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

Applicant: Colorado Rio Grande Restoration Foundation

Water Activity Name: Rio Grande Basin Implementation Plan

Water Activity Purpose: All inclusive

River Basin: Rio Grande

Water Source: Rio Grande River and tributaries

Amount Requested: $100,000 (Statewide Account), $211, 000 (Rio Grande Basin Account)

Matching Funds: none

Staff Recommendation:
Staff recommends approval of up to $100,000 from the Statewide Account, and $211,00 from the Rio Grande Basin Account to help complete the project titled: Rio Grande Basin Implementation Plan.

Water Activity Summary: WSRA funds will be expended to draft a Rio Grande Basin Implementation Plan that conforms to the Basin Implementation Plan Guidance Document to include Sections 1-6 to be authored by DiNatale Water Consultants, with the Colorado Rio Grande Restoration Foundation acting as the applicant and fiscal agent on behalf of the Rio Grande River Basin Roundtable.

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

Statewide Evaluation Criteria:
The application meets all three Tiered Evaluation Criteria.

Discussion:
No additional discussion is needed.

Issues/Additional Needs:
No additional issues or needs were identified.

Staff Recommendation:
Staff recommends approval of up to $100,000 from the Statewide Account, and $211,00 from the Rio Grande Basin Account for project titled: Rio Grande Basin Implementation Plan.

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.

Rio Grande Inter-Basin Roundtable
c/o San Luis Valley Water Conservancy District
623 Fourth Street
Alamosa, CO 81101
Telephone: (719) 589 – 2230
Email: slvwcdco1@qwestoffice.net

August 28, 2013

Mr. Michael King, Executive Director
Colorado Department of Natural Resources

Ms. Rebecca Mitchell, Section Chief
Water Supply Planning Section
Colorado Water Conservation Board

Reference: Rio Grande Basin Plan

Dear Mr. King and Ms. Mitchell:

The Rio Grande Inter-Basin Roundtable (R.G.R.T) has determined that the single, most critical water issue confronting the Rio Grande Basin (Basin) is the current unsustainable management of surface and ground water. The R.G.R.T. has made the decision that water activities that address this issue be favorably considered for funding from the Water Supply Reserve Account, SB 2005 -179 (WSRA Funds), providing the proposed water activities meet the SWSI findings for the Basin and the CWCB & IBCC Criteria and Guidelines for funding.

The attached application for WSRA funding of $311,000, is to cover the anticipated costs of the R.G.R.T. developing its 2014 Rio Grande Basin Plan (Plan), in accordance with Governor Hickenlooper's Executive Order D 2013-005 requesting that a Statewide Water Plan be developed by the CWCB in 2014. The R.G.R.T voted unanimously at their regular Meeting on August 13, 2013 that this WSRA request go forward to the CWCB Board for approval at their September 2013 Board Meeting. The R.G.R.T. is requesting $100,000 from Statewide Funds and $211,000 from Basin Funds. Please do not hesitate to contact me is this ratio of funding needs to be discussed or if other arrangements have been made by the CWCB to fund these necessary Basin Plans.

The applicant and fiscal agent of this funding request is the Colorado Rio Grande Restoration Foundation, which has previously received WSRA funding and meets the criteria for a receiptant of WSRA Funds.

The Plan will be developed in accordance with the published CWCB Guidelines. After considerable debate the R.G.R.T. deemed it necessary to hire an outside, third party consultant to assist with the Plan and to eventually write, edit and prepare the Plan's necessary documentation. The consultant selected for this work is DiNatale Water Consultants, whose principal is Kelley DiNatale, formally with CDM. Kelly is very familiar with the SWSI process, and has recently been retained by entities in the Rio Grande Basin to

perform engineering studies and analyses. DiNatale's Project Manager will be Tom Spezze, formally with Colorado Parks and Wildlife (CPW), who has been working on various projects in the Basin since leaving CPW.

The development of the Plan will be driven by the R.G.R.T. members and will focus on projects and methods recommended by the RGBRT to address the consumptive and non-consumptive needs. The Plan will assist the Rio Grande Basin to proactively meet future water needs, through completion of currently planned projects, re-prioritized projects, and development of new projects, operational agreements, flow protections, or other methods as needed. A major objective will be developing approaches to achieve aquifer sustainability throughout the Basin.

