. Construction will commence once the raw water system is taken off line. Because the Town has water rights from Jackson Reservoir, they can readily take the West Mancos River raw water intake system off line.

### **Raw Water Intake Improvements - Schedule**

Task	Start Date	Finish Date
1	Design April-June 2016	Construction Finish December 2016
2	Design April-June 2016	Construction Finish December 2016
3	Design April-June 2016	Construction Finish December 2016

NOTE: Actual completion may depend upon DOLA Contract Execution

## **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.

**Exhibit A.1 – Total Project Budget**

**"Mancos Water Projects"**

<b>Project</b>	<b>Projected Project Cost</b>
<b>PRV Replacement</b>	<b>\$131,761</b>
<b><u>Raw Water System Improvements</u></b>	<b><u>\$163,531</u></b>
<b>Waterline Replacement</b>	<b>\$243,566</b>
<b>TOTAL Project Cost</b>	<b>\$538,858</b>

**Requested funds from Department of  
Local Affairs (DOLA) \$269,429**

**Committed Funds from Southwestern  
Water Conservation District (SWCD) \$ 75,000**

**Funds Recommended from Southwest  
Basin Roundtable (SBRT) Water  
Supply Reserve Account (WSRA) \$ 81,765\*\***

**Committed Funds from Town of Mancos \$ 112,664**

**\*\* See A.2 for Raw Water Intake Improvements Budget Breakdown**

## Exhibit A.2 Cost Break Down and Detailed Budget

MANCOS - RAW WATER POND SYSTEM IMPROVEMENTS				
Russell Planning & Engineering				
				9/15/2015
ITEM DESCRIPTION	UNIT	AMOUNT	PRICE	COST
Clearing and Grubbing	Lump Sum	1	\$3,500.00	\$3,500.00
Construction Surveying	Lump Sum	1	\$2,000.00	\$2,000.00
Potholing	Hrs	5	\$150.00	\$750.00
12-IN 200 C900 (Purple Pipe) River to Pond #1	LF	35	\$55.00	\$1,925.00
Clean Pond #1 & Pond #2	Lump Sum	1	\$8,000.00	\$8,000.00
Pond #1 Baffle Installed	LF	35	\$75.00	\$2,625.00
Pond #2 Baffle Installed	LF	45	\$75.00	\$3,375.00
Crossover pipe 12-IN 200 C900 (Purple Pipe)	LF	80	\$55.00	\$4,400.00
12-IN 200 C900 (Purple Pipe) Pond #1 to River	LF	40	\$55.00	\$2,200.00
12-IN 200 C900 (Purple Pipe) Pond #2 to Control Box	LF	20	\$55.00	\$1,100.00
12-IN 200 C900 (Purple Pipe) Control Box to River	LF	110	\$55.00	\$6,050.00
Floating Decanter	EA	3	\$1,500.00	\$4,500.00
12-IN 200 C900 (Purple Pipe) Control Box to 48-IN MH	LF	30	\$55.00	\$1,650.00
48-IN Pre-Cast Concrete Manhole, Installed	EA	1	\$4,500.00	\$4,500.00
12-IN 200 C900 (Purple Pipe) 48-IN MH to River	LF	110	\$55.00	\$6,050.00
12-IN 200 C900 (Purple Pipe) 48-IN MH to Old MH	LF	570	\$55.00	\$31,350.00
<b>Control Box/Flume Structure Package Includes Purchase &amp; Installation</b>	EA	1	\$27,000.00	\$27,000.00
2 - 12-IN Sluice Gates, Installed				
1 - 3-IN Throat Parshall Flume				
Building over Control Box/Flume	LS	1	\$5,000.00	\$5,000.00
Raw Water Pipe Intake Structure, Installed	1	1	\$1,000.00	\$1,000.00
Remove Existing Pipe	LS	1	\$500.00	\$500.00
Abandon Existing Pipe	LS	1	\$500.00	\$500.00
Erosion Control	1	1	\$500.00	\$500.00
Revegetation	1	1	\$500.00	\$500.00
<b>TOTAL CONSTRUCTION COSTS</b>				<b>\$ 118,975.00</b>
<b>OTHER COSTS</b>				
Mobilization 5% of Construction Costs	Percentage	1	5%	\$ 5,948.75
Bonds, Insurance, and Permits	Percentage	1	1%	\$ 1,189.75
<b>DESIGN/CONSTRUCTION MANAGEMENT</b>				
Design and Record Drawings	Percentage	1	6%	\$ 7,138.50
Survey for Design & Clearances	Lump Sum	1	\$3,000.00	\$ 3,000.00
Construction Management 5% of Construction Cost	Percentage	1	5%	\$ 5,948.75
<b>TOTAL OTHER COSTS</b>				<b>\$ 23,225.75</b>

