

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 24, 2013
Agenda Item 18(q)

Applicant: La Plata Water Conservancy District

Water Activity Name: La Plata River Water Resources Operations Model – Supplemental Funding Request

Water Activity Purpose: Nonconsumptive

County: La Plata

River Basin: Southwest

Water Source: La Plata River

Amount Requested: \$6,926.25 (Statewide Account)

Matching Funds: \$0

Staff Recommendation
Staff recommends approval of up to \$6,926.25 from the Statewide Basin Account to help complete the project titled: La Plata River Water Resources Operations Model – Supplemental Funding Request

Water Activity Summary: The La Plata Water Conservancy District received a \$148,823 WSRA grant in March 2011 from the CWCB for the purpose of developing the La Plata River Water Resources Operations Model, a baseline model and methods for determining the most efficient and effective means for La Plata River operations. To date, two Amendment requests (CMS NO. 40865, and CMS No. 52766) have been approved, each of which extended the effective end date of the contract with no increase in budget. This supplemental funding request is in response to additional project costs associated with project delays due to coding errors in the StateMod model as noted in the approved Amendment (CMS No. 52766) executed January 29, 2013.

Threshold and Evaluation Criteria

The application meets all four Threshold Criteria.

Discussion:

No additional discussion is needed.

Issues/Additional Needs:

No issues have been identified.

Staff Recommendation:

Staff recommends approval of up to \$6,926.25 from the Statewide Basin Account to help complete the project titled: La Plata River Water Resources Operations Model – Supplemental Funding Request.

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

May 6, 2013

Mr. Greg Johnson
Program Manager, Water Supply Management Section
Colorado Water Conservation Board
1580 Logan Street, Suite 600
Denver, Colorado 80203

SUBJECT: La Plata River Water Resources Operations Model – Recommend Approval
for Contract Amendment adding \$7,000 from the Statewide Fund

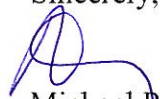
Dear Mr. Johnson,

The La Plata Water Conservancy District was previously approved for WSRA statewide funds to do a La Plata River Water Resources Operations Model. The Tasks associated with this involved the use of the CDSS model. It took substantial unanticipated work at a cost of \$7,000 to correct the CDSS model to meet the scope of work for this project. The La Plata Water Conservancy District requested that the contract be amended to cover this added cost.

At the April 17, 2013 Southwest Basin Roundtable meeting, with a quorum present, the Roundtable recommended approval of an additional \$7,000 in Statewide WSRA funding to cover this added cost.

Since this is an amendment of a previously approved WSRA application, please contact the applicant directly or me at 970-565-7562, mpreston@frontier.net, if you have questions or to advise as to any other required submittals from the applicant.

Sincerely,

A handwritten signature in blue ink, appearing to be 'Michael Preston', written over a horizontal line.

Michael Preston
Southwest Basin Roundtable Chair



COLORADO WATER CONSERVATION BOARD



WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

La Plata River Water Resources Operations Model-
Supplemental Funding

Name of Water Activity/Project

La Plata Water Conservancy District

Name of Applicant

Southwest Basin

Amount from Statewide Account:

\$6,926.25

Amount from Basin Account(s):

\$0

Total WSRA Funds Requested:

\$6,926.25

Approving Basin Roundtable(s)

(If multiple basins specify amounts in parentheses.)

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 December 2011

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:

Greg Johnson – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
gregory.johnson@state.co.us

If you have questions or need additional assistance, please contact Greg Johnson at: 303-866-3441 x3249 or gregory.johnson@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:	1362 County Road 126 Hesperus, CO 81326		
	Taxpayer ID#:	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:	Diana Chumney	Position/Title:	Office Manager
	Email:	diana@bikiswater.com		
	Phone Numbers:	Cell:	Office:	970-385-2340

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

See original WSRA Application approved by CWCB in May 2011.

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

Not Applicable

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.

See original WSRA Application approved by CWCB in May 2011.

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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.

See original WSRA Application approved by CWCB in May 2011.