The Plan will utilize existing information developed for the Rio Grande Decision Support System (RGDSS) Groundwater modeling, the ongoing Rio Grande Cooperative, and Radar Projects and other information that is available and relevant to the process. Additionally, it is anticipated that more detailed surface water and stream-flow modeling analyses will be conducted that will build on these efforts. The approach will be compatible with CWCB's data centered approach for its DSS modeling so that the work can be incorporated into a future RGDSS surface water model.

It is also critical for the Plan to develop, in conjunction with the US Forest Service and other federal and state agencies, watershed protection (short-term) and watershed restoration (short and long-term) implementation plans to address the areas of the Basin impacted by the recent West Fork Complex Fire. Watershed protection and restoration will take into account all natural resource attributes of the watershed including consumptive and non-consumptive elements (land, plants, water and wildlife).

The restoration plan will dove-tail with and augment the Forest Service BAER Team and Rio Grande Watershed Emergency Action Coordination Team (RWEACT) watershed restoration efforts that have been underway since July 2013. Tom Spezze and many members of the R.G.R.T. have been involved with the RWEACT and USFS BAER Team efforts associated with the West Fork Complex Fire. As such, the connection of the Plan to the watershed restoration efforts related to the impacts of the fire will be seamless.

The R.G.R.T. looks forward with working and coordinating with CWCB staff as the Plan is developed.

The R.G.R.T. appreciates the support of the Department of Natural Resources, the Colorado Water Conservation Board and the Interbasin Compact Commission in assisting in meeting the needs of all users of Colorado's water.

Sincerely,

Mike Gibson
Chair, Rio Grande Interbasin Roundtable

Attachment (1)

WATER SUPPLY RESERVE ACCOUNT
APPLICATION FORM FOR
BASIN IMPLEMENTATION PLANS

Rio Grande	Colorado Rio Grande Restoration Foundation
Basin	**Applicant/Fiscal Agent**
August 13, 2013	**Amount from Statewide Account:** $100,000
Roundtable Approval Date	**Amount from Basin Account:** $211,000
	Total WSRA Funds Requested: $311,000

Applicant Mailing Address:	623 Fourth Street Alamosa, CO 81101		
Taxpayer ID#:	75-3169057		
Primary Contact:	Heather Dutton	Position/Title	Executive Director
Email:	HeatherRDutton@gmail.com		
Phone Numbers:	Cell: 719-850-1480	Office:	719-589-2230

The Colorado Water Conservation Board (CWCB) has requested that each basin roundtable complete a Basin Implementation Plan as a fundamental component of the forthcoming update to the Statewide Water Supply Initiative and the Colorado Water Plan requested by Governor Hickenlooper's Executive Order D 2013-005. The CWCB's technical team will be available to help with the creation of these plans. In addition, resources of the Colorado River Water Availability Study Continuation will be available to west slope basins to help with more detailed modeling analyses in the plans. Basins are also encouraged to use Water Supply Reserve Account (WSRA) funds to complete all or a portion of their plans.

Since the plans meet the intent and criteria of the WSRA program, fund requests for this purpose should use this streamlined WSRA application form. In addition, staff has determined that Basin Implementation Plans meet the WSRA evaluation criteria for funds from the Statewide WSRA Account, however, applications that seek more than 33% of funds from the Statewide Account must provide a separate sheet justifying the request.

