

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 11-12, 2014
Agenda Item 13(m)

Applicant: Colorado Rio Grande Restoration Foundation

Water Activity Name: Rio Grande Basin Implementation Plan – Phase 2

Water Activity Purpose: All inclusive

River Basin: Rio Grande

Water Source: Rio Grande River and tributaries

Total Amount Requested: \$115,000

Source of Funds: \$76,000 Rio Grande Basin Account; \$39,000 Statewide Account

Matching Funds: n/a

Staff Recommendation:
Staff recommends approval of up to \$76,000 from the Rio Grande Basin Account, and \$39,000 from the Statewide Account and to help complete the project titled: Rio Grande Basin Implementation Plan – Phase 2.

Water Activity Summary: WSRA funds are needed to begin Phase 2 of the Rio Grande Basin Implementation Plan that conforms to the Basin Implementation Plan Guidance Document 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 Basin Roundtable. Additional funds are needed to expand upon future goals and needs of the Basin in addressing the Basin's long-term water issues.

The following deliverables associated with the revised scope of work include:

1. Finalized Rio Grande basin Water Plan
2. Rio Grande Basin Water Plan Executive Summary
3. Rio Grande Basin Planning Model with improved calibration, additional climate change results, and documentation that can be used to evaluate projects and methods
4. Up-to-date projects and methods project sheets complete with project scope and funding needs for identified projects
5. 6 color-printed copies of the Final Plan
6. 100 color-printed copies of the Executive Summary with an electronic copy of the Plan on a CD

Discussion:

No further discussion is needed.

Issues/Additional Needs:

No additional issues or needs were identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

n/a

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
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August 17, 2014

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

Mr. Craig Godbout, Program Manager, Water Supply Planning Section
Colorado Water Conservation Board

RIO GRANDE BASIN WATER PLAN – FUTURE WORK
WATER SUPPLY RESERVE ACCOUNT – FUNDING REQUEST \$115,000

Gentlemen:

The Rio Grande 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.

As part of this effort the Roundtable has worked on a Basin Water Plan, a draft of which was submitted to the CWCB on July 31, 2014. The Roundtable is aware that the current form of the document requires additional work if it is to meet the future goals and needs of the Basin in addressing the Basin's long term water issues.

Two future work plans have been considered and one has been selected for further execution. It has been determined that the consultant used for the drafting of the Draft Basin Plan, DiNatale Water Consultants, should continue the work on the Basin Plan because of their familiarity with the issues and to maintain consistency in the documentation.

The following is a summary of the proposed Scope of Work for the completion of the Rio Grande Basin Plan:

Task 1: Solicit Public/BRT input on the Draft Plan of July 31, 2014:

- a. Disseminate printed copies of the Draft Plan.
- b. Hold (2-4) regional public input meetings for people to provide input on the Basin Plan.

- c. Hold meetings with the Basin Roundtable Steering Committee and Subcommittees to get edits and additional information to be included in the Basin Plan.

Task 2: Develop an Executive Summary that provides a condensed summary of the key parts of the Basin Plan (the current Draft does not have an Executive Summary):

- a. Hold meetings with the Steering Committee and the Basin Roundtable to decide which content, currently existing and new, should be included in the Executive Summary.
- b. Work with Basin Roundtable subcommittees to finalize the Executive Summary.

Task 3: Review, update, and edit the Basin Overview Section:

- a. Work with the Basin Roundtable Steering Committee and Subcommittees to finalize the Basin Overview.
- b. Revise current and add missing maps, graphs and charts. Examples of additional maps include: reservoirs having conservation pool agreements and a map showing where major wetland areas are located.
- c. Review and revise references, cross-references, and works cited.

Task 4: Review, update, and edit the Basin Water Needs Section:

- a. Work with the Basin Roundtable Steering Committee and Subcommittees to finalize the Basin Water Needs.
- b. Revise current and add missing maps, graphs and charts.
- c. Review and revise references, cross-references, and works cited.