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 December 2011

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

Latitude:

Longitude:

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 Long Hollow Reservoir (LHR) is being constructed by the LPWCD to benefit Colorado irrigation interests in the La Plata River basin. The La Plata River Model is being developed as a tool that will integrate groundwater and surface water to refine water resources planning within the basin. The LPR Model will take into account the new conditions presented by the operations of the LHR Compact Pool as well as LHR exchange water, which will benefit irrigators, the State, and the SEO while meeting environmental and Compact requirements.

The LPR Model was run using State Mod, which is Colorado's hydrologic model. There were two code errors discovered in the StateMod Model, which were associated with the type 4 operating rule. These errors were corrected but the modeler, model peer reviewers, and water resource consultant experienced additional work effort unforeseen in the original budget and accrued additional costs. LPWCD therefore respectfully requests additional funding totaling \$6,926.25 to cover these supplementary costs. If approved, the total budget for the project would increase from \$148,823.00 to \$155,749.25.

See original WSRA Application approved by CWCB in May 2011.

Revised Statement of Work, Budget, and Schedule attached as Exhibit A.

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.)

See original WSRA Application approved by CWCB in May 2011.

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

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.
 - d) Matching Requirement: For requests from the **Statewide Fund**, the applicants is required to demonstrate a **20 percent** (or greater) match of the request from the Statewide Account. Statewide requests must also include a minimum match of **5 percent** of the total grant amount from Basin Funds. 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)
2. For Applications that include a request for funds from the **Statewide Account**, describe how the water activity/project meets all applicable **Evaluation Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines and repeated below.) Projects will be assessed on how well they meet the Evaluation Criteria. **Please attach additional pages as necessary.**

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

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

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

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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- 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

See original WSRA Application approved by CWCB in May 2011.

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.

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

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

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

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

REPORTING AND FINAL DELIVERABLE

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

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

PAYMENT

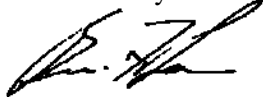
Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

Water Supply Reserve Account – Application Form

Revised December 2011

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

Signature of Applicant:



Print Applicant's Name: Brice Lee, President, La Plata Water Conservancy District

Project Title: La Plata Water Resources Operations Model

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

Greg Johnson – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
gregory.johnson@state.co.us

Exhibit A, Revised 09/03/2013

Statement of Work

WATER ACTIVITY NAME - La Plata River Water Resources Operations Model

GRANT RECIPIENT - La Plata Water Conservancy District

FUNDING SOURCE - Statewide Water Supply Reserve Account

INTRODUCTION AND BACKGROUND

The La Plata River Water Resources Operations Model will be a robust and accurate baseline model for the La Plata River. The model will integrate groundwater and surface water and provide an invaluable tool for water users and the Office of the State Engineer (SEO) to use to optimize water resources planning with the basin.

The Long Hollow Reservoir (LHR) will be built near the state line, in order to improve compliance with the La Plata River Compact and optimize beneficial use of water in Colorado (see Figure 1). By allowing Colorado's Compact delivery obligations to be met from the reservoir releases rather than suffer the transportation losses associated with delivery in the River channel, La Plata Water Conservancy District will be able to operate upstream exchange to ditches otherwise called out by the Compact. The proposed project will develop a model and methods for determining the most efficient and effective means for La Plata River operations. This study will take into account the new conditions presented by the operations of the LHR Compact Pool as well as LHR exchange water. The proposed study will benefit irrigators, the State, and SEO while meeting environmental and Compact requirements.

OBJECTIVES

It is expected that the proposed model will:

- 1) Allow the SEO to evaluate alternative Compact compliance delivery conduits and assess any impact on water users.
- 2) Allow LPWCD to assess, optimize and account for LHR operations including reservoir filling (whether directly or by groundwater recharge), account for and optimize the anticipated upstream exchange, and evaluate alternative reservoir operations regimes.
- 3) Quantify exchange water by ditch and develop an Allocation Plan for the exchange water in LHR that is adopted by ditch companies and LPWCD.
- 4) Allow water users and developers to evaluate alternative water development strategies in manner that does not injure existing water users.