Along with this completed form, the applicant must submit **a detailed scope of work as Exhibit A**, including a budget and schedule. The scope should closely follow the items set forth in the Basin Implementation Plan Guidance Descriptive Outline available on the CWCB website, including the following components:

	Included in this Application (Y or N)?
Executive Summary	**Y**
Section 1: Basin Goals and Measurable Outcomes	**Y**
Section 2: Evaluate Consumptive and Nonconsumptive Needs	**Y**
2.1 Nonconsumptive Needs	Y
2.2 Consumptive Needs	Y
Section 3: Evaluate Consumptive & Nonconsumptive Constraints and Opportunities	**Y**
3.1 Current Basin Water Operations and Hydrology	Y
3.2 Water Management and Water Administration (Optional)	Y
3.3 Hydrologic Modeling (Optional)	Y
3.4 Shortages Analysis	Y
Section 4: Projects and Methods	**Y**
4.1 Education, Participation & Outreach	Y
4.2 New Multi-Purpose, Cooperative, and Regional Projects and Methods	Y
4.3 M&I Projects and Methods (i.e. projects, conservation, reuse, drought planning)	Y
4.4 Agricultural Projects & Methods	Y
4.5 Non-consumptive Projects and Methods	Y
4.6 Interbasin Projects and Methods (optional)	Y
Section 5: Implementation Strategies for the Projects and Methods	**Y**
Section 6: How the plan meets the Roundtables' Goals and Measurable Outcomes	**Y**

The application must also be accompanied by the roundtable's letter of approval, required for all WSRA applications. In addition, the applicant must: coordinate plan development with CWCB's staff and technical team; meet all the WSRA eligibility criteria detailed in the WSRA Criteria and Guidelines document; be able to use the standard contract; address any TABOR issues; provide a W-9 form; and provide proof of required insurance. Other WSRA reference material is available on the CWCB website. Applications must be approved by the CWCB board, but the CWCB approval process may be expedited to accommodate aggressive timelines.

Signature of Applicant: Heather R. Dutton

Print Applicant's Name: Heather Dutton

Date: August 26, 2013

Return an electronic version of all application materials to:

WSRA Application – Basin Implementation Plans
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
rebecca.mitchell@state.co.us

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 of invoices and appropriate backup material from the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The invoice must include: a description of the work accomplished by major task, an estimate of the percent completed by individual tasks and the entire project 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 project budget will be withheld until final plan 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.

1035 Pearl Street, Suite 301
Boulder, CO 80301
Tel: 303-349-3668
www.dinatalewater.com

DiNatale WATER CONSULTANTS

DRAFT

SCOPE OF WORK FOR RIO GRANDE BASIN PLAN

The State Water Supply Initiative (SWSI) 2010, as part of the needs assessment, determined that every basin has a gap between available water supply and projected water demands. The fundamental purpose of the Basin Implementation Plans is to develop projects and methods to meet municipal, industrial and agricultural (consumptive) and environmental and recreational (nonconsumptive) needs across Colorado. This involves review of the Identified Projects and Processes (IPPs) from previous statewide planning efforts and the development of new projects and methods that can meet each basin's future water supply needs as identified in SWSI 2010 and other planning efforts. As part of this work, this is a proposal for the Rio Grande Basin Implementation Plan. We propose that a Basin Planning Team, led by DiNatale Water Consultants, will work with the Rio Grande Basin Round Table (RGBRT) to develop goals and measurable outcomes, and to identify needs, constraints and opportunities in the basin. In addition, the Basin Plan will identify specific implementation strategies and projects for achieving the desired goals and necessary outcomes.

The Rio Grande Basin Plan will focus on projects and methods recommended by the RGBRT to address the consumptive and non-consumptive needs. The Plan is intended to help the basin proactively meet water needs, through completion of currently planned projects, re-prioritized projects, and development of new projects, operational agreements, flow protections, or other methods as needed. The Basin Plan will also utilize existing information developed for the Rio Grande Decision Support System (RGDSS) Groundwater modeling, the ongoing Rio Grande Cooperative and Radar Projects and other information that is available and relevant to the process. Additionally, more detailed surface water and stream-flow modeling analyses will be conducted that will build on these efforts. The approach will be compatible with CWCB's data centered approach for its DSS modeling so that the work can be incorporated into a future RGDSS surface water model. A major objective will be to identify additional and support current approaches to achieve aquifer sustainability throughout the basin.

