Water Supply Reserve Fund
Water Activity Summary Sheet
July 18-19, 2018
Agenda Item 27(b)

Applicant & Grantee:	Special Improvement District Number One (Subdistrict No. 1)
Water Activity Name:	Rio Grande Water Conservation District Groundwater Level Telemetry
Water Activity Purpose:	Agricultural & Environmental Needs Assessment
County:	Alamosa, Rio Grande, and Saguache
Drainage Basin:	Rio Grande
Water Source:	Groundwater in Subdistrict No. 1
Amount Requested:	$71,348 Rio Grande Basin Account
Matching Funds:	Applicant Match (cash & in-kind) = $23,822 • 33% of the basin request (meets 25% min) • 25% of the total project cost of $95,170

Staff Recommendation:
Staff recommends approval of up to $71,348 from the Rio Grande Basin Account to help fund the project titled: Rio Grande Water Conservation District Groundwater Level Telemetry.

Water Activity Summary: WSRF grant funds, if approved, will assist Subdistrict No. 1 with the installation, management and production of automatic groundwater telemetry systems and data for the Unconfined Aquifer Storage Study Area north of the Rio Grande River near the cities of Monte Vista, Del Norte, Center, Mosca, and Hooper. The project includes installation of 25 well telemetry units within the boundaries of the Subdistrict No. 1 at historical observation well locations. The telemetry units will be used to send data from the well twice a day, for all 25 wells in the study area. After the one-year monitoring operation the Rio Grande Water Conservation District (RGWCD) will begin to fund the project for long-term usage.

WSRF funding will help purchase the well telemetry unit, transducer, vented cables and other primary components from the telemetry company, In-Situ. Funding will also contribute to HydroVu Services and a cellular data plan. HydroVu is an interface created by the telemetry company, In-Situ, which allows users to visualize daily water levels. HydroVu services will act as multiple platform tool to backup new data, present data for each of the 25 wells for both administrative and public viewing, and share data in multiple formats for other users, publications, or studies.

Discussion: As described in the Rio Grande Roundtable chair's recommendation letter, this project was supported and recommended for approval on May 29, 2018. This project assists in satisfying Colorado's Water Plan Critical Goals and Actions as identified in Chapter 10.3, *A. Supply and Demand* and D. *Agriculture* by improving data collection to better interpret sustainability of the unconfined aquifer's groundwater system in order to meet long-term water needs and basin health in the San Luis Valley economy in times of drought.

In an agricultural driven economy, water consumption in this area is a serious matter. Since groundwater and surface water in this region has been considered "over appropriated", there has been a need to protect groundwater resources. Increasing frequency of groundwater data collected in the West Central San Luis Valley is necessary to better predict and understand what is available and what is considered sustainable.

Well Locations: The project includes installation of 25 well telemetry systems (including pressure transducers) within the boundaries of the Subdistrict 1 at the RGWCD historical observation well locations. The well locations have been measured as part of an on-going study called the "Change in Unconfined Aquifer Storage." The telemetry units will collect water levels from each of the 25 wells twice a day to improve on the historic collection of monthly water levels for these wells.

Issues/Additional Needs: No additional needs have been identified.
Eligibility Requirements: The application meets requirements of all eligibility components.
Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Summary / Matching Funds:

Funding Source	**Cash**	**In-Kind**	**Total**
Rio Grande Water Conservation District	$20,906	$2,916	$23,822
WSRF Rio Grande Basin Account	$71,348	n/a	$71,348
Totals	**$92,254**	**$2,916**	**$95,170**

CWCB Project Manager: Megan Holcomb

May 29, 2018
Rio Grande Basin Round Table
623 E 4th Street
Alamosa, CO 81101

Colorado Water Conservation Board
1313 Sherman Street
Denver, CO 80203
Re: RGWCD Groundwater Telemetry Project

The Rio Grande Basin Roundtable with unanimous decision approves the proposed Rio Grande Water Conservation District Groundwater Telemetry Project. The total cost of the project is $95,170.00 with a 25% contribution match ($22,822.00) by the RGWCD in order to acquire funding approval from the CWCB to use the Water Supply Reserve Fund for a total of $71,348.00 from the Rio Grande Basin Roundtable.

