



COLORADO WATER CONSERVATION BOARD



WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date:

Grand Valley Roller Dam Rehabilitation Phase 1, Development of the Dam and Canyon Facilities Master Plan

Name of Water Activity/Project

Grand Valley Water Users Association (on behalf of all project partners)

Name of Applicant

Colorado Basin

Amount from Statewide Account:

Amount from Basin Account(s):

Total WSRA Funds Requested:

\$42,700

\$42,700

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

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 (CWCBC). 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 CWCBC 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 CWCBC 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

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

Water Supply Reserve Account – Application Form

Revised October 2013

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

1.	Applicant Name(s):	Grand Valley Water Users Association (on behalf of all project partners)		
	Mailing address:	1147 24 Road Grand Junction, Colorado 81505-9639		
	FEIN #:	84-0402700		
	Primary Contact:	Mark Harris	Position/Title:	General Manager
	Email:	mharris@gvwua.com		
	Phone Numbers:	Cell: (970) 261-1616	Office:	(970) 242-5065
	Alternate Contact:	Penny Roundtree	Position/Title:	Office Manager
	Email:	proundtree@gvwua.com		
	Phone Numbers:	Cell:	Office:	970-242-5065

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

3. Provide a brief description of your organization

The Grand Valley Water Users Association (Association) is the managing entity for a portion of the federally owned Grand Valley Project. These Grand Valley Project facilities include the Grand Valley Diversion Dam, also known as the Roller Dam, on the Colorado River in DeBeque Canyon, the 55-mile-long Government Highline Canal, 150 miles of project operated laterals, 100 miles of drainage ditches and a hydroelectric power plant. The Roller Dam and upper portions of the Government Highline Canal will be included as part of the Dam and Canyon Facilities Master Plan.

The Association first delivered water in 1916 to Reclamation's Grand Valley Project and since then has supplied a full supply of irrigation water, diverted at the Roller Dam, to approximately 24,000 irrigated acres under the Government Highline Canal. In addition, diversions at the Roller Dam provide water to 15,000 irrigated acres under the Mesa County, Palisade, and Orchard Mesa Districts and water for the Grand Valley Power Plant year round.

The primary participant for this project is the Orchard Mesa Irrigation District (OMID). OMID has 2 - 15 mile long delivery canals all supplied By 4 hydraulic pumps. They serve a little more than 9,000 acres & 10,000 water users.

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.

N/A

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)

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> | Nonconsumptive (Environmental or Recreational) |
| <input type="checkbox"/> | Agricultural |
| <input type="checkbox"/> | Municipal/Industrial |
| <input type="checkbox"/> | Needs Assessment |
| <input type="checkbox"/> | Education |
| <input checked="" type="checkbox"/> | Other |

Explain:

Develop a Master Plan to address the necessary rehabilitation of the Roller Dam and upper Canal.

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

There are a multitude of potential benefits that can be realized through proper planning and stakeholder outreach with the future Roller Dam and Canyon rehabilitation efforts including, but not limited to, nonconsumptive (recreation and environment, specifically Recovery Program issues), municipal, agricultural, water rights, water supply, and industrial. The objective of the Dam and Canyon Facilities Master Plan will be to identify these benefits and potential project partners, sponsors, and funding mechanisms. See also the list of measurable results in Part II.4 below.

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

- | | |
|--------------------------------|--|
| <input type="checkbox"/> Study | <input checked="" type="checkbox"/> Implementation |
|--------------------------------|--|

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

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> | New Storage Created (acre-feet) |
| <input type="checkbox"/> | New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet) |
| <input type="checkbox"/> | Existing Storage Preserved or Enhanced (acre-feet) |
| <input type="checkbox"/> | Length of Stream Restored or Protected (linear feet) |
| <input type="checkbox"/> | Length of Pipe/Canal Built or Improved (linear feet) |
| <input type="checkbox"/> | Efficiency Savings (acre-feet/year OR dollars/year – circle one) |
| <input type="checkbox"/> | Area of Restored or Preserved Habitat (acres) |
| <input checked="" type="checkbox"/> | Other -- Explain: |

The Dam and Canyon Facilities Master Plan will identify the potential for these and other potential improvements.

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:

39.188990°

Longitude:

-108.281816°

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.