<b>Sub-Total</b>	<b>\$142,200.75</b>
<b>Contingency (15%)</b>	<b>\$21,330.11</b>
<b>Total</b>	<b>\$163,530.86</b>



# Exhibit B 1 Projects Location Map Mancos Water Projects

Raw Water Ponds

Latitude 37.374062N  
Longitude 108.256239W

Latitude 37.344097N  
Longitude 108.286119W

Pressure Relief Valve

160

U.S. Hwy 160

184

Distribution System Improvements

Latitude 37.344097N  
Longitude 108.286771W

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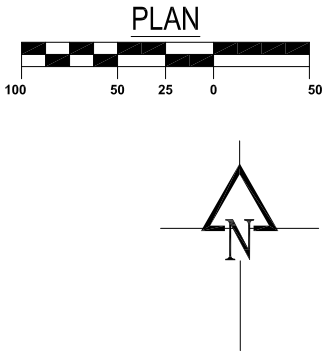


Exhibit B 2  
Raw Water Improvements  
Site Location Map  
Mancos Water Projects



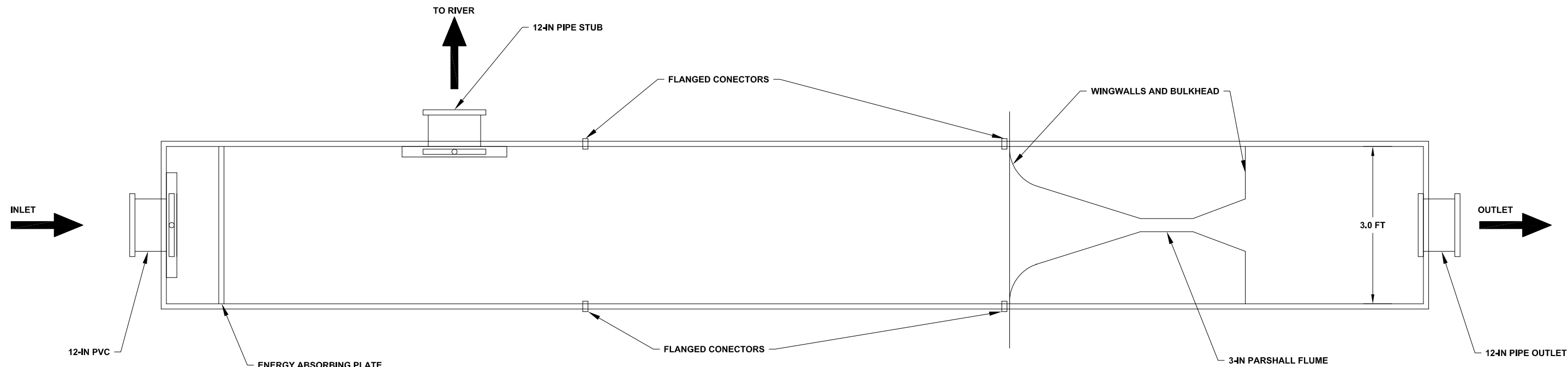


Exhibit B 3  
Raw Water Improvements  
Proposed Improvements  
Mancos Water Projects