Approval from the project was due to the project's function as an improvement towards Groundwater interpretation in the valley's first formed Groundwater Management Sub District (Special Improvement District Number One). One of Sub District No. 1's goals in its amended plan of water management was to recover groundwater levels in the unconfined aquifer within 200,000 to 400,000 acre feet below the January 1, 1976 unconfined aquifer storage level. The observation wells that are used to calculate the monthly and annual changes in aquifer storage for Subdistrict No. 1 to meet this goal are the wells to be improved by daily groundwater level collection by the RGWCD Groundwater Telemetry Project. Data from these wells would then be used as an improvement in the frequency of data for the subdistrict area north of the Rio Grande for the Rio Grande Decision Support System groundwater model. The increased data from the observational wells would be added to improve on the model that has been used to establish the major rules and regulations for groundwater within Division 3 of Colorado's Department of Water Resources.

This project meets Rio Grande Basin Implementation Plan Goals by improving data collection to better interpret sustainability of the unconfined aquifer's groundwater system in order to meet long-term water needs that promote overall basin health and protection of San Luis Valley economy in times of drought.

Nathan Coombs – Roundtable Chair

Rio Grande Basin Round Table

Signature: Date:

5-29-18

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Last Update: August 3, 2017

Colorado Water Conservation Board

Water Supply Reserve Fund
Grant Application

Instructions

All WSRF grant applications shall conform to the current 2016 WSRF Criteria and Guidelines.

To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) **AND** the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application.

If you have questions, please contact the current CWCB staff Roundtable liaison:

Arkansas	**Gunnison | North Platte | South Platte | Yampa/White**	**Colorado | Metro | Rio Grande | Southwest**
Ben Wade	Craig Godbout	Megan Holcomb
ben.wade@state.co.us	craig.godbout@state.co.us	megan.holcomb@state.co.us
303-866-3441 x3238	303-866-3441 x3210	303-866-3441 x3222

WSRF Submittal Checklist (Required)

X	I acknowledge this request for funding was recommended for CWCB approval by the sponsoring Basin Roundtable(s).
X	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines.
X	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.(1)
Exhibit A	
X	Statement of Work(2) *(Word – see Exhibit A Template)*
X	Budget & Schedule(2) *(Excel Spreadsheet – see Exhibit A Template)*
X	Letters of Matching and/or Pending 3rd Party Commitments(2)
X	Receipts of partial contribution.
Exhibit C	
X	Map(2)
X	Photos/Drawings/Reports
X	Letters of Support
-	Certificate of Insurance(3) (General, Auto, & Workers' Comp.)
Contracting Documents	
-	Certificate of Good Standing(3)
-	W-9(3)
-	Independent Contractor Form(3) (If applicant is individual, not company/organization)
-	Electronic Funds Transfer (ETF) Form(3)

(1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting
(2) Required with application if applicable.
(3) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

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Schedule		
CWCB Meeting	**Application Submittal Dates**	**Type of Request**
January	December 1	Basin Account; BIP
March	February 1	Basin/Statewide Account; BIP
May	April 1	Basin Account; BIP
X July	X June 1	Basin Account; BIP
September	August 1	Basin/Statewide Account; BIP
November	October 1	Basin Account/BIP

Desired Timeline	
Desired CWCB Hearing Month:	June 2018
Desired Notice to Proceed Date:	July 2018

Water Activity Summary	
Name of Applicant	Special Improvement District Number One
Name of Water Activity	Rio Grande Water Conservation District Groundwater Level Telemetry

Approving Roundtable(s)	Basin Account Request(s)[1]
Rio Grande Roundtable	$71348.00 (75%)
Basin Account Request Subtotal	$71348.00 (75%)
Statewide Account Request[1]	$0
Total WSRF Funds Requested (Basin & Statewide)	$71348.00 (75%)
Total Project Costs	$95170.00

(1) Please indicate the amount recommended for approval by the Roundtable(s)

