

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
July 16-17, 2014
Agenda Item 20(f)

Applicant: La Plata Water Conservancy District

Water Activity Name: Long Hollow Reservoir Compact Delivery Study

Water Activity Purpose: Study

County: La Plata

Drainage Basin: Southwest/La Plata River Basin

Water Source: Long Hollow Creek and Government Draw

Amount Requested: \$38,000

Source of Funds: Southwest Basin Account

Matching Funds: \$10,000 in-kind match provided by La Plata Water Conservancy District, and \$4,950 in cash provided by Colorado Department of Water Resources (refer to *Funding Overview/Matching Funds*)

| |
|---|
| Staff Recommendation |
| Staff recommends approval of up to \$38,000 from the Southwest Basin Account to assist in the funding of the project titled: Long Hollow Reservoir Compact Delivery Study |

Water Activity Summary: The La Plata Water Conservancy District (LPWCD) is requesting funding to conduct a study for water delivery from Long Hollow Reservoir to New Mexico. The results of this work will be used to establish a plan to better meet La Plata River Compact (Compact) requirements to the State of New Mexico. The Colorado Division of Water Resources (CDWR) supports the development of this plan because it will help to administer the Compact. A better understanding of stream characteristics along the 4.5-mile reach between the outlet works to the state line is vital to efficient Compact water delivery and effective water management of limited water supply. This work will develop a plan for reservoir releases and stream administration.

Objectives:

It is expected that the proposed study will:

- 1) Help to administer Compact compliance.
- 2) Develop a plan for reservoir releases and stream administration.
- 3) Promote maximum use of state waters now and for future needs

Discussion:

No additional discussion is required.

Issues/Additional Needs:

No issues or additional needs have been identified.

Funding Overview/Matching Funds

| | <u>Cash</u> | <u>In-kind</u> | <u>Total</u> |
|--|----------------|----------------|----------------|
| WSRA Southwest Basin Account | \$38,000 | n/a | \$38,000 |
| La Plata Water Conservancy District | \$0 | \$10,000 | \$10,000 |
| Colorado Department of Water Resources | <u>\$4,950</u> | <u>\$0</u> | <u>\$4,950</u> |
| Total Project Costs | \$42,950 | \$10,000 | \$52,950 |

Staff Recommendation:

Staff recommends approval of up to \$38,000 from the Southwest Basin Account to assist in the funding of the project titled: Long Hollow Reservoir Compact Delivery Study.

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 and Final Deliverable: 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. 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

June 4, 2014

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

SUBJECT: Long Hollow Reservoir Compact Water Delivery Study - \$38,000 from Basin Account

Dear Mr. Godbout:

The Southwest Basin Roundtable is pleased to recommend funding of \$38,000 from the Southwest Basin Account for the Long Hollow Reservoir Compact Water Delivery Study. The application was considered in detail and approved at the May 14, 2014 meeting of the Southwest Basin Roundtable. There was a quorum of Roundtable members present.

The proposed project is a Southwest Basin Roundtable IPP. This application also addresses deliveries to meet obligations of the La Plata River Compact with New Mexico while supporting beneficial use of water rights in the Colorado portion of the La Plata drainage.

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, if you have questions or wish to discuss this application in more detail.

Sincerely,

A handwritten signature in blue ink, appearing to be 'Michael Preston', written over a circular stamp or seal.

Michael Preston
Southwest Basin Roundtable Chair



COLORADO WATER CONSERVATION BOARD



WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: May 5, 2014

Long Hollow Reservoir Compact Water Delivery Study

Name of Water Activity/Project

La Plata Water Conservancy District

Name of Applicant

SouthWest Basin Roundtable

Amount from Statewide Account:

\$0

Amount from Basin Account(s):

\$38,000

Total WSRA Funds Requested:

\$38,000

Approving Basin Roundtable(s)

(If multiple basins specify amounts in parentheses.)

FEIN 84-1191941

Application Content

| | |
|--|---------|
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Required Exhibits

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

Appendices – Reference Material

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

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>

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

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

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

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

| | | | | |
|----|--------------------|--|-----------------|-----------------|
| 1. | Applicant Name(s): | La Plata Water Conservancy District | | |
| | Mailing address: | 555 RiverGate Lane, Suite B4-82 Durango, CO 81301 | | |
| | FEIN #: | 84-1191941 | | |
| | Primary Contact: | Eric Bikis | Position/Title: | Project Manager |
| | Email: | eric@bikiswater.com | | |
| | Phone Numbers: | Cell: 970-769-0997 | Office: | 970-385-2340 |
| | Alternate Contact: | Brice Lee | Position/Title: | President |
| | Email: | brice@obii.net | | |
| | Phone Numbers: | Cell: 970-946-2646 | Office: | 970-588-3369 |

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.