It is also critical for the Plan to develop, in conjunction with the US Forest Service and other federal and state agencies, watershed protection (short-term) and watershed restoration (short and long-term) implementation plans to address the areas of the basin being impacted by the recent fires in the headwaters region. Watershed protection and restoration will take into account all natural resource attributes of the watershed including consumptive and non-consumptive elements (land, plants, water and wildlife). Long-term watershed health and the identification and analysis of methods and projects to achieve this health are vital to the ability to meet both future consumptive and non-consumptive basin needs and will be a focus of the Plan. The restoration plan will dove-tail with and augment the Forest Service BAER Team and RWEACT watershed restoration effort that has been underway since July 2013.

Relation to Other Pieces: The Rio Grande Basin Plan will be a fundamental component in SWSI, as it will focus on strategies to meet the basin's consumptive and non-consumptive water supply needs. The Colorado Water for 21st Century Act established the Basin Roundtables and tasked them to develop a water supply needs assessment, conduct a water supply analysis and propose projects and methods to meet those needs. This Rio Grande Basin Plan will provide a more detailed analysis and will be directed towards developing and implementing projects to meet those needs and to address the basin's gap in a meaningful way. The Plan will function as a standalone basin plan, but will be a foundational component of the update to SWSI and provide critical inputs into the State Water Plan.

DiNatale Water and members of the Rio Grande Basin Roundtable have a strong presence in the RWEACT and BAER Team efforts associated with the West Fork Complex Fire. As such, the connection of the RGB Water Plan to the watershed restoration efforts related to the impacts of the fire will be seamless.

DEFINITIONS

Goals and Measureable Outcomes (goals and outcomes) - a specific statement that defines a program area of interest with a quantitative milestone. Examples might be; "to protect and preserve 80% of mapped Rio Grande Cutthroat trout habitat within the Rio Grande Basin" or "implement erosion control in X % of the area impacted by the 2013 fires and successfully revegetate those lands within X years."

Uncompensated Basin Representatives – persons that may have paid or unpaid positions with agencies or organizations working within the basin and the nature of the BRT Plan tasks is included in the scope of their normal, paid position. For example, BRT members, Division Engineer's office, CPW personnel, CSU Extension Service, non-voting agency representatives, etc., are assumed to be able to be available for this process under the umbrella of their paid positions.

Compensated Basin Representatives –persons that may have paid or unpaid positions, but the nature of the tasks is beyond the scope of their regular position, and are therefore compensated as a subcontractor under this Basin Implementation Plan. However, some tasks for compensated basin reps will be uncompensated if it is part of their normal and assigned job duties. These could include attending BRT meetings, review of documents and providing information from their respective organizations. Compensated tasks may include additional data collection beyond their organization, setting up meetings, conducting specific interviews or data collection and drafting of memos and report sections.

TASK 1 – DEVELOP GOALS AND MEASURABLE OBJECTIVES

Purpose

- Review the CWCB developed initial draft of basin goals and measurable objectives
- Work with basin representatives (compensated and uncompensated) to review and update the initial CWCB draft
- Work with BRT to further update draft and present the revised draft to CWCB
- Finalize basin goals and outcomes

Tasks

1. Develop goals and measurable objectives
   1.1. Review and compile data from all previous and existing RGB projects as to: goals and outcomes, grant approvals, project updates and goals and outcomes met. Utilize meeting minutes and in-basin subcontractors to assist in this effort.
   1.2. Review initial draft of basin goals and measurable objectives for the Basin Roundtable provided by the CWCB (as described in the Guidance document) for review and modification by the BRT
   1.3. Work with basin representatives to review and modify CWCB submittal and to revise and/or add goals and outcomes.
   1.4. Meet with RGBRT to solicit comments and feedback from the BRT [Meeting #1- as part of a regularly scheduled RGBRT meeting]
   1.5. Based on decisions made at Meeting #1, and with assistance from basin representatives develop draft-final list of basin goals and measureable outcomes that effectively represents all basin stakeholders.
   1.6. Review updated list of basin goals and objectives with CWCB to inform them of changes made by the RGBRT.
   1.7. Present draft-final list of basin goals and measurable outcomes to RGBRT and make minor modifications for finalization and present to CWCB [Meeting #2]

Deliverable

- Drafts and final version of GMO document

Assumptions

- As outlined in the Draft Basin Implementation Plan Guidance, CWCB proposes to develop an initial draft of basin goals and measurable outcomes based on the 2011 Basin Report, SWSI 2010, SWSI 1, and IBCC efforts. To the extent that CWCB develops and provides this information in a timely manner, it will be used as a basis for the initial development of basin goals and measurable outcomes.
- CWCB does not have significant comments or modifications to the updated goals and measurable outcomes list developed by the BRT and will accept the final submission developed as part of the Plan.
- Basin representatives will assist in review and updates of the GMO document.