Grantee and Applicant Information

Last Update: August 3, 2017

Grantee and Applicant Information	
Name of Grantee(s)	Special Improvement District Number One
Mailing Address	8805 Independence Way, Alamosa, CO 81101
FEIN	Tax ID: 84-0608457
Grantee's Organization Contact(1)	Cleave Simpson
Position/Title	Rio Grande Water Conservation District - General Manager
Email	cleave@rgwcd.org
Phone	719-589-6301
Grant Management Contact(2)	Chet Tokarsky
Position/Title	Hydrologic Technician/ Well Program Technician
Email	chester@rgwcd.org
Phone	713-306-6787
Name of Applicant (if different than grantee)	Cleave Simpson
Mailing Address	8805 Independence Way Alamosa, CO 81101
Position/Title	Rio Grande Water Conservation District - General Manager
Email	cleave@rgwcd.org
Phone	719-589-6301

(1) Person with signatory authority

(2) Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

Description of Grantee
Provide a brief description of the grantee's organization (300 words or less).
In 2006, the formation of Special Improvement District Number One (Subdistrict No. 1) was created as legal entity to begin management of groundwater in West Central San Luis Valley in Southwest Colorado. With the subdistrict formation, the subdistrict's plan of water management cited its first priority to improve and replenish unconfined groundwater levels in the subdistrict. With this in mind as its primary goal, focus weighed heavily on improving injurious depletions by recovering the unconfined aquifer in this region by any means necessary within the confines of the subdistrict. After multiple years of litigation with Colorado water courts the subdistrict had drafted an "effective" plan of water management in December 2011. The plan of water management now undertook its primary focus for replacement of injurious depletions to the Rio Grande River to meet Rio Grande River Compact obligations and senior surface water rights users. The secondary goal was recovery and maintenance of groundwater storage in the unconfined aquifer to a historically sustainable level in order to maintain the hydraulic divide permanently. The hydraulic divide is a line on the north of the Rio Grande River separating the unconfined aquifer underlying the subdistrict and the tributary unconfined aquifer that attributes groundwater to the Rio Grande River. To meet these criteria, aquifer storage levels must be increased from the current level (2017) at -1,000,000 acre feet below the 1976 level (considered the relative 0 storage value) to a level between -200,000 to -400,000-acre feet below the 1976 aquifer storage level to be sustainable. To reach this goal by 2030, it has been estimated that 40,000 acres of irrigated lands would need to be retired from irrigation. The Rio Grande Water Conservation District (RGWCD) will administer the grant on behalf of the Special Improvement District Number One. The Special Improvement District Number One (Subdistrict No. 1) of the RGWCD will be the fiscal agent for the grant.

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Type of Eligible Entity (check one)	
	Public (Government): municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
X	**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, any organization that is not part of the government
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes

Type of Water Activity (check one)	
	Study
X	Implementation

Category of Water Activity (check all that apply)		
X	Nonconsumptive (Environmental)	
	Nonconsumptive (Recreational)	
X	Agricultural	
	Municipal/Industrial	
X	Needs Assessment	
X	Education & Outreach	
	Other	Explain: add the activities explanations why we think each category fits our project.

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in **decimal degrees**. The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	Alamosa County, Rio Grande County, Saguache County
Latitude	-106.096957
Longitude	37.671513

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Water Activity Overview
Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, area of habitat improvements. If this project addresses multiple purposes or spans multiple basins, please explain. The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, and Schedule.
The water project will use WSRF funding for the purchase of groundwater telemetry units from the telemetry company, In-Situ, to monitor groundwater observational wells in Subdistrict No. 1. Subdistrict No. 1 represents the area north of the Rio Grande River between the cities of Monte Vista, Del Norte, Center, Mosca and Hooper. This district is approximately 246,000 acres in size using more than 3,000 irrigation wells and numerous diversions from the Rio Grande by ditches and canals to irrigate roughly 174,000 acres. In an agricultural driven economy, water consumption in this area is a serious matter. Since groundwater and surface water in this region has been considered "over appropriated", there has been a need to protect groundwater resources. Increasing frequency of groundwater data collected in the West Central San Luis Valley is necessary to better predict and understand what is available and what is considered sustainable. The project includes installation of 25 well telemetry systems (including pressure transducers) within the boundaries of the Subdistrict 1 at the RGWCD historical observation well locations (See **Map 1**). The well locations have been measured as part of an on-going study called the "Change in Unconfined Aquifer Storage." The telemetry units will collect water levels from each of the 25 wells twice a day to improve on the historic collection of monthly water levels for these wells. The telemetry company In-Situ has created an interface called HydroVu for users to visit to see daily water levels. WSRF funding will allow the purchase for the telemetry units for this project.