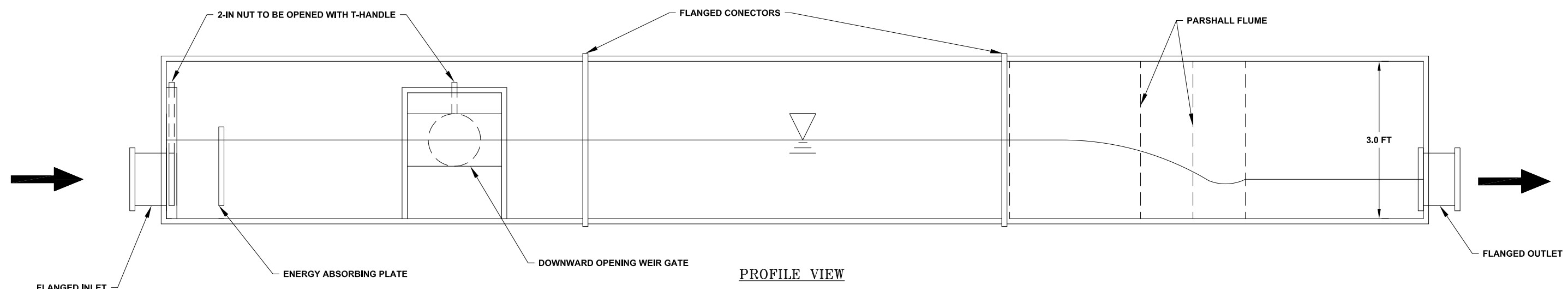


CONCEPTUAL

811 Know what's below. Call before you dig. CALL 811 TWO WORKING DAYS BEFORE YOU DIG	
REVISIONS:	
MANCOS RAW WATER MONTEZUMA COUNTY, COLORADO SITE PLAN	
<b>Russell Planning &amp; Engineering, Inc.</b> Civil Engineering Services 934 Main Avenue, Unit C Durango, Colorado 81301 Phone: (970) 385-4546 Fax: (970) 385-4502	
Drawn: JH Drafted: CO Checked: WF	
Date of Submittal 09/18/2015	
1 OF 2	
1	



PLAN VIEW



PROFILE VIEW

MANCOS GATE AND FLUME STRUCTURE  
N.T.S.

