Rio Grande Inter-Basin Roundtable
c/o San Luis Valley Water Conservancy District
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March 21, 2015

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

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

Reference: Conejos Groundwater Monitoring and Analysis

Gentlemen:

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 Conejos River System Water Users Association (CRSWUA) is requesting a total of $219,000 from the WSRA for the Conejos Groundwater Monitoring and Analysis Project (Project). Of this total $200,000 is from the Statewide Account and $19,000 is from the Rio Grande Basin Account. The Project is a study to determine how best to reduce groundwater withdrawals while maintaining the viable agricultural production of the farmers and ranchers in the Conejos River watershed.

The members of CRSWUA are a group of water users and irrigators who pool their financial, technical, material, and human resources to support the sustainable operation and maintenance of the Conejos River System on behalf of those who depend upon its waters.

CRSWUA, like other water managers and groundwater users in the Rio Grande Basin, is facing significant challenges in dealing with the complex hydrogeological conditions of the San Luis Valley as they affect the ability of water managers to meet the requirements of the State's groundwater model for the region, particularly in the area of the groundwater management Subdistrict # 3.

Over the years, water users in the CRSWUA have collectively observed aquifer system behaviors that are not entirely in agreement with State's groundwater model outputs. The current groundwater model of the San Luis Valley uses available hydro-stratigraphic, well pumping, and water level data to calibrate recent water level and flow conditions. The

State has used this model (part of the Rio Grande Decision Support System or RGDSS), to forecast future conditions under current and proposed pumping and hydrologic conditions, and intends to use that data in the future as the basis for promoting sustainable Rio Grande Basin (Basin) groundwater administration.

Wells in the Basin will be shut down by the State Engineer unless (1) injurious stream depletions are replaced or remedied, and (2) a plan for sustainability of the unconfined aquifer and the confined aquifer is addressed and maintained. In the over-appropriated Basin, there is not sufficient water available for all well owners to meet the augmentation requirements of the new proposed State's Well Rules and Regulations. CRSWUA is concerned about relying upon the State's model for groundwater administration because the model is regional rather than specific to conditions in the Conejos River watershed. The model uses a relatively large grid size and has been calibrated on the basis of data from only three monitoring sites located in an area south of Alamosa County. Although those three sites are within the boundaries of the future Subdistrict # 3 and Subdistrict # 4, they are not representative of those Subdistricts' pumping and geohydrologic realities.

The Project will install a groundwater monitoring network in the Subdistrict # 3 area. Water level transducers will be installed in 16 local confined aquifer irrigation wells to record and monitor real-time water level data over a sustained length of time. This set of existing wells were identified for potential use within the monitoring network based on available information of perforated well intervals and a goal to achieve a regular spacing across representative aquifer conditions.

The Project will establish a scientific basis for evaluating the relationships / interconnectivity between different pumping wells in the area in and around Subdistricts #3 and # 4, providing a better understanding of the lateral transmissivity of the confined aquifer, the degree of connection to the overlying unconfined aquifer, and the potential connection to surface water bodies.

By gathering groundwater data from a larger and more relevant sample, CRSWUA will provide to the State Engineer a scientific assessment to fine tune the State's groundwater model. Deliverables of the Project will prepare for future groundwater administration; improve understanding of the regional groundwater system in the future Subdistrict # 3; provide data to influence the accuracy of the currently accepted groundwater model; improve current tools being used for meeting delivery obligations of the Rio Grande Compact; and significantly improve groundwater administration and management in the Basin and help meet the short-term and long-term objectives of water users in the Conejos watershed.

With a total Project Cost of $336,500, CRSWUA is requesting $219,000 from WSRA funds. A detailed Budget breakdown is shown on a copy of the attached Budget from the Application, EXHIBIT A. The Budget details the multipole sources of In-Kind ($27,500) and Matching Funds ($90,000). The Project will take 24 months to complete as shown on the attached Schedule from the Application, EXHIBIT B.

The work on the Project has been ongoing with In-Kind and Matching Funds being utilized and it is necessary that WSRA Funds be made available in a timely manner for the Project to continue to proceed on schedule.

At the regular R.G.R.T. meeting on November 10, 2014 the R.G.R.T. Members unanimously approved that this request for WSRA funding of $219,000 ($200,000 from the Statewide Account and $19,000 from the Rio Grande Basin Account) be forwarded to the CWCB for their approval. The R.G.R.T. urges the CWCB Board to approve this request as expeditiously as possible.

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)

Cc: Nathan Coombs
Travis Smith

BUDGET

TASK			VALUE		IN KIND	MATCHING	WSRA	TOTAL
1	**Identify Wells**		$ 23,500	DWR	$ 23,500			
2	**Verify Wells & Schedule Project**		$ 2,000	CRSWUA	$ 2,000			
2a	Well owners permission		$ 2,000	CRSWUA	$ 2,000			
2b	Additional wells (next phase)		$ 5,000	ALAMOSA/LAJARA		$ 5,000		
3	**Implementation**							
3a	Pull			CWCD		$ 5,000		
3b	Camera	$2,600 x 16 wells	$ 41,600	RGWCD		$ 31,600		
3c	Reinstall			CWCD		$ 5,000		
3d	Telemetry							
3e	Transducers	$ 5.900 x 16 wells	$ 94,400	RGWCD		$ 43,400	$ 51,000	
4	**Post Installation**							
4a	Assessment						$ 25,000	
4b	Engineering		$ 168,000				$ 50,000	
4c	Analysis						$ 69,000	
4d	Administration						$ 24,000	
	TOTAL		$ 336,500		$ 27,500	$ 90,000	$ 219,000	$ 336,500

EXHIBIT A

SCHEDULE

Provide a project schedule including key milestones for each task and the completion dates or time period from the Notice to Proceed (NTP). This dating method allows flexibility in the event of potential delays from the procurement process. Sample schedules are provided below. Please note that these schedules are examples and will need to be adapted to fit each individual application.

SCHEDULE

ACTIVITY	2014				2015												2016							
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Identify Wells																								
Verify Wells & Schedule Project																								
Well owners permission																								
Phase II wells																								
Implementation																								
Pull																								
Camera (when water settled/clear)																								
Reinstall																								
Telemetry																								
Transducers																								
Post Installation																								
Assessment																								
Engineering																								
Analysis																								
Administration																								

NOTICE TO PROCEED