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3. Provide a brief description of your organization

La Plata Water Conservancy District (LPWCD), located in southwest La Plata County, was formed in 1944 by area irrigators and continues to be run by a volunteer board. The purpose of the District is to improve water supply in the La Plata River basin, including the construction and operation of facilities necessary to meet this goal.

LPWCD contracts with a consultant and water rights attorney. The contact for LPWCD's President, Brice Lee, is 970-588-3369 or brice@obii.net. LPWCD's Project Manager is Eric Bikis at Bikis Water Consultants, LLC: 970-385-2340 or eric@bikiswater.com.

LPWCD has been active in promoting the beneficial use of surface water rights in the La Plata River basin for decades by working with irrigators, ditch companies and the Office of the State Engineer (SEO) to monitor and to help to solve water shortage and allocation issues.

The La Plata River originates in the La Plata Mountains, 15 miles northwest of the City of Durango, in La Plata County, Colorado. The river flows from its headwaters in the mountains, ≈40 river miles south to New Mexico where it eventually becomes tributary to the San Juan River. LPWCD covers approximately 21,600 acres of irrigated land served by 16 main ditches and other smaller diversions. LPWCD works with a range of water users to achieve large goals such as water conservation, development of the Long Hollow Reservoir and protection of irrigation water rights. LPWCD also manages Marvel Spring, an important, non-potable, water supply source and hauling station for local residents that do not have domestic water supply.

The LPWCD area is primarily rural and agricultural use. The most common agricultural crop in the region is hay and cattle ranching according to the 2013 USDA Agricultural Census.

LPWCD's annual budget is approximately \$13,000. The funds are spent on existing District operations and management commitments. This budget does not include the LHR grant allocations.

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

Not Applicable

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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.

LPWCD held a vote amongst its members on November 6, 2001 addressing budget issues related to TABOR. The result was an approval of the following referred issue:

WITHOUT AUTHORIZING ANY PROPERTY TAXES, SHALL THE LA PLATA WATER CONSERVANCY DISTRICT OF LA PLATA COUNTY, COLORADO, BE AUTHORIZED TO COLLECT, AND EXPEND OR RETAIN THE FULL AMOUNT OF ANY REVENUE RECEIVED AFTER NOVEMBER 6, 2001 FROM ANY SOURCE, INCLUDING NON-FEDERAL GRANTS, NOT WITHSTANDING ANY RESTRICTION ON REVENUE OR SPENDING, INCLUDING THE REVENUE GROWTH LIMITATIONS CONTAINED IN C.R.S. SECTION 29-1-301, et seq., AND IN ARTICLE X, SECTION 20, OF THE COLORADO CONSTITUTION, SUCH AUTHORIZATION TO CONSTITUTE A VOTER-APPROVED REVENUE AND SPENDING CHANGE?

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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:

Studies and/or analysis of structural and consumptive water needs project

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

The study will benefit the SEO, ditch companies, individual irrigators and the state. The proposed study is critical in developing methods for optimizing operations and administration of LHR and the La Plata River.

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:

Operations plan Long Hollow Reservoir Project (5,309AF)

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

Latitude: 108°10'59" W

Longitude: 37°2'45" N

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 La Plata Water Conservancy District (LPWCD) is requesting funding to conduct a study for water delivery from Long Hollow Reservoir to New Mexico. The results of this work will be used to establish a plan to better meet La Plata River Compact (Compact) requirements to the State of New Mexico. The Colorado Division of Water Resources (CDWR) supports the development of this plan because it will help to administer the Compact.

The 1922 Compact requires that the State of Colorado deliver half of the daily mean flow at the La Plata River at Hesperus gage to New Mexico the following day. Historically, Colorado has not always been able to satisfy this Compact due to a variety of factors, but primarily due to changing stream characteristics along the 31 river miles between the Hesperus and State Line gages. In order to help meet Compact requirements Long Hollow Reservoir (LHR), an on-channel reservoir with a capacity of 5,309 acre-feet, currently is being constructed. Construction of the reservoir began in July of 2012 and is expected to be completed in October of 2014. Releases from the reservoir, located only 4.5 miles from the state line, will be made when streamflow in the La Plata is not sufficient to satisfy Compact requirements.