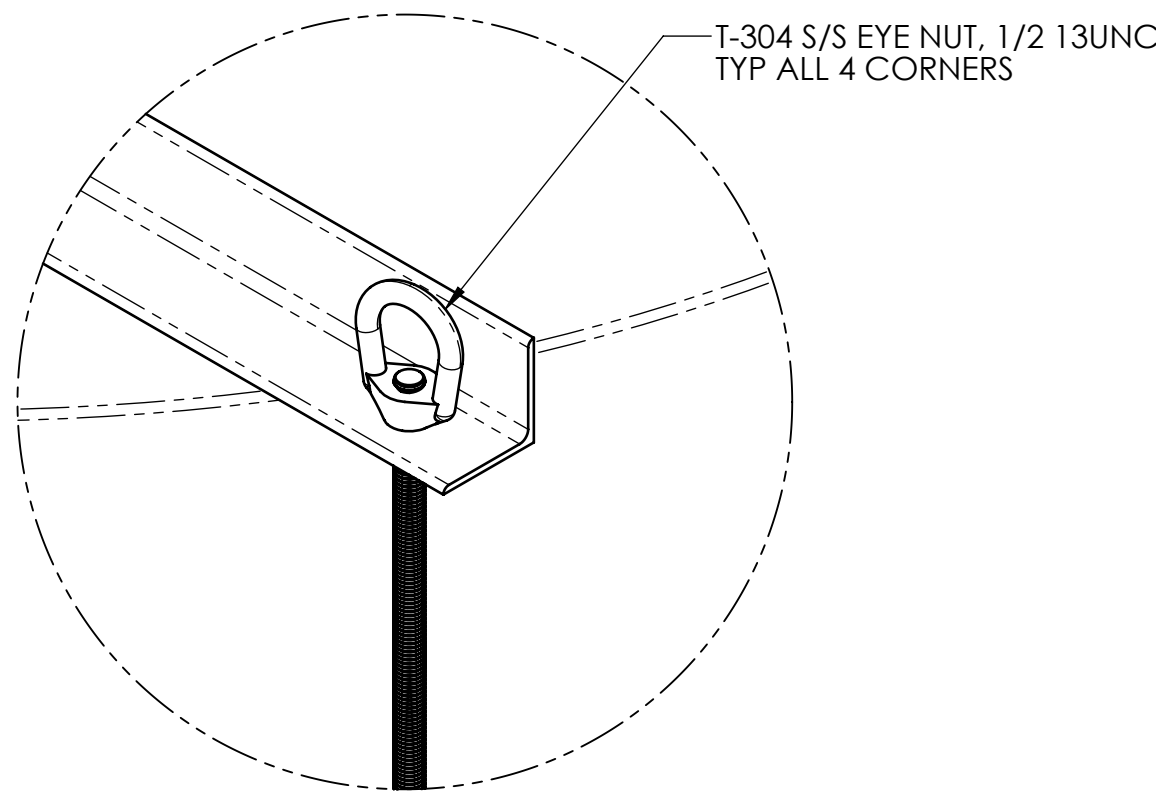
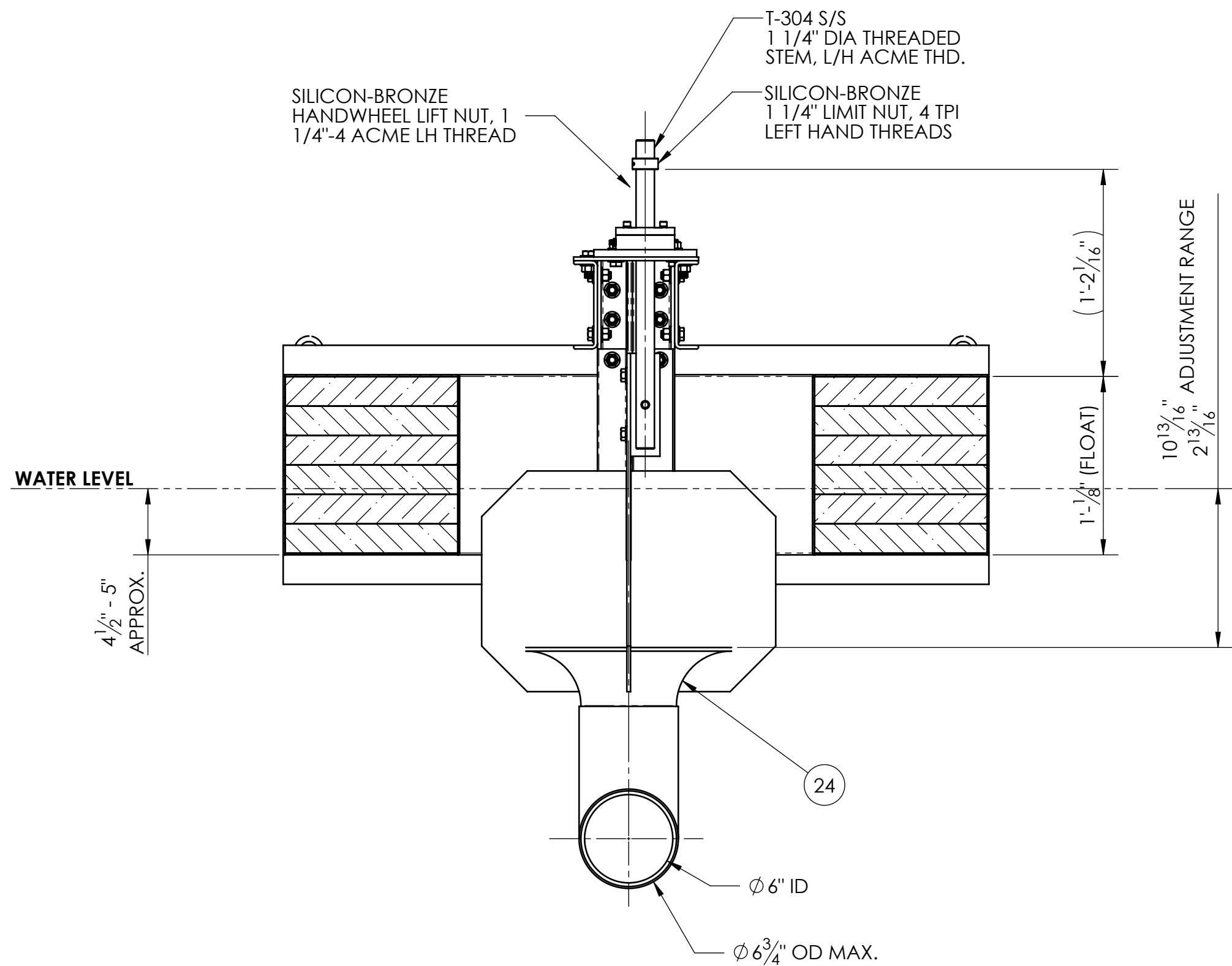