Measurable Results		
To catalog measurable results achieved with WSRF funds please provide any of the following values.		
	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
	Existing Storage Preserved or Enhanced (acre-feet)	
	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	Area of Restored or Preserved Habitat (acres)	
	Length of Pipe/Canal Built or Improved	
X	Other	Explain: Telemetry and Hydrovu software installed and utilized at 25 wells to improve the frequency of groundwater observation wells within the "Change in Unconfined Aquifer Storage Study Area" in the San Luis Valley.

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Water Activity Justification

Provide a description of how this water activity supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, and the respective Roundtable Basin Implementation Plan and Education Action Plan (1). The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in 2016 WSRF Criteria and Guidelines).

The objective of Subdistrict No. 1 is complimentary to Colorado's Water Plan, the Statewide Water Supply Initiative and the Rio Grande Basin Implementation Plan by giving the people of this area a chance to govern themselves to protect their ground water supply. The formation of Subdistrict No. 1 has given its members a chance to protect groundwater supply and develop a long-term plan to mitigate or avoid economic and social impacts on agricultural and rural communities. This governance provides ability to better manage water in situations of extreme drought and formidable seasonal changes. Managing this water supply in better efforts to increase storage in the unconfined aquifer will also help to improve some of the non-consumptive needs in the Rio Grande Basin. By improving or increasing groundwater supply in a heavily irrigated area by groundwater, the Rio Grande hydraulic divide can stabilize to mitigate damages on riparian corridors while avoiding interference with Colorado's obligations under the Rio Grande Compact. By improving frequency of data collection within the West Central San Luis Valley, significant groundwater models like the Rio Grande Decision Support System can be improved with daily monitoring of the well network improving accuracy of the model within this area for the unconfined aquifer.

CWP:
The data telemetry project will help support Colorado's Water Plan by improving data frequency to provide more accurate information to visualize progress towards meeting the some of the goals of Subdistrict No. 1, keeping agriculture productive and efficient while recharging the unconfined aquifer.

SWSI:
Keep the hydraulic divide on the Rio Grande more stable for the river by using less groundwater. Increased data frequency by telemetry to better represent more frequent change.

RBIP:
Project supports Rio Grande Basin Implementation Plan by mitigating and avoiding, economic and social impacts on agricultural and rural communities by improving data frequency within a heavily groundwater use area. The project may provide more information for Subdistrict No. 1 to improve water conservation methods and to improve future observation efforts for ground water resources in order to meet normal agriculture yields, aquifer sustainability and water recharge goals.

EAP:
Using In-Situs web interface, HydroVu, the website can be used by anyone to learn what the water wells in the telemetry network are doing at any time using the Rio Grande Water Conservation District website to view the telemetry wells.

In summary, this well network would help to increase our understanding of the unconfined aquifer, to better forecast changes more dynamically as well as improvement of our measurements for the "Change in Unconfined Aquifer Storage Study Area." Data from the telemetry system will be used to improve the Rio Grande Decision Support System Ground Water model in efforts to improve validity of the model in this region.

(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.

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Matching Requirements: Basin Account Requests	
Basin (only) Account grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3rd party and shall be accompanied by a **letter of commitment** as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity's letterhead). Attach additional sheet if necessary.	
Contributing Entity	Amount and Form of Match (note cash or in-kind)
Rio Grande Water Conservation District (Cash)	$ 20906.00
Rio Grande Water Conservation District (In-Kind)	$ 2916.00
Total Match	$ 23822.00 (25%)
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	

Matching Requirements: Statewide Account Requests	
Statewide Account grant requests require a 50% match as described in **the 2016 WSRF Criteria and Guidelines**. A minimum of 10% match shall be from Basin Account funds (cash only). A minimum of 10% match shall be provided by the applicant or 3rd party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3rd party) and shall be accompanied by a **letter of commitment.** Attach additional sheet if necessary.	
Contributing Entity	Amount and Form of Match (note cash or in-kind):
Total Match	
TOTAL Project Cost	
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	

Last Update: August 3, 2017

Related Studies

Please provide a list of any related studies, including if the water activity is complimentary to or assists in the implementation of other CWCB programs.