A better understanding of stream characteristics along the 4.5-mile reach between the outlet works to the state line is vital to efficient Compact water delivery and effective water management of limited water supply. This work will develop a plan for reservoir releases and stream administration. For example, LHR release schedules may be modified under high, moderate, and low flow conditions to reduce stream losses. Work tasks will include:

- Review and evaluation of available and pertinent gage data.
- Multiple steam flow measurements at several locations to assess losing and gaining reaches under various flow conditions.
- Evaluation of available well records, if any.
- Drilling of two or more exploratory test holes to characterize subsurface conditions.
- Review of geologic data with additional field mapping in an attempt to correlate losing and gaining streams reaches with hydrogeologic conditions and riparian vegetation.

Work product will be a summary report with conclusions and recommendations. Findings will be made available to the Southwest Basin Roundtable and the CDWR. LPWCD is requesting \$38,000 in Roundtable funding for the work. LPWCD will contribute work and equipment to establish a LPR gaging station below Long Hollow, an estimated \$10,000 value. CDWR will contribute \$4,590 in staff fees and expenses to measure river flows and provide technical input to the work. The work will be completed six months after notice to proceed is received.

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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.¹

The proposed study will be a tool to more effectively meet Colorado's La Plata River Compact obligations to New Mexico and to optimize the beneficial use of the La Plata River in accordance with Colorado Water Law. This study will allow for a better understanding of stream characteristics along the 4.5-mile reach between the outlet works to the New Mexico state line. It will not diminish, impair, or cause injury to any intergovernmental agreements; in fact, this study will help develop a plan for reservoir releases and stream administration.

- 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 project was reviewed on a concept basis by the Southwest Basin Roundtable at its March 12, 2014 meeting. The proposal was presented to the Southwest Basin Roundtable at its May 14, 2014 meeting and grant funds were requested.

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.

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- 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.

The proposed study is an important component of the Long Hollow Reservoir (LHR), which is on the SWSI list of Identified Projects and Processes (IPP). It is located in a water-short basin with a River Compact requirement and will involve collaboration amongst water users and SEO. It will help determine stream characteristics between Long Hollow and the New Mexico state line at varying flow levels along the La Plata River. This will allow for a more systematic release plan for the LHR and Compact compliance.

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

LPWCD is requesting \$38,000 from the Basin account and will contribute work and equipment to establish a La Plata River gaging station below Long Hollow, an estimated \$10,000 value, and CDWR is contributing \$4,590 in fees and expenses. The detailed budget and work to be completed with these matching funds is shown in Exhibit A of this application.

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.

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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. 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

The Long Hollow Reservoir Compact Water Delivery Study is a prime example of the Tier 1 goals. The proposed study, as a component of the LHR project, will bring together irrigators and the SEO in Colorado. The study will address multiple needs which include sustaining agriculture in the La Plata River basin and Compact compliance.

The SWSI reports states the LHR project will “maximize in-basin supplies” which addresses identified water needs in the water-short La Plata River basin. In order to further “maximize in-basin supplies,” this study will provide a better understanding of stream characteristics along the 4.5-mile reach of the La Plata River between Long Hollow and the New Mexico state line which is vital to efficient Compact water delivery and effective water management of limited water supply. The study will provide efficient means to improve delivery of Compact flows under high, moderate, and low flow conditions to reduce stream losses while optimizing beneficial use within Colorado.

Tier 2: Facilitating Water Activity Implementation

LPWCD is requesting that the Southwest Basin Roundtable and the CWCB assist in funding the study as it will benefit the SEO, ditch companies, individual irrigators and the state. The proposed study is critical in developing methods for optimizing operations and administration of LHR and the La Plata River. This study will develop a plan for reservoir releases and stream administration.

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

The requested funds will provide valuable information to enhance implementation and administration of the multi-million dollar LHR project. A Memorandum of Understanding regarding LHR operations was established between the District, the Colorado Parks and Wildlife (formally Colorado Division of Wildlife), the SEO and the Department of Natural Resources to benefit the native fishery in the La Plata River. The MOU includes conditions to bypass flows entering Long Hollow Reservoir to help sustain native fish.