Background

The water rights of the Grand Valley irrigation systems that comprise the “Cameo Call,” along with the water rights of the Shoshone Hydropower Plant, control administration of the Colorado River basin within Colorado. In addition to the direct economic benefits in supporting the agricultural economy of the Grand Valley, exercise of these water rights and the continued operation of the Grand Valley Dam and canyon facilities provide predictability to river flows and associated environmental and cultural benefits. These benefits include more reliable water flows in the upper portions of the Colorado River, and water flowing from the upper portions of the basin improves water quality in the lower portions of the basin. The flows generated by the Cameo Call help provide water for recreational activities on the Colorado River and for riparian habitat and aesthetic values along the entire Colorado River corridor. Flows generated by the Cameo Call also assist the state in complying with its obligations under the Colorado River Compact and in maintaining acceptable lake levels in Lake Powell.

The Roller Dam diverts water into the Highline Canal for irrigation and hydropower purposes under very senior water rights (listed in Part IV below) that collectively make up the “Cameo Call.” The irrigation water is provided to four irrigation entities: Grand Valley Water Users Association and the Orchard Mesa, Palisade and Mesa County Irrigation Districts, which provide irrigation water to approximately 41,000 acres of land in the Grand Valley. The hydropower water is used to produce hydropower at the Grand Valley Power Plant, which has a capacity of approximately 800 cfs and an electrical generation capacity of about 3 megawatts (MW). Return flows from the power plant return to the Colorado River at the head of the 15-Mile Reach, which helps maintain flows in that reach for the endangered fish. The Roller Dam, which was constructed in the early 1900’s, is in need of extensive upgrading and rehabilitation. In addition, repairs and upgrades to the upper portion of the Highline Canal immediately below the Roller Dam are needed to allow the canal to reliably carry all of the water diverted at the Roller Dam. The continued operation of these facilities will provide multiple benefits, justifying a cost share approach to project financing commensurate with the derived benefits.

Purpose

The proposed Roller Dam Rehabilitation project addresses the need for rehabilitating and upgrading the Roller Dam and the portion of the Government Highline Canal immediately below the Roller Dam while maintaining the Cameo Call, improving water delivery system operations, capacity and reliability, sustaining the ecological health of the river and preserving the agricultural economy of the Grand Valley. These two features make up the Dam and Canyon Facilities. The Dam and Canyon Facilities Master Plan is the first step to defining the rehabilitation needs and will 1) identify and prioritize the rehabilitation needs (structural, cosmetic, environmental, etc.); and 2) develop implementation plans for each prioritized need, specifically addressing the costs, funding opportunities, timeline, and list of potential teaming partners and sponsors.

It is the intent of this Dam and Canyon Facilities Master Plan request to use a similar approach to that to be

Water Supply Reserve Account – Application Form

Revised October 2013

used in the Water Management Plan for canal facilities from the Stub Pump to the state line. The District and the Association are contractual partners on these dam and canyon related facilities with full responsibility for their operation, maintenance, repair, replacement and the attendant costs. Mesa County and Palisade Irrigation Districts are partners for this project as the water adjudicated to them is delivered through these facilities and are of great importance to them and their continued operations.

Other Ongoing Studies

Recently the Association received grants from both the CWCBC and the Bureau of Reclamation to match the in-kind and cash contributions of the Association to completely update its Water Management Plan (WMP). The objective of this project is to prepare a conditional assessment and operational analysis of the 50 miles of the canal below the outfall of Tunnel No. 3, identify and document water losses, identify priority projects, conduct a benefits analysis, ascertain environmental concerns, determine cost associated with the projects and create a strategic funding plan to implement the priority projects. This project will also allow the association to honor commitments made in the Colorado River Cooperative Agreement (CRCA, Section 7, specific to conservation and avoidance of Compact issues). The WMP project will begin by fall 2015 and conclude in early 2017.

The Association's current plans to create a robust and dynamic WMP for the delivery and drainage portion of the Grand Valley Project and this proposed Master Plan addressing the priority needs of the Roller Dam and related facilities add significant value to each other. The better these two projects are planned, coordinated, and executed, the greater the potential benefits, for not only the irrigation companies and communities directly involved, but the entire Colorado River system and those who rely upon it regardless of their respective resource or economic community.

Figure 1 depicts the geographical extent of the Water Management Plan and Master Plan, including the planned Upper Canal Improvements Project.