TASK 2 – EVALUATE CONSUMPTIVE AND NONCONSUMPTIVE NEEDS

Purpose

- Evaluate how well the Goals and Measurable Objectives are being met for both consumptive and nonconsumptive needs

Tasks

2. Evaluate Consumptive and Nonconsumptive Needs

2.1. Nonconsumptive needs evaluation
- 2.1.1. Evaluate existing project and method information from nonconsumptive database, state planning documents provided by CWCB
- 2.1.2. Augment nonconsumptive information with local planning documents and information provided by basin representatives, including habitats for species of concern or threatened and endangered species issues
- 2.1.3. Match project and method information to each GMO and evaluate the degree of success and any remaining needs
- 2.1.4. Reporting (including relevant mapping)

2.2. Consumptive needs evaluation
- 2.2.1. Evaluate existing project and method information from state planning documents provided by CWCB (SWSI 2010, State Drought Plan etc.)
- 2.2.2. Augment consumptive information with local planning documents and information provided by basin representatives, organized by localized needs.
- 2.2.3. Match project and method information to each GMO and evaluate the degree of success and any remaining needs
- 2.2.4. Reporting (including relevant mapping)

2.3. Present results to CWCB and incorporate feedback

Deliverable

- Technical Memorandum describing process and results of the nonconsumptive and consumptive needs evaluation, including relevant mapping.
- TM can be incorporated into Basin Plan Section 2.

Assumptions

- CWCB will provide the State planning documents (SWSI 1, SWSI 2, SWSI 2010, Basin Reports, IPP Database, State Drought Plan, any other relevant documents) and supporting documentation in usable format (e.g. spreadsheets of tables and figures) for incorporation into Task 2 deliverable.
- Basin representatives (compensated and uncompensated) will assist in acquisition and review of local planning documents and information relevant to goals and outcomes.
- Feedback from CWCB on the draft Technical Memo can be addressed with minimal editing.

TASK 3 – EVALUATE OPPORTUNITIES AND CONSTRAINTS

Purpose

- Understand the constraints and opportunities that exist within the basin to meet the needs identified in Tasks 1 and 2.
- Understand current operations under varying hydrology (dry/avg/wet)
- Provide a common understanding on water administration and the constraints and opportunities of the Rio Grande Compact
- Incorporate lessons learned on coordinated operations from the Rio Grande Cooperative Project

- Evaluate how the Radar Project can enhance streamflow forecasts through the reduction of uncertainty
- Develop hydrologic modeling to quantify imbalances of supply and demand and compare potential options
- Use hydrologic modeling to quantify water supply and flows under various scenarios and identify opportunities for water management strategies that can enhance nonconsumptive needs such as water for wetlands and in stream flows while protecting water rights
- Develop a current and future shortages analysis, which identifies shortages that vary with hydrology instead of the firm yield gap that has been used in previous planning efforts
- Review and consider, and if appropriate incorporate planning documents associated with the BAER Team Assessment Report and with the RWEACT watershed restoration planning efforts.