TASKS

Task 1: Refine and Improve the baseline La Plata River Model in StateMod

Description:

The study will begin by refining and improving the existing Colorado Decision Support System's StateMod model for the La Plata River basin in Colorado. Additional data and nodes will be added, updated and refined. Groundwater return flows and/or depletions will be added to the model. All of the additional inputs will be used to run the model with historic diversion records in order to establish a more robust baseline condition for the La Plata River.

Method:

- Review and enhance irrigated acreage assessment by ditch and/or by water rights
- Refine inputs for irrigation and reservoir operations using input from irrigators, reservoir operators, commissioners and records
- Update datasets with current records from HydroBase, CDSS, USGS gages, WRCC, groundwater field measurements and other sources
- Obtain parameters for modeling groundwater return flows from irrigation and recharge; Hydrographs of wells and groundwater studies will be a source of inputs for model
- Develop more nodes to include input for tributaries and groundwater return flows
- Refine assumptions on Compact calls
- Develop historical model data set and documentation
- Run and calibrate the baseline model, including simulating split river conditions

Deliverables:

- Documentation of all input parameters and assumptions
 - All files for the DMIs TSTool and State DMI used to create the historical model data set.
 - Narrative, geographic and other documentation of input parameters
- StateMod model for La Plata River including LHR
 - Includes groundwater return flows modeling
 - Includes simulation of split river conditions
 - Tabulation of monthly diversions, broken down by ditch and by direct vs. exchange diversions, for all basin diversions included in the model
- All information will be made available to SEO, CWCB and others for future use and updates

2013 UPDATE:

Task 1a: Correction of StateMod Program

Two code errors were discovered in the StateMod Model, which were associated with the type 4 operating rule. These errors were corrected but accrued additional costs unforeseen in the original budget.

Task 2: Analyze means of administering the La Plata River and LHR

Description:

Several aspects of river operations and accounting will be analyzed using the improved model, and recommendations for accounting and administration will be made based on results.

Method:

LHR predictive model

- Using the historical data set, revise demands, water rights, return flows and operations to reflect current conditions for the model period (aka calibrate model)
- Model future calls and operations of Compact Pool
- Quantification of exchange water associated with LHR District Pool releases
- Appropriate allocation of exchange water to ditches based on historical data
- Means of accounting for direct flow diversions and exchange water diversions

Alternate conveyance feasibility and associated impacts

- Develop a baseline of operations and streamflow during late-season call periods when Compact Pool is empty
- Model alternate conveyance of Compact water via up to three irrigation ditches
- Assess the potential groundwater recharge and/or depletions related to baseline and alternative conveyance methods

Deliverables:

- StateMod model for operations of LHR and quantification of exchange water
 - All associated documentation
- Findings and recommendations for operations of Compact Pool
- Findings and recommendations for quantification and allocation of exchange water
- Findings and recommendations for potential means of alternative conveyance of late-season Compact water

Task 3: Collaboration amongst LPWCD, SEO and water users

Description:

Personnel working on the model will meet with LPWCD, water users and SEO staff to obtain information and buy-in on the operating parameters used in the model. This will include criteria for administration of the Compact Pool, groundwater administration based on recharge, and strategies for exchange water accounting. Meetings throughout the study period will help to support that the findings of the model being adopted and implemented by the SEO.

Method:

Meetings may occur in Denver, Durango and/or on-site, as necessary, and will be coordinated by the project manager.

Deliverables:

- Documented meetings between modelers, LPWCD, SEO and/or water users
- Guidance from SEO on development of model

Task 4: Develop Allocation Plan

Description:

The exchange water quantified in Task 2 will be used to develop an Allocation Plan for the District Pool. The plan will be used to reach agreements with all participating ditches anticipated to receive exchange water. The agreements with ditches and associated payments for exchange water will provide the capital for operations and maintenance of LHR.