Task 5: Review, update, and edit the Opportunities and Constraints Section:

- a. Work with the Basin Roundtable Steering Committee and Subcommittees to finalize the Opportunities and Constraints.
- b. Revise current and add missing maps, graphs and charts.
- c. Review and revise references, cross-references, and works cited.
- d. Develop a RWEACT Chapter for the Plan that details the West Fork Complex Fire and how RWEACT was developed, all of the work RWEACT has accomplished, and future projects (i.e.: on-going efforts, Great Divide, Biomass Industry, RGN Forest Plan Revision etc.).
- e. Meet with water officials and interested parties including, but not limited to: the Division 3 Engineering staff, Conejos Water Conservancy District, the Rio Grande Water Conservancy District, the Rio Grande Water Conservation District, and entities with storage rights to provide information about what is included in the model and modelling assumptions, as well as to solicit additional information about river administration, storage use and releases, and general water operations to improve the function and use of the Rio Grande Basin Planning Model.
- f. Refine the Rio Grande Basin Planning Model.
 - Make model runs as appropriate to support projects and methods
 - Perform additional climate change analysis
 - Finish all 30-year windows of 21st century with 5 representative traces
 - Incorporate an increase in IWR based on projected changes in temperature, precipitation and frost date.
 - Complete StateCU runs for the Rio Grande Basin with projected climate station data, use new IWR data in RiverWare Climate Change runs.

- More analysis of effects on specific water rights, Compact compliance.
- Improve model calibration
- Perform additional work on timing and volume of return flows
- Improve the use of historical or modeled start and end of the irrigation season (currently using April 1 – Oct. 31)
- Change rules for the Curtailment and Compact administration
- Include logic for Compact storage
- Incorporate storage for multiple benefits into the model
- Analyze specific project ideas

Task 6: Review, update, and edit the Projects and Methods Section:

- a. Create additional project sheets with funding and scope for identified projects and methods that currently don't have one and additional projects and methods identified through public and Roundtable feedback.
- b. Update costs and goals met tables to include new projects and methods
- c. Add a map with the location of all projects and methods as applicable.

Task 7: Continue communication, education and public outreach once the Plan is finalized:

- a. Complete the Rio Grande Basin Water 101 booklet and distribute.
- b. Distribute the completed Executive Summary to Basin stakeholders including County Commissioners, water administrators, water users, etc.
- c. Attend the Water Resources Review Committee public meeting in the Basin as well as any additional public outreach meeting scheduled by the WRRC in the RGB.
- d. Continue radio, newspaper and article outreach efforts regarding the RGBIP.
- e. Continue website management and updates for the Plan.
- f. Follow up with Basin-wide meetings or information sharing in basin communities

Task 8: Provide project management including coordination of meetings, review of draft documents, communications, and grant reimbursements:

- a. Coordinate and provide guidance and feedback for professional editor and graphic designer.

The Following are the Deliverables Associated with this Scope of Work:

1. Finalized Rio Grande Basin Water Plan
2. Rio Grande Basin Water Plan Executive Summary
3. Finalized Rio Grande Basin Planning Model with improved calibration, additional climate change results, and documentation that can be used to evaluate projects and methods
4. Up-to-date projects and methods project sheets complete with project scope and funding needs for identified projects
5. 6 color-printed copies of the Final Plan
6. 100 color-printed copies of the Executive Summary with an electronic copy of the Plan on a CD.