Tasks

3. Evaluate Opportunities and Constraints
   - 3.1. Current basin water operations and hydrology
     - 3.1.1. Meet with Division 3 Engineer and water commissioners and other key water users representatives (M&I, Agricultural, non-consumptive) and discuss major operations, such as diversions, storage, exchanges, groundwater use and upcoming Plans of Water Management for Subdistricts 2 and 4, Expected Rules and Regulations for the Rio Grande Basin, key nonconsumptive locations, reaches and trends, Rio Grande Compact administration and other key water rights administration information and challenges. Discuss variability of all operational and administrative aspects with respect to different hydrologic conditions, and identify key decision variables that drive operational decision making.
   - 3.2. Develop an Operations and Administration Technical Memorandum that can be incorporated into Basin Plan, summarizing the operations and administration of the Rio Grande and identifying constraints and opportunities to meeting the needs identified in Tasks 1 and 2
   - 3.3. Develop hydrologic model, using existing Rio Grande Cooperative Model as a basis
     - 3.3.1. Develop dry, average and wet hydrologic inputs, and current and future conditions demands using data-centered methods compatible with existing DSS datasets. Incorporate results from the Radar Project into hydrology inputs
     - 3.3.2. Model Configuration - water rights, return flows and calibration. Reliance on information developed for the RGDSS groundwater model and any available data from the RGDSS surface water model development.
     - 3.3.3. Quantify local level supply and demand imbalances under varying input conditions (hydrology and demands) to provide technical support for locations of constraints and opportunities identified in the Operations and Administration TM.
     - 3.3.4. Simulate Projects and Methods developed in Task 4 to evaluate the effectiveness of the project or method at meeting goals and outcomes and needs. Results will be presented with each Project and Method (Task 4) and summarized in Task 6.
     - 3.3.5. Develop simulation of likely hydrology impacts from climate change and 2013 fires.

3.3.6. Analyze the potential to maintain or increase soil water holding capacity in the basin overall and changes in water application requirements for crops and prospects of improvements on rangelands through enhanced grazing management and monitoring.

3.3.7. Develop an implementation plan, incorporating the results of the hydrologic modeling, for minimizing agricultural water use with the objective of achieving aquifer sustainability, while still maximizing agricultural production using the methods, crop selection, and other approaches outlined in 3.3.6.

3.4. Current and future shortages analysis

3.4.1. Analyze the water supply gap or local level supply and demand imbalances.

3.4.2. Summarize municipal and industrial, agricultural, and nonconsumptive shortages under varying hydrology including wet, dry and average conditions.

Deliverables

- Operations and Administrative Technical Memorandum (TM) that can be incorporated into overall Plan report, including appropriate mapping and use of existing data
    - Descriptions of history, development, surface water resources, groundwater resources, environmental and nonconsumptive resources, unique characteristics of the Rio Grande Basin, other background information
    - Water administration practices, including Compact administration and its impact on water users
    - Description of river flows, dry up locations and river gains and losses
    - Discussion of competition or conflict between identified goals or measureable outcomes
    - Mapping as appropriate
- Hydrologic model, based on the Rio Grande Cooperative Project model files
    - Utilize RGDSS inputs where appropriate, and develop DSS-compatible outputs
    - Evaluate necessary model simplifications such that the model is a valuable planning tool that allows decision makers to balance the basin needs, but does not replace or duplicate previous RGDSS modeling efforts
    - Incorporate simplified water rights and observed gains and losses
    - Incorporate potential modifications to hydrology as a result of climate change and 2013 fires.
    - Incorporate findings from the Radar Project and quantify, through modeling, the basin benefits of reducing uncertainty in forecasting streamflows and improved accuracy of snowfall and snowpack estimations.
    - Configure model for various decision variables identified through Task 3.1
    - General model documentation and model configuration descriptions for various simulations used for Tasks 4 and 6.
    - Analysis of potential for land/soil health (e.g., land management methods) to contribute to long-term hydrology and effective use of limited water.
- Current and Future Shortages Technical Memorandum (TM) that can be incorporated into overall Plan report, including appropriate mapping and use of existing data

  - Description of where municipal and industrial, agricultural and nonconsumptive needs may have shortages
  - Mapping as appropriate
- Draft approach for increasing soil water holding capacity in the basin and achieving aquifer sustainability while optimizing agricultural production.

Assumptions

- CWCB will provide existing RGDSS surface and groundwater model inputs for use in the updated hydrologic model
- Information and data from various sources will be used to evaluate how to maintain or increase soil water holding capacity to assist in ongoing and future efforts to achieve aquifer sustainability and maximize the beneficial use of water applied to lands and maintain or improve stream and river function, wetlands and overall resiliency of the system. Sources will include the NRCS-sponsored soil health group, the USFS pilot monitoring project in the Saguache Ranger District, and other soil health and rangeland management resources available In the Rio Grande basin and region.