Change in Unconfined Aquifer Storage Study:

Starting in 1974, the Change in Unconfined Aquifer Storage study and its study area was used to measure the approximate change in the shallow groundwater (unconfined aquifer) storage within the region north of the Rio Grande River in the West Central San Luis Valley (see **Map 2**). Since this area was considered an intensively farmed area the creation of the Change in Unconfined Aquifer Storage Study Area focused on this region. The study area includes 335,000 acres and was measured using 26 RGWCD historical observation wells (today using 27 wells). Annual and monthly changes were measured using the Thiessen Mean Method where a large polygon area is constructed to represent each observation well. An assumption is made that each observational well's water level is same throughout that well's polygon area. The change was plotted as a zero value at the beginning of the study period in 1975 with monthly changes plotted thereafter through this most recent month. For 2017 the current level in the Change in Unconfined Aquifer Storage for the West Central San Luis valley was -1,000,000 acre feet. This study is used currently by Subdistrict No. 1 as a measure of progress to reach its recharging and sustainability efforts for the unconfined aquifer by reaching a level of -200,000 to -400,000 acre feet below the 1976 aquifer storage level by 2030.

RGDSS:

The Rio Grande Decision Support System (RGDSS) has been described as an interactive computer-based system that utilizes data and computer models to help decision makers solve unstructured problems. Built and created by five major contractors, the computer system encompasses concepts of IT, hydrology, physics, mathematical formulation, groundwater, surface water, geology, irrigation, crops grown, irrigation methods and the relationships interlocking ground and surface water. RGDSS is then broken into major "tools" that make up the model including the groundwater model, surface water planning model, consumptive use model, water budget model and water rights administration model. Groundwater data collected by the RGWCD, National Parks Service, United States Geological Survey, Bureau of Land Management, US Bureau of Reclamation, Conejos Water Conservation District and a collection of other well measurements throughout the San Luis Valley help to calibrate and improve the ground water model in regards to making the ground water model represent what happens in the San Luis Valley.

Closed Basin Project:

The water salvaging project known as the Closed Basin Project spans 195 square miles of the sump zone of the closed basin east of Alamosa and 4 miles south of Moffat. The 42 mile canal comprised of 350 observation wells, 170 salvage wells, head gates, locks and pump stations are part of the telemetry network system known as a Supervisory Control and Data Acquisition (SCADA) system.

Previous CWCB Grants

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order

Neither the District nor the Special Improvement District #1 have any previous or existing CWCB loans or grants.

Last Update: August 3, 2017

Tax Payer Bill of Rights
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.
As a special enterprise of the Rio Grande Water Conservation District, Subdistrict #1 is not subject to TABOR restrictions.

Colorado Water Conservation Board

Water Supply Reserve Fund

Exhibit A - Statement of Work

Date: (include all edit date)	**5/1/2018**
Water Activity Name:	**Rio Grande Water Conservation District Groundwater Telemetry Project**
Grant Recipient:	**Rio Grande Water Conservation District**
Funding Source:	**Rio Grande Basin ($ 71348.00) (75%). Rio Grande Water Conservation District (23822.00) (25%)**

Water Activity Overview: (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for.

The proposed water project will use WSRF funding for the installation, management and production of automatic groundwater telemetry systems and data for the Unconfined Aquifer Storage Study Area north of the Rio Grande River around or near the cities of Monte Vista, Del Norte, Center, Mosca and Hooper.

The project includes installation of 25 well telemetry units within the boundaries of the "Special Improvement District Number 1" at our historical observation well locations. The telemetry units would be used to send data from the well twice a day for all 25 wells in the study area. The project would provide a one-year monitoring operation funding to take place for all current measurements at the observation wells within the Unconfined Aquifer Storage Study Area. WSRF funding includes the well telemetry unit, transducer, vented cables and other primary components from the telemetry company, In-Situ. The Rio Grande Water Conservation District (RGWCD) after the first year of operation and data collection will begin to fund the project for long-term usage.
HydroVu services will act as multiple platform tool to backup new data, present data for each of the 25 wells for both administrative and public viewing and eventually sharing data in multiple formats for other users, publications or studies.