OMID and the Association are conducting the Grand Valley Power Plant rehabilitation feasibility study, the District is making big improvements to his canal, and the Association is submitting two Salinity Control proposals to improve two miles of canal in the east end of the Valley in July of 2015.

See Exhibit A for the detailed scope of work, cost and schedule.

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.)

The project (water activity) meets the following eligibility requirements in the described manner:

- Competitive grants for environmental compliance and feasibility studies;

The Association is responsible for a multitude of remaining system improvements and enhancements supporting the compliance with the BOR system condition guidelines, Recovery Program issues, environmental concerns, water supply and water rights issues, including significant quantities of Pre-Compact water, Compact compliance and related obligations, commercial agricultural use. The Association is also responsible for the delivery of water downstream to support urban, suburban, and municipal/industrial uses and users, including the needs of Mesa County, Palisade, and Orchard Mesa Irrigation Districts through the planning process.

- Technical assistance regarding permitting, feasibility studies, and environmental compliance;

The implementation plans developed as part of the Master Planning process will be used to determine the anticipated structural and operational improvements and what type of feasibility studies should be furthered to outline the technical engineering needs to construct identified projects and potential permitting challenges associated with construction of those projects.

- Studies or analysis of structural, nonstructural, consumptive, and nonconsumptive water needs, projects, or activities;

The Master Plan will first identify the needed repairs and upgrades to the upper portion of the Highline Canal immediately below the Roller Dam and to the Roller Dam that are needed to allow the canal to divert, carry and deliver all Cameo water rights (see water rights table on page 14 below). The continued operation of these facilities will provide multiple benefits, justifying a cost share approach to project financing commensurate with the derived benefits. Several entities will be involved with this task to ensure that consumptive, nonconsumptive, structural and nonstructural opportunities are coordinated.

The Roller Dam and Canyon facilities deliver water to the Grand Valley Power Plant (GVPP) which then becomes available for OMID to check (water) back to the River above the Grand Valley Irrigation Company (GVIC) diversion per the “Orchard Mesa Check Case”. Potential water “shepherding” proposals will likely involve deliveries for use at the GVPP, involve checking, and then pass on downstream.

It should be noted that, although not a specific component of this Master Plan Scope of Work, the potential for hydro power generation at the Roller Dam will be noted as an area worthy of further investigation.

- Structural and nonstructural water projects or activities

The Master Planning process will be used to determine the anticipated structural and operational improvements required to maintain and enhance the multiple benefits delivered by the Roller Dam and related facilities and operations; to develop prioritized capital and operational cost estimates; to investigate funding opportunities; and to consider next steps.

Water Supply Reserve Account – Application Form

Revised October 2013

- a) The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.¹

Yes this activity is consistent with statute.

- 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.

Letter pending Colorado Basin Roundtable approval.

- c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.² The Basin Roundtable Chairs shall include in their approval letters for particular WSRA grant applications a description of how the water activity will assist in meeting the water supply needs identified in the basin roundtable's consumptive and/or non-consumptive needs assessments.

Letter pending Colorado Basin Roundtable approval.

¹ 37-75-102. Water rights - protections. (1) It is the policy of the General Assembly that the current system of allocating water within Colorado shall not be superseded, abrogated, or otherwise impaired by this article. Nothing in this article shall be interpreted to repeal or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

² 37-75-104 (2)(c). Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, develop a basin-wide consumptive and nonconsumptive water supply needs assessment, conduct an analysis of available unappropriated waters within the basin, and propose projects or methods, both structural and nonstructural, for meeting those needs and utilizing those unappropriated waters where appropriate. Basin Roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing its needs assessment, and shall propose projects or methods for meeting those needs. Recommendations from this assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

Water Supply Reserve Account – Application Form

Revised October 2013

- 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 Association, OMID, Mesa County Irrigation District, and Palisade Irrigation District will be working as partners on this project. A summary of the matching, in-kind and cash contributions from these partners is outlined in the table below.

Identified Funding Partner	In-Kind or Cash Contribution
Cash Contributions	
Association, OMID, Mesa County and Palisade Irrigation Districts	\$5,000 (Cash)
Colorado Basin Roundtable Water Supply Reserve Account Request	\$42,700
Total Cash Contributions	\$47,700
In-Kind Contributions	
Association, OMID, Mesa County and Palisade Irrigation Districts ¹	\$25,600
Total Project Costs	\$73,300

¹ Estimated based upon 32 hours per month for 8 months @ \$50/hour for 1 Association staff member and 1 OMID staff member.

