

**Water Supply Reserve Account – Grant and Loan Program  
Water Activity Summary Sheet  
Agenda Item 22.c**

**Applicant:** Rio Grande County

**Water Activity Name:** Rio Grande County Hydrogeologic Study

**Water Activity Purpose:** Study

**County:** Rio Grande

**Drainage Basin:** Rio Grande

**Water Source:** Groundwater

**Amount Requested:** \$99,564 (Rio Grande Basin Account)

**Matching Funds:** None

<b>Staff Recommendation</b>
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Staff recommends approval of up to \$99,564 from the Rio Grande Basin Account for the Rio Grande County Hydrogeologic Study.
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**Water Activity Summary:**

Rio Grande County is experiencing a renewed interest in oil and gas exploration and the potential for multiple future applications for drilling permits. This study seeks to provide hydrogeological information in the vicinity of two currently proposed oil wells that will be useful to the Rio Grande County Commissioners and others. This information will assist the Commissioners and others in judging whether the health, safety and welfare of present and future residents of the County, in relationship to the water quality of groundwater aquifers, will be reasonably protected by proposed well construction plans for the oil wells. The results from this study will also be useful in the consideration of future proposed oil or gas wells and furthering the general understanding of subsurface water resources in the San Luis Valley and the eastern San Juan Mountains.

On February 29, 2012, Governor Hickenlooper created a special Task Force to clarify and better coordinate the regulatory jurisdiction between state and local governments with regard to oil and gas development. The purpose is to create a collaborative process through which issues of local concern can be resolved without requiring litigation or new legislation, encouraging local governments to designate a Local Government Designee (LGD) and to participate in the Colorado Oil and Gas Conservation Commission's (COGCC's) rules on substantive issues listed in the Executive Order. In 2009, Rio Grande County, ahead of the curve, appointed its Land Use Administrator, Rose Vanderpool, as LGD. The County is committed to maintaining an open and collaborative relationship with COGCC, BLM, private parties, and all entities involved as it considers granting drilling permits for exploratory and extractive activities.

WSRA funds would be used to:

1. Review, identify and consolidate information from past geological and hydrogeological work that is applicable to the Del Norte/South Fork area. This will begin the process of describing geologic structures and the existence of water within these structures that is tributary to groundwater aquifers and surface streams that are utilized for domestic, municipal, commercial and agricultural purposes;
2. Expand these findings to include data developed and collected by the oil & gas industry during previous exploration and drilling efforts;
3. Collect, compile and evaluate data on water wells near the two proposed oil and gas well drilling locations, collecting construction information, water levels and existing water quality data;
4. Identify deep water wells in Rio Grande County and nearby areas that may be suitable for future study to better understand the regional hydro-geologic characteristics;

5. Interpret and make recommendations; and
6. Prepare and deliver a report to Rio Grande County, with data assembled in a GIS format, as appropriate, providing GIS Shapefiles.

#### *Threshold and Evaluation Criteria*

The application meets all four Threshold Criteria.

#### *Funding Overview*

The applicant is seeking funds to cover the total project costs.

#### **Discussion:**

Although there have been many studies of ground water in the San Luis Valley (SLV), few have sought to determine the existence and characteristics of potential ground water pathways between the deep strata targeted by oil and gas exploration, and the shallower strata that provide water to domestic wells in western Rio Grande County, and that may provide ground water recharge to the confined aquifer layers of the western SLV. This study seeks to bring together and assess the adequacy of the existing studies, identify data gaps, and begin to develop new data to further understand the hydrogeologic relationships of this critical area.

The study will inform the staff and County Commissioners of Rio Grande County (County) for them to better assess permitting of proposed oil and gas wells and possible measures necessary to maintain the integrity of the aquifers. The County has de-TABORED, making it eligible to receive State Funds.

#### **Issues/Additional Needs:**

No issues or additional needs remain.

#### **Staff Recommendation:**

Staff recommends approval of up to \$99,564 from the Rio Grande Basin Account for the Rio Grande County Hydrogeologic Study.

All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

**Reporting:** 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.

**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.

**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.