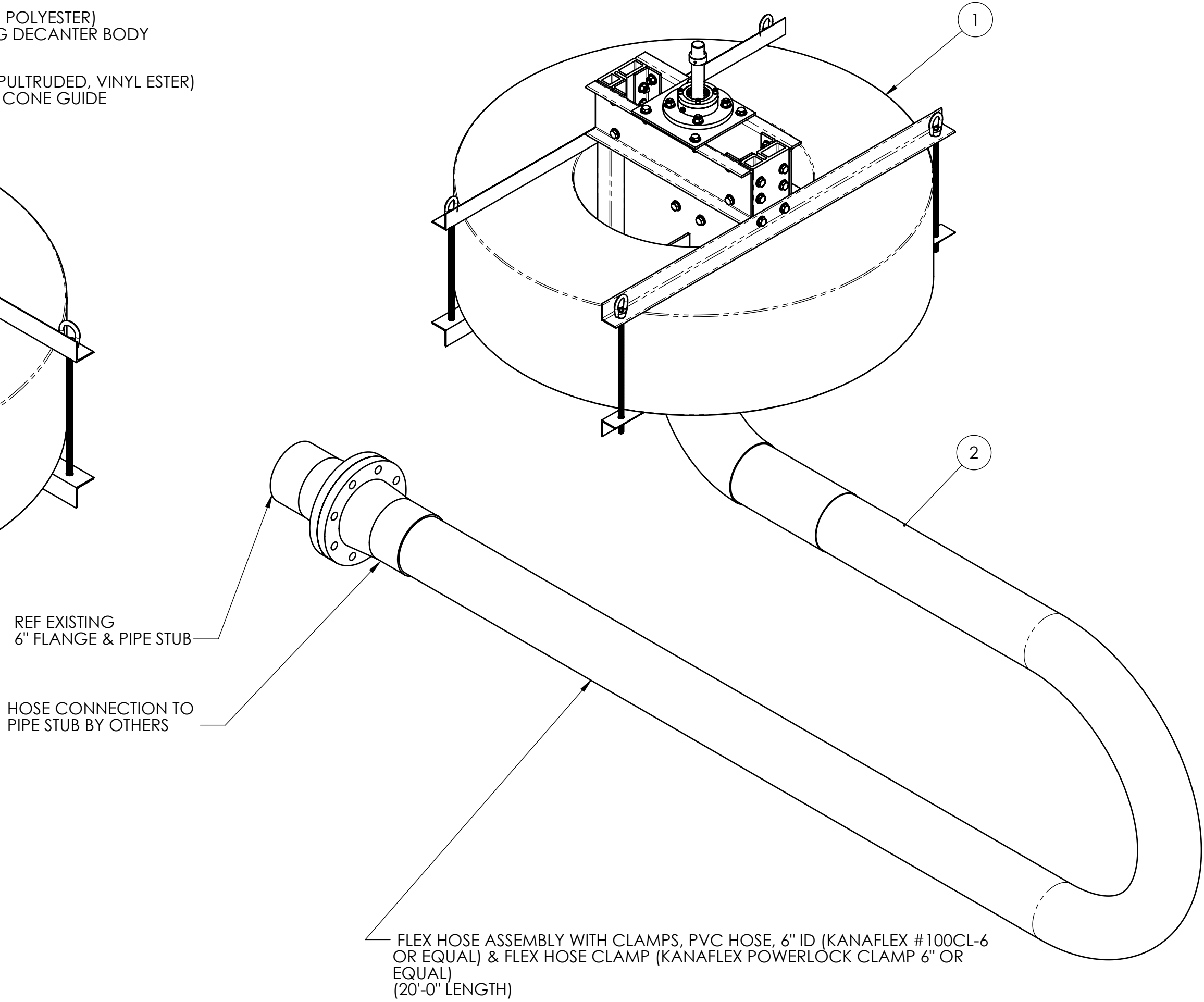
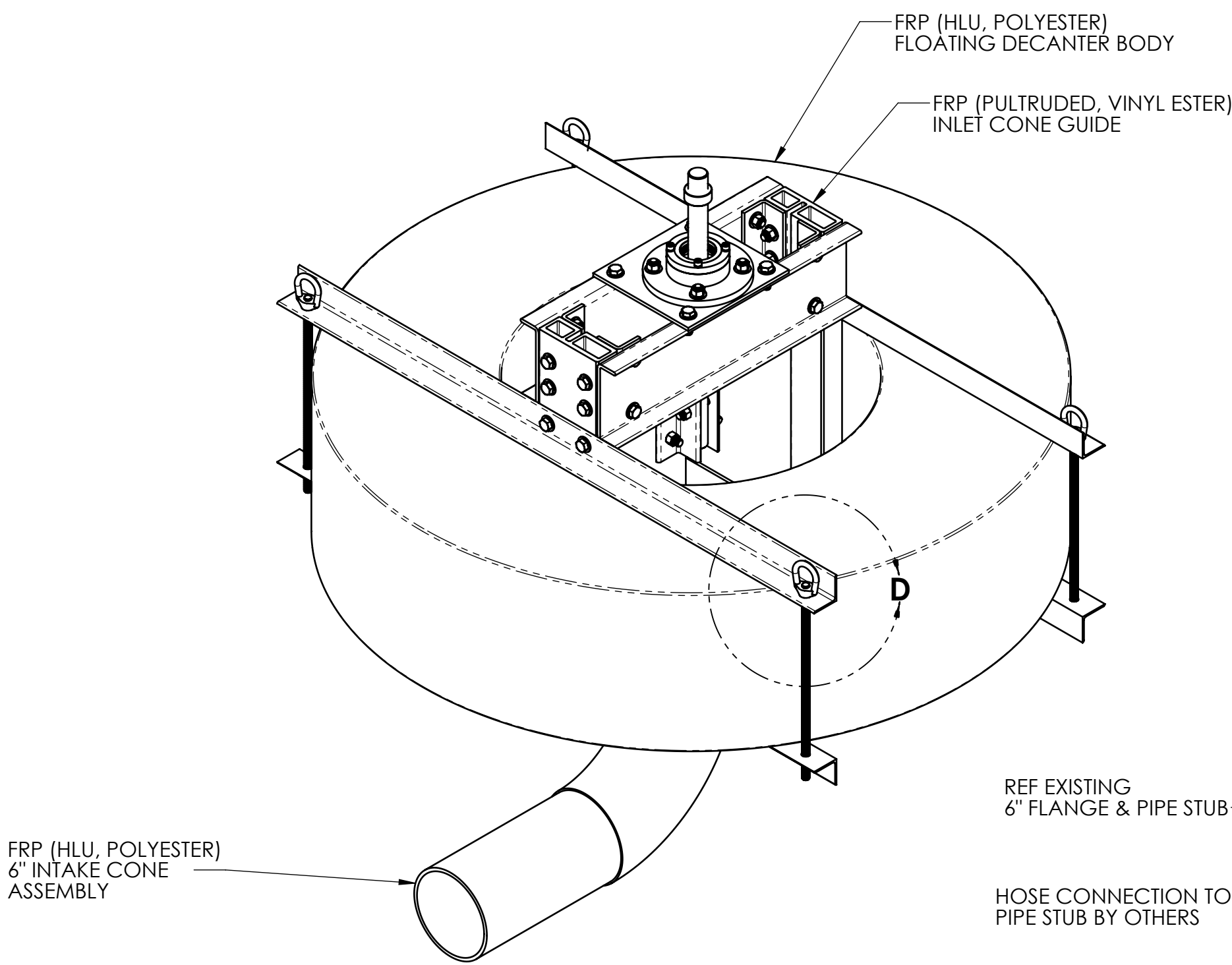