TASK 4 – BASIN PROJECTS AND METHODS

Purpose

- Update existing IPPs
- Develop new projects or methods to meet the goals and outcomes, needs and plans identified in Task 1
- Prioritize projects to meet basin needs
- Education and outreach to promote community awareness

Tasks

4. Basin Projects and Methods
   - 4.1. BRT Education Liaison to develop Education Action Plan
     - 4.1.1. Reach out to decision makers about status of basin's consumptive and nonconsumptive needs, planned projects, current river operation and opportunities and constraints associated with different hydrological cycles.
   - 4.2. Develop detailed project descriptions (PD) for multi-use projects through direct input from project proponents (see deliverables section for more detail). Include hydrologic model results (from Task 3). Includes stakeholder workshops to solicit input.
   - 4.3. Develop detailed project descriptions (PD) for M&I projects through direct input from project proponents (see deliverables section for more detail). Include hydrologic model results (from Task 3). Includes stakeholder workshops to solicit input.
   - 4.4. Develop detailed project descriptions (PD) for agricultural projects through direct input from project proponents (see deliverables section for more detail). Include hydrologic model results (from Task 3). Includes stakeholder workshops to solicit input.

4.5. Develop detailed project descriptions (PD) for nonconsumptive projects through direct input from project proponents (see deliverables section for more detail). Include hydrologic model results (from Task 3). Includes stakeholder workshops to solicit input.

For Tasks 4.2 - 4.6 the following will be done:

- Solicit and obtain PDs from proponents via RGBRT, phone calls, and letters.
- Stakeholder workshops to identify other projects and potential collaborations.
- Develop a scoring system based on criteria established by stakeholders, such as total project cost, cost per AF of need met, timeliness, species habitat needs met, specific and overall watershed health and/or other factors
- In conjunction with RGBRT, score projects and prioritize based on scoring results
- Present information and scoring results to stakeholders, basin representatives and CWCB

4.6. Draft Basin Plan Section 4: Project and Method descriptions

4.6.1. Coordinate with project proponents to revise project descriptions.

4.6.2. Incorporate previous TMs into Sections 1-3 of Basin Plan.

Deliverable

- Section 4 of the Basin Report to include:
  - Summary of education, participation and outreach efforts by the IBCC and BRT Education Liaison as conducted through the IBCC
  - Detailed project descriptions that include
    - Potential for multi-use benefits and/or potential combinations with other projects to meet multiple goals and outcomes
    - Identification of goal, measurable outcome or shortages and/or gap being met
    - Discussion of model results (from Task 3) to quantify project benefits
    - Evaluation of potential challenges, issues or benefits to existing operations or administration
    - Reconnaissance level estimate of costs and funding and financing options
    - Description of permitting requirements
    - Project schedule
    - Appropriate mapping
    - Identification of strategies for implementation
    - Listing of next steps (e.g. feasibility study partners/sponsors, etc.)
    - Fact-sheets for each project that efficiently convey the key benefits of the project

Assumptions

- Rio Grande Basin participants will provide existing IPP lists and information and will help host stakeholder workshops. CWCB will assist in these efforts.
- Where possible, dovetail Basin projects with fire-related BAER Team or RWEACT watershed restoration projects which promote watershed yield and long-term health.

TASK 5 – BASIN IMPLEMENTATION STRATEGIES

Purpose

- Identify water management challenges and opportunities
- Provide framework for meeting the challenges

Tasks

5. Basin Implementation Strategies
   - 5.1. Identify strategies to ensure public education and acceptance
   - 5.2. Identify funding mechanisms and strategies for implementing water supply projects and methods
   - 5.3. Develop timelines for identified projects and key tasks and milestones/metrics for progress and adaptations as needed
   - 5.4. Present strategies and results to stakeholders, basin representatives and CWCB. Draft Basin Plan Section 5: Implementation Strategies
   - 5.5. Where possible, combine funding strategies with those already in place related to the West Fork Fire to leverage dollars for watershed restoration.