Objectives: (List the objectives of the project)

1.) **Purchase 25 telemetry units and components for install**
2.) **HydroVu Services and Cellular Data Plans**
3.) **Administration, reporting, completion of project and final reports. Additional parts for completion of project.**

Tasks
Provide a detailed description of each task using the following format:
Task 1 - (Name) Physical Installation and Construction
Description of Task:
Purchasing, Installation and Construction of the Telemetry Units and Pressure Transducers at all 25 Well Sites.
Method/Procedure:
Timeline: November 2018 – February 2018 Installation and maintenance by the RGWCD Hydrologic Technician will include the placement of the telemetry unit, cable and pressure transducers permanently for each well site for the 25 well locations within Sub District's Study Area. Major components of the telemetry setup will be provided by In-Situ which includes their online data service provider HydroVu. Protocols included for each well will collect water well depths twice a day consistent measuring for all wells within the study area. Telemetry units will be installed and programmed to begin collecting data next day of installation and transmitting data each morning. Task 1 will include all major expenditures from In-Situ in relation to purchasing for the 25 well locations and telemetry systems.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Operational well telemetry units for the 25 wells which will be represented on HydroVu once the well is installed and operational. The well will be completed, installed and functioning to collect data. Records indicating the unit is working correctly and data is visible through the HydroVu Website marking date and time for each well for completion.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Major Purchase orders from In-Situ will be included as a copy to show that WSRF grant funding was used to purchase the primary components necessary for installation from In-Situ. Two separate purchase orders will be included to show the 75% contribution for units by WSRF grant funding and a separate purchase order for the 25% RGWCD contributions to the project for this task. Documentation will include the date of installation for each unit and additional photos for each well to be processed within 4 months of receiving funding for units. This will provide time to accomplish correct orders from In-Situ on time and complete without any possible setbacks.

Tasks
Provide a detailed description of each task using the following format:
Task 2 - (Name) Data Monitoring by HydroVu and Cellular Plans for telemetry units
Description of Task: Finalize data monitoring efforts to be presented on HydroVu to be visible and recording data for the 25 well locations.

Tasks
Method/Procedure:
Ensuring all well telemetry units and pressure transducers are working and communicating with HydroVu web services to begin providing online viewing for all 25 wells within the study area. Task 2 will include (1st Year) Cellular Data Plan and HydroVu Services for the 25 telemetry units. Activation occurs once a unit is installed, tested and posting data online to HydroVu
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
To provide access and operations of HydroVu for public and administrative purposes. To begin consistent and calibrated data collection and monitoring from the 25 well locations.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
The RGWCD hyperlink can be added to show the HydroVu data services to the CWCB to view data for observational data collection from 25 well locations in the study area. Cost of the 1st year of the cellular data plan and HydroVu services from In-Situ will be included as a cost within the major purchase order from In-Situ as the contribution from RGWCD.

Tasks
Provide a detailed description of each task using the following format:
Task 3 - Administration, reporting, completion of project and final reports. Additional parts for completion of project
Description of Task:
Task 3 includes base salary for program Technician to construct and install telemetry units to perform automatically with HydroVu web services. This will include fixing issues or problems that arise with the project.The cost of this task will be considered an “in-kind” contribution to be carried out as part of the 25% match by the RGWCD.
Method/Procedure:
Administration will include the RGWCD Program Technician insuring all well telemetry units are installed with proper additional parts in the well and are communicating properly, daily with HydroVu web services. Authorizing HydroVu services to be available for viewing purposes on the RGWCD Website or at least by hyperlink to the HydroVu Website. Any problems or issues with units to be described and maintained by the RGWCD Program Technician. 6-month progress reports and the final deliverable report needed to complete the WSRF Grant Contract will be managed and produced for CWCB by the RGWCD Program Technician (Chet Tokarsky). Cost was calculated based on technician’s regular salary for 100 hours of service to the project along with the cost of additional parts to hold the telemetry units safely in place in the well. (nuts, bolts and safety cables).
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
The wells will be completed installed and functioning to collect data to begin providing correct information for viewers on HydroVu.

Tasks
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Operational well telemetry units for the 25 wells which will be represented on HydroVu once the well is installed and operational. Receipts of the costs for additional parts to hold the units in the well in combination with the salary of the technician will be included for reporting purposes.