Water Supply Reserve Account – Application Form

Revised October 2013

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.

Water Supply Reserve Account – Application Form

Revised October 2013

- 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.

Basinwide funding request only.

DRAFT

Water Supply Reserve Account – Application Form

Revised October 2013

Part IV. – Required Supporting Material

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

Water rights, described below from the Colorado River, comprising the “Cameo Call” are for irrigation, power and domestic use. Irrigation water is tied to specific lands within the project and provides full and supplemental service. The domestic water right is a small water right primarily used for livestock watering purposes during non-irrigation season and has not been utilized for several years.

<i>Cameo Water Rights</i>				
Owner	Amount (c.f.s.)	Adjudication Date	Approp. Date	Use
GVWUA/United States	730	7/22/1912	2/27/1908	Irrigation
GVWUA/United States	400/800 ¹	7/25/1941	2/27/1908	Hydro-electric Power
GVWUA/United States	220	7/25/1941	2/27/1908	Domestic & Livestock
Orchard Mesa Irrigation District	450	7/22/1912	10/25/1907	Irrigation
Orchard Mesa Irrigation District	10.2	7/22/1912	10/1/1900	Irrigation
Palisade Irrigation District	23.5	7/25/1941	6/1/1918	Irrigation
Palisade Irrigation District	80	7/22/1912	10/01/1889	Irrigation
Mesa County Irrigation District	40	7/22/1912	7/6/1903	Irrigation

The source of all of the above described water rights is the Colorado River.

The Association was a Co-Applicant in Case No. 91CW247 (“Check Case”), District Court, Water Division 5. The other co-applicants were the District and the United States. Details of this “Check Case” are available upon request.

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

Water Management Plan

The Association recently received a Water Supply Reserve Account Grant in the amount of \$45,000 (note funds were obtained from BOR to support this project as well) to fund a comprehensive update to the Water Management Plan, a critical component to long term maintenance, asset management, water stewardship, and most importantly, creating a funding plan to accomplish those projects – whose costs will be in the millions.

Upper Canal Improvements

Water Supply Reserve Account – Application Form

Revised October 2013

One component of the Roller Dam Master Plan is currently underway. The top 500' of the canal, immediately below the dam, has been identified as a near term priority for renovation by the Association and the District. The Bureau of Reclamation has provided the design work and attendant pricing estimates for reshaping the canal prism and replacing the concrete liner currently in place. They will continue to provide technical and professional assistance, ultimately delivering construction drawings and specifications. The Association and the District will be seeking matching funds from Reclamation, the CWCB, and possibly other sources, in addition to the cash and in-kind contributions they will make to the project. Construction is planned to be complete in the spring of 2016 should the entire length of canal be undertaken; should the project be bifurcated for logistics reasons the work would be completed in the fall of 2016 or the spring of 2017.

OMID and the Association are conducting the Grand Valley Power Plant rehabilitation feasibility study, OMID is making big improvements to their canal, and the Association is submitting two Salinity Control proposals to improve two miles of canal in the east end of the Valley.

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

REPORTING AND FINAL DELIVERABLE

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

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

PAYMENT

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

Water Supply Reserve Account – Application Form

Revised October 2013

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

Signature of Applicant:



Print Applicant's Name:

MARK HARRIS

Project Title: GRAND VALLEY ROLLER DAM REHABILITATION PHASE I

Date: 9/25/15 DEVELOPMENT OF THE DAM AND CANYON FACILITIES
MASTER PLAN

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

Basinwide Project – Grand Valley Roller Dam Rehabilitation

Project Name: Grand Valley Roller Dam Rehabilitation

Project Purpose and Description: The water rights of the Grand Valley irrigation systems that comprise the “Cameo Call,” along with the water rights of the Shoshone Hydropower Plant, control administration of the Colorado River basin within Colorado. In addition to the direct economic benefits in supporting the agricultural economy of the Grand Valley, exercise of these water rights and the continued operation of these facilities provide predictability to river flows and associated environmental and cultural benefits. These benefits include more reliable water flows in the upper portions of the Colorado River, and water flowing from the upper portions of the basin improves water quality in the lower portions of the basin. The flows generated by the Cameo Call help provide water for recreational activities on the Colorado River and for riparian habitat and aesthetic values along the entire Colorado River corridor. Flows generated by the Cameo Call also assist the state in complying with its obligations under the Colorado River Compact and in maintaining acceptable lake levels in Lake Powell. The proposed Roller Dam Rehabilitation project consists of addressing the need for rehabilitating and upgrading the Grand Valley Project Diversion Dam (commonly known as the “Roller Dam”) and the portion of the Government Highline Canal immediately below the Roller Dam. This project will help to maintain the Cameo Call, improve water delivery system operations, capacity and reliability, sustain the ecological health of the river and preserve the agricultural economy of the Grand Valley.

The Roller Dam diverts water into the Highline Canal for irrigation and hydropower purposes under very senior water rights (listed below). The irrigation water is provided to four irrigation entities: Grand Valley Water Users Association and the Orchard Mesa, Palisade and Mesa County Irrigation Districts, which provide irrigation water to approximately 41,000 acres of land in the Grand Valley. The hydropower water is used to produce hydropower at the Grand Valley Power Plant, which has a capacity of approximately 800 cfs and an electrical generation capacity of about 3 megawatts (MW). Return flows from the power plant return to the Colorado River at the head of the 15-Mile Reach, which helps maintain flows in that reach for the endangered fish. The Roller Dam, which was constructed in the early 1900’s, is in need of extensive upgrading and rehabilitation. In addition, repairs and upgrades to the upper portion of the Highline Canal immediately below the Roller Dam are needed to allow the canal to reliably carry all of the water diverted at the Roller Dam. The continued operation of these facilities will provide multiple benefits, justifying a cost share approach to project financing commensurate with the derived benefits.

Project Sponsor(s)	Grand Valley Water Users Association, Orchard Mesa, Palisade and Mesa County Irrigation Districts, Colorado Basin Roundtable	Sponsor Type: <input type="checkbox"/> Single Entity <input checked="" type="checkbox"/> Partnership
Use Type	<input type="checkbox"/> NC <input type="checkbox"/> Ag <input checked="" type="checkbox"/> Multi-Purpose <input type="checkbox"/> M&I	
Project Type	<input checked="" type="checkbox"/> Structural <input type="checkbox"/> Non-Structural <input type="checkbox"/> Policy <input type="checkbox"/> Agreement (The structural improvements will enable the continued operation of the Roller Dam and Highline Canal under existing institutional arrangements to derive multiple economic, environmental, agricultural and cultural benefits)	
Volume of Water Saved/Gained	The project will preserve the ability to better use and manage approximately 1,334 cfs of direct flow irrigation and 800 cfs of direct flow hydropower senior water rights. Rehabilitation of the Roller Dam and upper portion of the Highline Canal will provide the ability to more closely match river diversions with actual irrigation and hydropower demands, enable better response time to river flow variations, reduce	