Deliverable

- Section 5 of the Basin Report to include:
  - Implementation strategies including:
    - Identification of strategies for implementation
    - Timeline and milestones/metrics for progress and adaptations as needed
    - Listing of next steps (e.g. feasibility study partners/sponsors, etc.) identified in Tasks 4.2 - 4.6.

Assumptions

- CWCB will help host stakeholder workshops

TASK 6 – HOW THE PLAN ADDRESSES THE ROUNDTABLE'S GOALS AND MEASURABLE OUTCOMES

Purpose

- Inform SWSI and the State Water Plan on how the Basin is addressing municipal, industrial, agricultural, environmental and recreational needs

Tasks

6. How Plan Meets goals and outcomes
   - 6.1. Identify how the projects and methods in the plan to help meet the gaps and water supply shortages in relation to goals and measurable outcomes from Section 2.

6.2. Coordination with CWCB on initial draft and enhancement of document.

Deliverable

- Section 6 of the Basin Report to include:
  - goals and outcomes being met through projects and methods
  - Shortages and/or gap to be met through projects and methods

Assumptions

- CWCB will provide an initial draft to BRT and work with it to further refine section.

TASK 7 – STAKEHOLDER PARTICIPATION AND PROJECT MANAGEMENT

Purpose

- Develop positive, working relationships with Basin stakeholders to develop trust, cooperation, and transparency in the Basin plan process and document content and direction.
- Establish project management duties such as coordination of meetings, review of draft documents, communications, documents and grant reimbursements.
- Establish and maintain coordination with CWCB staff for consistency with other Basin Plans
- Establish a community-wide outreach and education effort through the various media

Tasks

7. Stakeholder Participation and Project Management
   7.1. Attend RGBRT meetings
   7.2. Schedule broad-based stakeholder meetings to obtain the necessary information for deliverables and to establish an environment of cooperation.
   7.3. Establish regular conference calls and/or web-based meetings with stakeholders
   7.4. Coordinate early and often with CWCB staff to establish common technical platform methods and procedures for consistency with other basins and incorporation into the State Water Plan
   7.5. General project management, including basin subcontractor coordination and contracting.
   7.6. Develop and implement a community outreach strategy through press, interviews, etc., to inform larger community and provide accurate information and status updates

Deliverables

- Meeting minutes
- Regular updates to sponsoring agency

Assumptions

- DWC will attend up to 6 RGBRTs
- Meetings with stakeholders can be coordinated with BRT meetings and scheduled to minimize direct costs associated with travel to the basin.

PROPOSED BUDGET

		$ 175	$ 145	$ 145	$ 110	$ 55	$ 35		
Totals	Task	Senior Engineer	Senior Consultant	Water Resources Engineer II	Water Resources Engineer I	Water Resources Analyst /GIS	Basin Subs	Other Direct Costs and Subs	Total
Task 1	Goals and Measurable Outcomes	48	46	6	6	2	88	$ 1,100	$ 21,000
Task 2	Evaluate Needs	32	52	56	0	34	106	$ 600	$ 27,000
Task 3	Evaluate Constraints and Opportunities	148	68	222	266	102	148	$ 12,100	$ 120,000
Task 4	Basin Projects and Methods	76	78	58	58	42	222	$ 10,700	$ 60,000
Task 5	Basin Implementation Strategies	16	16	14	15	0	24	$ 1,000	$ 11,000
Task 6	How Plan Meets Goals and Outcomess	32	32	16	8	0	24	$ 1,500	$ 16,000
Task 7	Stakeholder Participation and Project Management	92	92	19	15	0	142	$ 1,800	$ 41,000
	Subtotal	**444**	**384**	**391**	**368**	**180**	**754**	**$ 28,800**	**$ 296,000**
	Rio Grande Basin Fiscal Agent Fee 5%								$ 15,000.00
	Total								**$ 310,000.00**

Note that if funded, the CWCB funds could potentially be used as match to help raise additional funds for related, complementary work to enhance the information base and effectiveness of this plan.