Schedule Associated with the Scope of Work:

Rio Grande Basin Plan Option 2: Schedule								
Task Description	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May - Dec
Task 1: Solicit Public Input on the Plan								
Task 2: Executive Summary								
Task 3: Basin Overview								
Task 4: Basin Water Needs								
Task 5: Opportunities and Constraints								
Sub task: RWEACT Chapter								
Sub task: Modelling Meetings								
Sub task: Rio Grande Basin Modelling								
Task 6: Projects and Methods								
Task 7: Public Outreach								
Task 8: Project Management								
Proof Reader								
Graphic Designer - Final rework of the Plan								
Printing and CDs								

Cost to Complete the Scope of Work:

The total cost of the effort to complete the Scope of Work estimated to be \$115,000. The R.G.R.T. requests that \$77,000 be allocated from the Rio Grande Basin Funds and the balance of \$38,000 be allocated from Statewide Funds.

This request for WSRA funding will be ratified by Roundtable Members at the September 9, 2014 meeting of the Roundtable.

The R.G.R.T. appreciates the support of Colorado Water Conservation Board in assisting in this effort to develop a Rio Grande Basin Water Plan that will serve as a guidance document to the Basin as it addresses the critical future water issues of the Basin, which in turn will assist in Colorado meeting its long term water needs and supplies.

Sincerely,



Michael H. Gibson
Chair, Rio Grande Basin Roundtable

Rio Grande Basin Plan Amendment: Option 2 - Executive Summary and Additional Content in the Plan Scope of Work

This Scope of Work details how the existing information in the Basin Plan will be edited as well as how new/additional information will be produced and incorporated in an effort to provide a more comprehensive and working Basin Implementation Plan.

Tasks

1. Solicit Public/BRT input on the draft Plan.
 - a. Disseminate printed copies of the Draft Plan.
 - b. Hold (2-4) regional public input meetings for people to provide input on the Basin Plan.
 - c. Hold meetings with the Basin Roundtable Steering Committee and Subcommittees to get edits and additional information to be included in the Plan.
2. Develop an Executive Summary that provides a condensed summary of the key parts of the Basin Plan.
 - a. Hold meetings with the Steering Committee and the Basin Roundtable to decide which content, currently existing and new, should be included in the Executive Summary.
 - b. Work with Basin Roundtable subcommittees to finalize the Executive Summary.
3. Review, update, and edit the Basin Overview Section.
 - a. Work with the Basin Roundtable Steering Committee and Subcommittees to finalize the Basin Overview.
 - b. Revise current and add missing maps, graphs and charts. Examples of additional maps include: reservoirs having conservation pool agreements and a map showing where major wetland areas are located.
 - c. Review and revise references, cross-references, and works cited.
4. Review, update, and edit the Basin Water Needs Section.
 - a. Work with the Basin Roundtable Steering Committee and Subcommittees to finalize the Basin Water Needs.
 - b. Revise current and add missing maps, graphs and charts.
 - c. Review and revise references, cross-references, and works cited.
5. Review, update, and edit the Opportunities and Constraints Section.
 - a. Work with the Basin Roundtable Steering Committee and Subcommittees to finalize the Opportunities and Constraints.
 - b. Revise current and add missing maps, graphs and charts.
 - c. Review and revise references, cross-references, and works cited.
 - d. Develop a RWEACT Chapter for the Plan that details the West Fork Complex Fire and how RWEACT was developed, all of the work RWEACT has accomplished, and future projects (i.e.: on-going efforts, Great Divide, Biomass Industry, RGN Forest Plan Revision etc.).
 - e. Meet with water officials and interested parties including, but not limited to: the Division 3 Engineering staff, Conejos Water Conservancy District, the Rio Grande Water Conservancy