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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 study addresses the La Plata River operations which involve Compact waters and required delivery, LHR water rights, future exchange water as well as other direct diversion water rights in the La Plata River basin. The study will help develop a plan for the SEO to use in administration of all of these rights under the new conditions that will be present with LHR. Colorado has not always been able to satisfy the Compact due to a variety of factors, but primarily due to changing stream characteristics along the 31 river miles between the Hesperus and State line gages. This study will allow for a better understanding of the stream characteristics between the 4.5-mile reach between the outlet works and the state line which is vital to efficient Compact water delivery and effective water management of limited water supply.

LHR has 2 storage water rights that include an initial fill of 5,400 AF plus 2 refills for a total of 11,200 AF. In addition there are 48 diversions on the La Plata River with an estimated direct flow rights of \approx 570 cfs (CDSS).

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

Existing studies completed for LHR will be used, as appropriate, for the proposed study. For example, the La Plata River Operations Plan showed how to allocate and convey water. Background data may be taken from the Red Mesa Aquifer Study and subsequent groundwater monitoring data (BWC, 2007 & 2010). Data available from technical resources (such as USGS gages, CDSS data, weather stations, etc.) will also be used.

No permits are required for this work.

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

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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.

Please see attached 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 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.

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

Signature of Applicant:



Print Applicant's Name: Brice Lee

Project Title: President

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

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

Exhibit A

Statement of Work

WATER ACTIVITY NAME – Long Hollow Reservoir Water Delivery Study

GRANT RECIPIENT – La Plata Water Conservancy District

FUNDING SOURCE – Basin Water Supply Reserve Account

INTRODUCTION AND BACKGROUND

The Long Hollow Reservoir Compact Water Delivery Study will help to understand stream characteristics of the La Plata River along the 4.5-mile reach between Long Hollow and the New Mexico state line stream gage. This work will develop a plan for reservoir releases and stream administration.

The 1922 Compact requires the State of Colorado to deliver half of the daily mean flow at the La Plata River at Hesperus gage to New Mexico the following day. Historically, Colorado has not always been able to satisfy this Compact due to a variety of factors, but primarily due to changing stream characteristics along the 31 river miles between the Hesperus and State Line gages. The Long Hollow Reservoir (LHR) is being constructed to help meet the Compact requirements. Releases from the reservoir will be made when streamflow in the La Plata is not sufficient to satisfy Compact requirements.

OBJECTIVES

It is expected that the proposed study will:

- 1) Help to administer Compact compliance.
- 2) Develop a plan for reservoir releases and stream administration.
- 3) Promote maximum use of state waters now and for future needs.

TASKS

Task 1: Review and evaluate available and pertinent gage data.

Description:

- The study will begin by reviewing and evaluating existing gage data to define existing stream characteristics.

Method:

- Review current and historical gage data provided by the Colorado Division of Water Resources and Bureau of Reclamation to help to understand historical stream flow trends.
- Compilation and analysis of existing data.

Deliverables:

- Findings will be included in a final report which will be provided CDWR, CWCB and others for future use.

Task 2: Collect stream flow measurements

Description:

- Multiple stream flow measurements will be collected at up to four locations along the 4.5-mile reach of the La Plata River (LPR) below the outlet works and the New Mexico state line to assess losing and gaining reaches under various flow conditions.

Method:

- Stream flow measurements will be taken at up to four locations at various river stages.
- Stream flows will be measured with a U.S. Geological Survey approved Type AA or Pigmy Current Meter.
- Data will be compiled and analyzed.

Deliverables:

- Results will be included in the final report and made available to CDWR, CWCB and others for future use.

Task 3: Evaluation of available well records.

Description:

- Evaluation of available well records will help to characterize subsurface conditions.

Method:

- Utilize the Colorado Division of Water Resources well database to research available well records in and around the area.

Deliverables:

- Results will be included in the final report and made available to SEO, CWCB and others for future use.

Task 4: Drill two exploratory test holes and install two piezometers

Description:

- Two exploratory test holes will be drilled to bedrock along the LPR between Long Hollow and the New Mexico state line. Piezometers will be installed and water level measurements will be monitored contemporaneously with stream flow measurements. This data will help characterize subsurface characteristics and the relationship between La Plata River flows and adjacent groundwater levels.

Method:

- A well contractor will drill into the LPR alluvium to bedrock.
- Perforated pipe will be installed to measure water levels.
- Data will be collected and compiled.

Deliverables:

- Results will be included in the final report and made available to CWDR, CWCB and others for future use.

Task 5: Review of geologic data and additional field mapping

Description:

- Geologic data and additional field mapping of the area will be collected and analyzed to compare losing and gaining stream reaches with hydrogeologic conditions and riparian vegetation.