Method:

An Allocation Plan will be developed based on:

- Quantification of exchange water by the model using historical data (see Task 2)
- Negotiations with Ditches
- Discussions on model parameters and/or accuracy with modelers
- Maintaining compliance with environmental requirements, Compact Pool requirements and La Plata River Compact

Deliverables:

- A summary of the Allocation Plan will be provided to the CWCB describing the overall agreements and value of exchange water
- A detailed Allocation Plan will be prepared for LPWCD for use in operations of LHR

Task 5: Documentation, Reporting and Recommendations

Description:

Bi-annual reporting will be completed per CWCB requirements. A summary report will be prepared and made available to the CWCB, SEO and public.

Method:

A summary report will be prepared, including the following:

- Documentation of assumptions and data used in the model to facilitate future use and updates of the model
- Results and discussion of the analyses on administration and accounting
- Summary of Allocation Plan
- Recommendations and tools for administration (such as spreadsheets and models)
- Preliminary recommendations on alternative conveyance methods

Deliverables:

- Status reports to the CWCB on the progress of the project, obstacles and budget will be provided bi-annually
- Final report for the project
 - Report will include spreadsheets, graphs, mapping, model inputs and/or other formats to best represent the study methods and results
 - A draft report will be prepared; LPWCD and the SEO will have the opportunity to make comments and revisions
 - A final report will be provided in hard copy and electronic format
 - Report will be made available to LPWCD, CWCB, SEO and other entities as appropriate

REPORTING AND FINAL DELIVERABLE

See Task 4 above.

BUDGET, Revised September 3, 2013

Table 1. Total Costs				
Task	Labor Cost	Direct Cost	Total Costs	In-Kind
	(1)	(2)	(3)	(4)
1. Refine and Improve the baseline La Plata River Model in StateMod	\$34,950	\$3,275	\$38,225	LPWCD and water users
2. Model scenarios for La Plata River Operations and Exchange Water Allocation	\$20,098	\$1,860	\$21,957	LPWCD and water users
3. Collaboration with stakeholders and model refinement	\$27,625	\$2,013	\$29,638	LPWCD, SEO, water users
4. Allocation Plan	\$45,293	\$3,099	\$48,392	LPWCD and water users
5. Documentation, Reporting and Recommendations	\$37,114	\$3,261	\$40,375	LPWCD
Total Costs	\$165,080	\$13,508	\$178,588	-
Statewide Grant		\$148,823	\$155,749	-
Correction of StateMod Code (Additional Statewide Grant Funds)		\$6,926		
LPWCD Matching Funds (20% of Statewide)			\$22,838	-

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.
- 4) In-kind contributions consist of time from LPWCD Board, Ditch Companies, SEO and other stakeholders. These contributions are not quantified or counted as matching funds.

Table 1a. Budget per Personnel				
Task	Prof Staff	Tech & Admin	Legal	Total
	(1)	(2)	(3)	(4)
1. Baseline Modeling	\$30,750	\$2,000	\$2,200	\$34,950
2. Modeling Scenarios	\$15,598	\$3,000	\$1,500	\$20,098
3. Collaboration & Model Refinement	\$18,125	\$2,000	\$7,500	\$27,625
4. Allocation Plan	\$27,993	\$3,000	\$14,300	\$45,293
5. Reporting	\$26,614	\$6,000	\$4,500	\$37,114
Total Costs	\$119,080	\$16,000	\$30,000	\$165,080

Notes:

- 1) Professional staff includes project manager, modeling experts 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) Legal fees are a lump sum of \$30,000 for the project and have been approximately allocated per task.
- 4) Equals sum of columns 1 through 3.

SCHEDULE
Revised September 3, 2013

WATER ACTIVITY NAME – La Plata River Water Resources Operations Model

GRANT RECIPIENT – La Plata Water Conservancy District

Task	Start Date	Finish Date
1. Refine and improve the baseline La Plata River Model in StateMod Program.	July 22, 2011	February 29, 2012
1a. Correction of StateMod Program.		
2. Analyze means of administering the La Plata River and LHR.	Upon completion of Task 1	October 1, 2013
3. Collaboration with stakeholders and model refinement.		
4. Allocation Plan.	Upon completion of Tasks 2 and 3	November 1, 2013
5. Documentation, reporting, and recommendations.	Upon completion of Tasks 2 and 3	March 31, 2014
Total Project	July 22, 2011	March 31, 2014