- District, the Rio Grande Water Conservation District, and entities with storage rights to provide information about what is included in the model and modelling assumptions, as well as to solicit additional information about river administration, storage use and releases, and general water operations to improve the function and use of the Rio Grande Basin Planning Model.
- f. Refine the Rio Grande Basin Planning Model.
 - i. Make model runs as appropriate to support projects and methods
 - ii. Perform additional climate change analysis
 1. Finish all 30-year windows of 21st century with 5 representative traces
 2. Incorporate an increase in IWR based on projected changes in temperature, precipitation and frost date.
 3. Complete StateCU runs for the Rio Grande Basin with projected climate station data, use new IWR data in RiverWare Climate Change runs.
 4. More analysis of effects on specific water rights, Compact compliance.
 - iii. Improve model calibration
 1. Perform additional work on timing and volume of return flows
 2. Improve the use of historical or modeled start and end of the irrigation season (currently using April 1 – Oct. 31)
 3. Change rules for the Curtailment and Compact administration
 4. Include logic for Compact storage
 - iv. Incorporate storage for multiple benefits into the model
 1. Analyze specific project ideas
 6. Review, update, and edit the Projects and Methods Section
 - a. Create additional project sheets with funding and scope for identified projects and methods that currently don't have one and additional projects and methods identified through public and Roundtable feedback.
 - b. Update costs and goals met tables to include new projects and methods.
 - c. Add a map with the location of all projects and methods as applicable.
 7. Continue communication, education and public outreach once the Plan is finalized.
 - a. Complete the Rio Grande Basin Water 101 booklet and distribute.
 - b. Distribute the completed Executive Summary to Basin stakeholders including County Commissioners, water administrators, water users, etc.
 - c. Attend the Water Resources Review Committee public meeting in the Basin as well as any additional public outreach meeting scheduled by the WRRRC in the RGB.
 - d. Continue radio, newspaper and article outreach efforts regarding the RGBIP.
 - e. Continue website management and updates for the Plan.
 - f. Follow up with Basin-wide meetings or information sharing in basin communities
 8. Provide project management including coordination of meetings, review of draft documents, communications, and grant reimbursements.
 - a. Coordinate and provide guidance and feedback for professional editor and graphic designer.

Deliverables

1. Finalized Rio Grande Basin Water Plan
2. Rio Grande Basin Water Plan Executive Summary
3. Finalized Rio Grande Basin Planning Model with improved calibration, additional climate change results, and documentation that can be used to evaluate projects and methods
4. Up-to-date projects and methods project sheets complete with project scope and funding needs for identified projects
5. 6 color-printed copies of the Final Plan
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<p>Option 2: Executive Summary and Additional Content in the Plan:</p>	
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	Senior Engineer	Senior Consultant	Water Resources Engineer II	Water Resources Engineer I	Water Resources Engineer I	Water Resources Analyst / GIS	Basin Subs	Other Direct Costs and Subs	
	\$175	\$145	\$145	\$110	\$110	\$55	Lump Sum	Lump Sum	Total
Task 1: Solicit Public Input on the Plan		24					\$820		\$4,300
Task 2: Executive Summary	20	20		40		5	\$2,000	\$1,525	\$14,600
Task 3: Basin Overview	8		3	26	2	8		\$600	\$6,000
Task 4: Basin Water Needs	8			26				\$540	\$4,800
Task 5: Opportunities and Constraints	8			26	4	8	\$1,500	\$600	\$7,200
Sub task: RWEACT Chapter	4	24		24			\$1,000	\$1,080	\$8,900
Sub task: Modelling Meetings			27		27			\$915	\$7,800
Sub task: Rio Grande Basin Modelling	8		20	8	150				\$21,700
Task 6: Projects and Methods	8	16		24		12		\$1,580	\$8,600
Task 7: Public Outreach - After the Plan is Finalized		50					\$850		\$8,100
Task 8: Project Management	16	8		32					\$7,500
Proof Reader								\$3,000	\$3,000
Graphic Designer - Final rework of the Plan								\$2,000	\$2,000
Printing and CDs								\$5,000	\$5,000
Total	80	142	50	206	183		\$6,170	\$16,840	\$109,500
Rio Grande Basin Program Sponsor Fee 5%									\$5,500
Total									\$115,000

Rio Grande Basin Plan Option 2: Schedule								
Task Description	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May - Dec
Task 1: Solicit Public Input on the Plan								
Task 2: Executive Summary								
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Sub task: RWEACT Chapter								
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