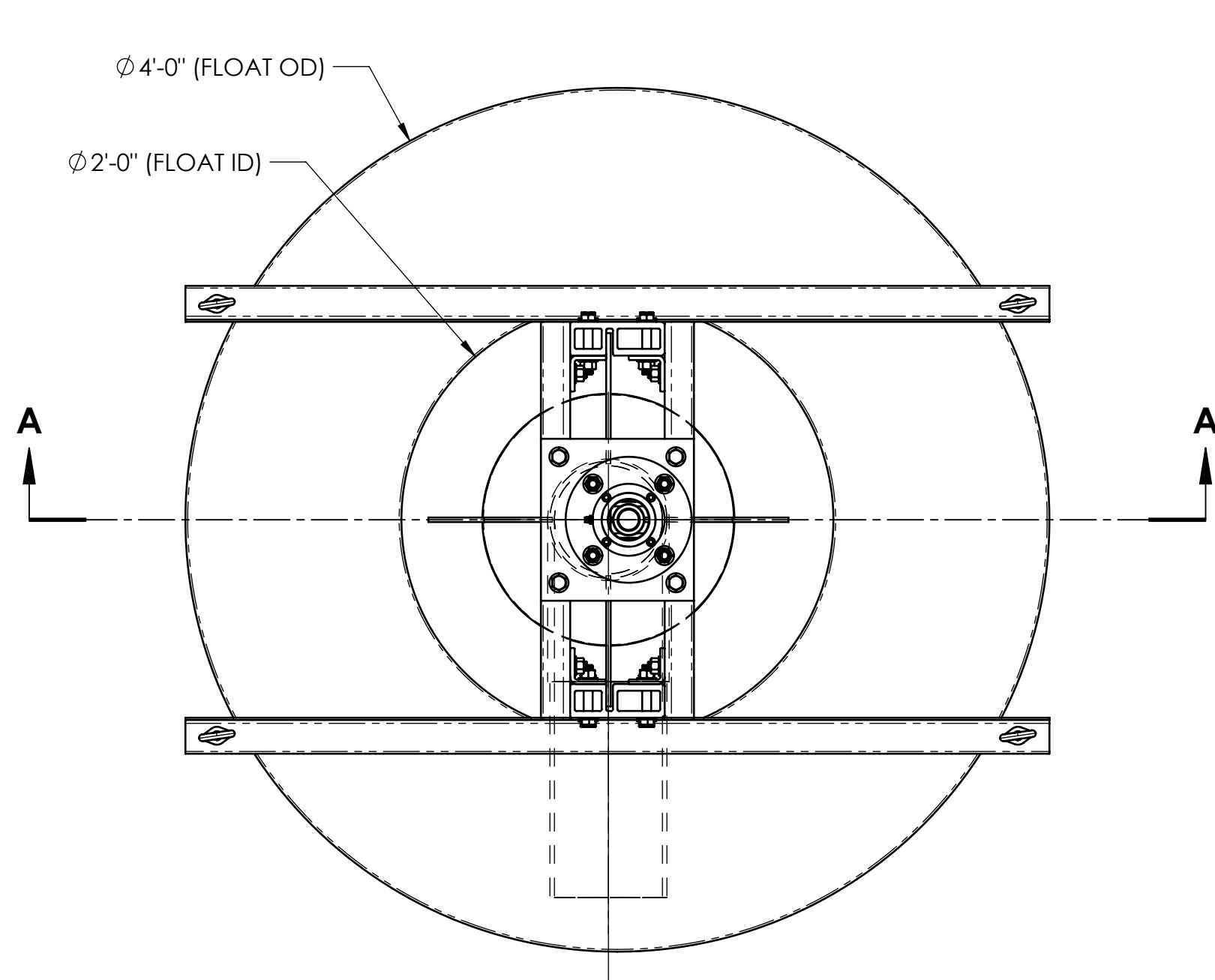
Exhibit B 4  
Raw Water Improvements  
Proposed Improvements  
Mancos Water Projects