Method:

- Review geologic maps of the LPR basin
- Conduct surveys of geology and vegetation

Deliverables:

- Results will be included in the final report and made available to SEO, CWCB and others for future use.

Task 6: Documentation and reporting

Description:

- All data will be analyzed, compiled, and included in a final report. The report will summarize findings of the study. These findings will be used to assist in the development of a release plan for the LHR in order to meet compact requirements.

Method:

- Final report for the project
 - Report will include spreadsheets, graphs, mapping, and other formats to best represent the study methods and results.

Deliverables:

- A final report will be provided in hard copy and electronic format.
- Report will be made available to LPWCD, CWCB, CWDR and other entities as appropriate.

REPORTING AND FINAL DELIVERABLE

See Task 6 above.

BUDGET

The proposed project will be completed by Bikis Water Consultants, LLC which has extensive experience with LHR, the La Plata River and specific water rights concerns. Support and guidance will be provided, as needed, by CDWR who will assist with collection of stream flows and provide input on results of the study. The LPWCD Board, ditch companies and water rights owners will provide historical input and comments on the study results as an in-kind contribution. Qualifications of key personnel are available upon request.

| Table 1. Total Costs | | | | |
|---|-----------------|----------------|-----------------|---------------|
| Task | Labor Cost | Direct Cost | Total Costs | In-Kind |
| | (1) | (2) | (3) | (4) |
| 1. Review and evaluate available and pertinent gage data | \$2,945 | \$295 | \$3,240 | CDWR |
| 2. Stream flow measurements | \$8,455 | \$845 | \$9,300 | CDWR LPWCD |
| 3. Evaluation of well records | \$1,381 | \$138 | \$1,519 | - |
| 4. Drilling of two exploratory test holes and installation of piezometers | \$17,136 | \$235 | \$17,371 | - |
| 5. Geologic review and mapping | \$1,773 | \$177 | \$1,950 | - |
| 6. Documentation, Reporting and Recommendations | \$4,182 | \$418 | \$4,600 | CDWR |
| Total Costs | \$35,871 | \$2,109 | \$37,980 | - |
| Basin Grant | | | \$38,000 | - |
| LPWCD Matching Funds | | | \$10,000 | LPWCD |
| CDWR Matching Funds | | | \$4,590 | CDWR |
| Total Matching Funds | | | \$14,590 | - |
| Total Project Costs | | | \$52,590 | - |

Notes:

(1) Labor costs shown in Table 1a (below).

(2) Direct Costs equal 10% of labor costs (excluding Legal). Direct costs include mileage, copies, software, travel time, etc.

(3) Total Project Cost equals sum of columns 1 and 2.

| Table 1a. Budget per Personnel | | | | |
|---------------------------------------|-----------------|----------------|-----------------|-----------------|
| Task | Prof Staff | Tech & Admin | Driller | Total |
| | (1) | (2) | (3) | (4) |
| 1. Gage data | \$2,240 | \$1,000 | \$0 | \$3,240 |
| 2. Stream flow measurements | \$6,400 | \$2,900 | \$0 | \$9,300 |
| 3. Well records | \$829 | \$690 | \$0 | \$1,519 |
| 4. Exploratory test holes/piezometers | \$1,800 | \$550 | \$15,000 | \$17,350 |
| 5. Geologic review and mapping | \$1,200 | \$750 | \$0 | \$1,950 |
| 6. Reporting | \$2,800 | \$1,800 | \$0 | \$4,600 |
| Total Costs | \$15,269 | \$7,690 | \$15,000 | \$37,959 |

Notes:

- (1) Professional staff includes project manager and support staff. Rates range from \$65/hr to \$175/hr.
- (2) Technicians and Administrative Assistant rates range from \$44/hr to \$60/hr.
- (3) Driller costs are a lump sum of \$15,000 for the project for construction of 2 piezometers.
- (4) Equals sum of columns 1 through 3.

SCHEDULE

| Task | Start Date | Finish Date |
|--|---|-----------------------|
| 1. Review and evaluate gage data | Upon NTP | NTP + 2 months |
| 2. Stream flow measurements | Upon NTP | NTP + 4 months |
| 3. Evaluate well records | Upon NTP | NTP + 2 months |
| 4. Drill test holes and install piezometers. | Upon NTP | NTP + 4 month |
| 5. Documentation and Reporting | Upon NTP and completion of tasks 1 through 4. | NTP + 6 months |
| Total Project | NTP | NTP + 6 months |

NTP= Notice to Proceed