Basinwide Project – Grand Valley Roller Dam Rehabilitation

	leakage and seepage, and provide for a more efficient operation of the irrigation and power systems that depend on diversions at the Roller Dam.																								
Project Location/Description	The project consists of the upgrading, rehabilitation and modernization of the existing Roller Dam and the upper portion of the Highline Canal adjacent to the dam. Both of these facilities are located on or adjacent to the Colorado River near Palisade, CO. Technical work needs to be done to examine and define the scope of the work to be done, but such work could include, without limitation: Reshaping, stabilizing, and relining the upper portion of the canal, adjacent service and access areas, and utilities; rehabilitate, repair, and replace as required the canal headgates and related operational facilities; upgrade the electrical and control system that operates the roller gates and supplies other required electrical needs; repair and replace mechanical components such as bearings, seals, gears, chains, sprockets and improved perimeter and base gate seals; investigate replacing one or more roller gates with different style gates allowing for more positive control of dam pond level; repair and/or replace deteriorating and spalling concrete throughout facility; install gate automation devices with water level sensors; and install flow measurement devices.																								
Water Rights Information	<p>Water rights diverted at the Roller Dam include:</p> <table><tr><td><u>Entity</u></td><td><u>Use</u></td><td><u>Amount</u></td></tr><tr><td>Orchard Mesa Irrigation District</td><td>Irrigation</td><td>450 cfs</td></tr><tr><td>Orchard Mesa Irrigation District</td><td>Irrigation</td><td>10.2 cfs</td></tr><tr><td>Grand Valley Water Users Association/USA</td><td>Irrigation</td><td>730 cfs</td></tr><tr><td>Palisade Irrigation District</td><td>Irrigation</td><td>80 cfs</td></tr><tr><td>Palisade Irrigation District</td><td>Irrigation</td><td>23.5 cfs</td></tr><tr><td>Mesa County Irrigation District</td><td>Irrigation</td><td>40 cfs</td></tr><tr><td>Grand Valley Water Users Association/ Orchard Mesa Irrigation District/USA</td><td>Power</td><td>400/800 cfs</td></tr></table>	<u>Entity</u>	<u>Use</u>	<u>Amount</u>	Orchard Mesa Irrigation District	Irrigation	450 cfs	Orchard Mesa Irrigation District	Irrigation	10.2 cfs	Grand Valley Water Users Association/USA	Irrigation	730 cfs	Palisade Irrigation District	Irrigation	80 cfs	Palisade Irrigation District	Irrigation	23.5 cfs	Mesa County Irrigation District	Irrigation	40 cfs	Grand Valley Water Users Association/ Orchard Mesa Irrigation District/USA	Power	400/800 cfs
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Constraints and Challenges	<p>Technical: The Roller Dam and Highline Canal were constructed in the early 1900’s. Grand Valley Water Users Association and Orchard Mesa Irrigation District have spent significant amounts in recent years to restore the rollers on the Roller Dam. Technical investigations will be needed to determine the additional work that needs to be done to rehabilitate and upgrade these facilities to allow them to keep functioning properly for their intended purposes in the future.</p> <p>Partnerships: A productive, collaborative process should be developed to explore the project scope, potential participants and funding requirements. This process can be used to determine the anticipated structural and operational improvements required to maintain and enhance the multiple benefits delivered by the Roller Dam and related facilities and operations; to develop prioritized capital and operational cost estimates; investigate funding opportunities; and to consider next steps.</p> <p>Staffing: TBD.</p> <p>Funding: See discussion under Partnerships, above.</p>																								

Basinwide Project – Grand Valley Roller Dam Rehabilitation

Implementation Steps	<p>Design: See discussion under Technical in the Constraints and Challenges section, above.</p> <p>Staffing: TBD</p> <p>Funding: See discussion under Partnerships in the Constraints and Challenges section, above.</p>
Effectiveness at Meeting Basin Goals	<p>Protect/Restore Healthy Streams – This project maintains critical flows in the Colorado River from the headwaters to the Grand Valley, and water used to produce hydropower at the Grand Valley Power Plant is returned to the Colorado River at the head of the 15-Mile Reach to benefit the endangered fish in the river.</p> <p>Sustain Agriculture - This project allows continued diversions by four major irrigation entities under senior, pre-Compact water rights to irrigate over 33,000 acres of fruit trees, grapes, hay, wheat, corn, vegetables and other agricultural crops in the Grand Valley.</p> <p>Secure Safe Drinking Water – This project provides needed dilution water for water providers with mainstem intakes above the Grand Valley Project Roller Dam.</p> <p>Water Conscious Land Use – Agricultural use of the land is a very water conscious land use, and this project will help maintain the use of the land in the Grand Valley for agriculture.</p> <p>Assure Dependable Basin Administration – This project helps maintain the historical flow regime on the Colorado River, which allows for continued dependable administration of flows in the Colorado River.</p> <p>High Basinwide Conservation – This project will improve aging diversion and water transmission structures, which will help manage system losses and provide a more reliable supply of water for irrigation use. In addition, due to the dual water system in the Grand Valley, this project will help conserve treated drinking water for domestic use by allowing continued diversion and distribution of untreated water for lawn and garden irrigation.</p>

Water Supply Reserve Account – Application Form

Revised October 2013

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

Signature of Applicant:



Print Applicant's Name:

MARK HARRIS

Project Title:

GRAND VALLEY ROLLER DAM REHABILITATION PHASE I
DEVELOPMENT OF THE DAM AND CANYON FACILITIES

Date:

9/25/15

MASTER PLAN

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)
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