CONCEPTUAL

		CALL 811 TWO WORKING DAYS BEFORE YOU DIG
REVISIONS:		
MANCOS RAW WATER MONTEZUMA COUNTY, COLORADO GATE AND FLUME STRUCTURE		
Russell Planning & Engineering, Inc. Civil Engineering Services 934 Main Avenue, Unit C Durango, Colorado 81301 Phone: (970) 385-4546 Fax: (970) 385-4502		
Drawn: JH Drafted: CO Checked: WF		Date of Submittal 09/18/2015
2 OF 2		2

File Name: R:\Current Projects\Land Projects 3\Mancos - PRV and Headgate 2015\ACAD\Exhibits\DWG\Mancos - Raw Water Plotted: 9/16/2015 12:40 PM Plot Style: HALF-STB Plotted By: CHRISTOPHER OLIVER

REVISIONS				
REV.	DESCRIPTION	NCR/ECO NO.	REVISED BY	DATE
A	FOR APPROVAL		T. BAILEY	7/12/2012



DETAIL D  
SCALE 1 : 3

## Exhibit B 5

### Raw Water Improvements


### Proposed Decanter Detail

### Mancos Water Projects

BOM TABLE				
ITEM NO.	QTY.	JOB QTY.	DESCRIPTION	MATERIAL
1	1	2	FRP FLOATING DECANTER, Ø 4'-0" W/6" INTAKE CONE	-
2	1	2	FLEX HOSE ASSEMBLY WITH CLAMPS, PVC HOSE, 6" ID (KANAFLEX #100CL-6 OR EQUAL) & FLEX HOSE CLAMP (KANAFLEX POWERLOCK CLAMP 6" OR EQUAL)	PVC Flex

- NOTES:
- FLOAT MATERIAL IS FRP (FIBERGLASS REINFORCED POLYESTER).
  - FLOAT IS 2# FOAM FILLED.
  - FLOAT COLOR IS GRAY.
  - RESIN: MCWHORTER 712-3765.
  - ALL FASTENERS MATERIAL EXCEPT ADJUSTMENT NUT IS T-304 S/S.
  - DECANTER FLOW RATE RANGE: 144 TO 524 GPM.

SECTION A-A

PROJECT: RED LION WTP RED LION, PENNSYLVANIA USA				PLASTI-FAB PART NUMBER:		TITLE: FRP FLOATING DECANTER, Ø 4'-0" W/6" INTAKE CONE  QUANTITY (2) EACH			
CUSTOMER: SHERWOOD-LOGAN & ASSOC.				MATERIAL INFORMATION: -					
REP: SHERWOOD-LOGAN & ASSOC.		UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN FEET/INCHES		SPECIAL FINISH REQUIREMENT:					
P.O. NO: 12-202									
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF PLASTI-FAB. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF PLASTI-FAB IS PROHIBITED.		TOLERANCES UNLESS OTHERWISE SPECIFIED:				SIZE D	DRAWING NO.: 121255-1A-01	REV. B	
		≤ 6'-0"		± 1/16"					NAME:  DATE:  DRAWN BY: T. BAILEY  7/12/2012  CHECKED BY:
		≥ 6'-0" AND ≤ 25'-0"		± 1/8"					
		≥ 25'-0"		± 1/2"					
						WEIGHT: 173.27	SCALE: 1:8	SHEET: 1 OF 1	