Budget and Schedule
Exhibit B - Budget and Schedule: This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

Reporting Requirements
Reporting: The grantee shall provide their respective Roundtable(s) and the CWCB a Progress Report every 6 months, beginning from the date of executed contract. The Progress Report shall describe the status of the water activity, the completion or partial completion of the tasks identified in the Statement of Work – Exhibit A including a description of any major issues that have occurred and any corrective action to address these issues. The CWCB may withhold reimbursement until satisfactory Progress Reports have been submitted.
Final Deliverable: At the completion of the water activity, the grantee shall provide their respective Roundtable(s) and the CWCB a final report on the grantee's letterhead that: • Summarizes the water activity and how the water activity was completed • Describes any obstacles encountered, and how these obstacles were overcome • Explains the Proposed Budget versus the Actual Budget • Confirms that all matching commitments have been fulfilled • Includes photographs, summaries of meeting and engineering reports/design, if appropriate The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or contract may be denied consideration for future funding of any type from CWCB.

Colorado Water Conservation Board

Water Supply Reserve Fund

EXHIBIT B - BUDGET AND SCHEDULE

Date: 6/1/2018

Water Activity Name: Rio Grande Water Conservation District Groundwater Telemetry Project

Grantee Name: Special Improvement District Number 1

Task No.[1]		Start Date[2]	End Date	Matching Funds (cash & in-kind)[3]	WSRF Funds (Basin & Statewide combined)[3]	Total
1	Purchase 25 telemetry units and components for install	11/1/2018	2/1/2019	$ 10,406.00	$ 71,348.00	$81,754
2	HydroVu Services and Cellular Data Plans (first year)	2/1/2019	2/1/2019	$ 10,500.00	-	$10,500
3	Administration, reporting, completion of project and final reports. Additional parts for completion of project.	11/1/2018	4/31/2019	$ 2,916.00	-	$2,916
						$0
						$0
						$0
						$0
						$0
			Total	$23,822	$71,348	$95,170

(1) The single task that include costs for Grant Administration must provide a labor breakdown (see Indirect Costs tab below) where the total WSRF Grant

(2) Start Date for funding under $100K - 45 Days from Board Approval; Start Date for funding over $100K - 90 Days from Board Approval.

(3) Round values up to the nearest

• Reimbursement eligibility commences upon the grantee's receipt of a Notice to Proceed (N

• NTP will not be accepted as a start date. Project activities may commence as soon as the grantee enters contract and receives formal signed State Agreement.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of the CWCB staff project manager.

• Additonally, the applicant shall provide a progress report every 6 months, beginning from the date of contract execution

• Standard contracting proceedures dictate that the Expiration Date of the contract shall be 5 years from the Effective Date.

May 21, 2018
Rio Grande Water Conservation District
8805 Independence Way
Alamosa, CO 81101

Colorado Water Conservation Board
1313 Sherman Street
Denver, CO 80203
Re: RGWCD Groundwater Telemetry Project

The Rio Grande Water Conservation District will contribute the 25% funding contribution as a 3rd party in order to fulfill grant requirements stated in the Water Supply Reserve Fund (WSRF) Criteria and Guidelines to fund the project known as the "Rio Grande Water Conservation District Groundwater Telemetry Project."

The Rio Grande Water Conservation District has contributed $8926.00 (9.4%) to the project as cash and will contribute the remaining cash amount of $11,980.00 (12.6%) pending approval of the project by the Colorado Water Conservation Board. The remaining balance of the 25% contribution will be an "in-kind" amount for the Well Program Technician to install the units.

Greg Higel – President Board of Directors

Rio Grande Water Conservation District

Signature: Date:

_____ _____

May 21, 2018
Rio Grande Water Conservation District
8805 Independence Way
Alamosa, CO 81101

Colorado Water Conservation Board
1313 Sherman Street
Denver, CO 80203
Re: RGWCD Groundwater Telemetry Project

The Rio Grande Water Conservation District has contributed 9.4 % of funding towards the project by purchasing and installing 3 of the 25 telemetry units. The current telemetry units have been in the project area for the last six months and have been included in the WSRF grant application as a part of the 25% contribution percentage. The district's Board of Directors will be updated on the project and signing an official letter of contribution for the remaining cash contribution of $11,980.00 to reach the 25% contribution match.

Cleave Simpson- General Manager

Rio Grande Water Conservation District

Signature:

Date:

5-24-18

May 21, 2018

Rio Grande Water Conservation District
8805 Independence Way
Alamosa, CO 81101

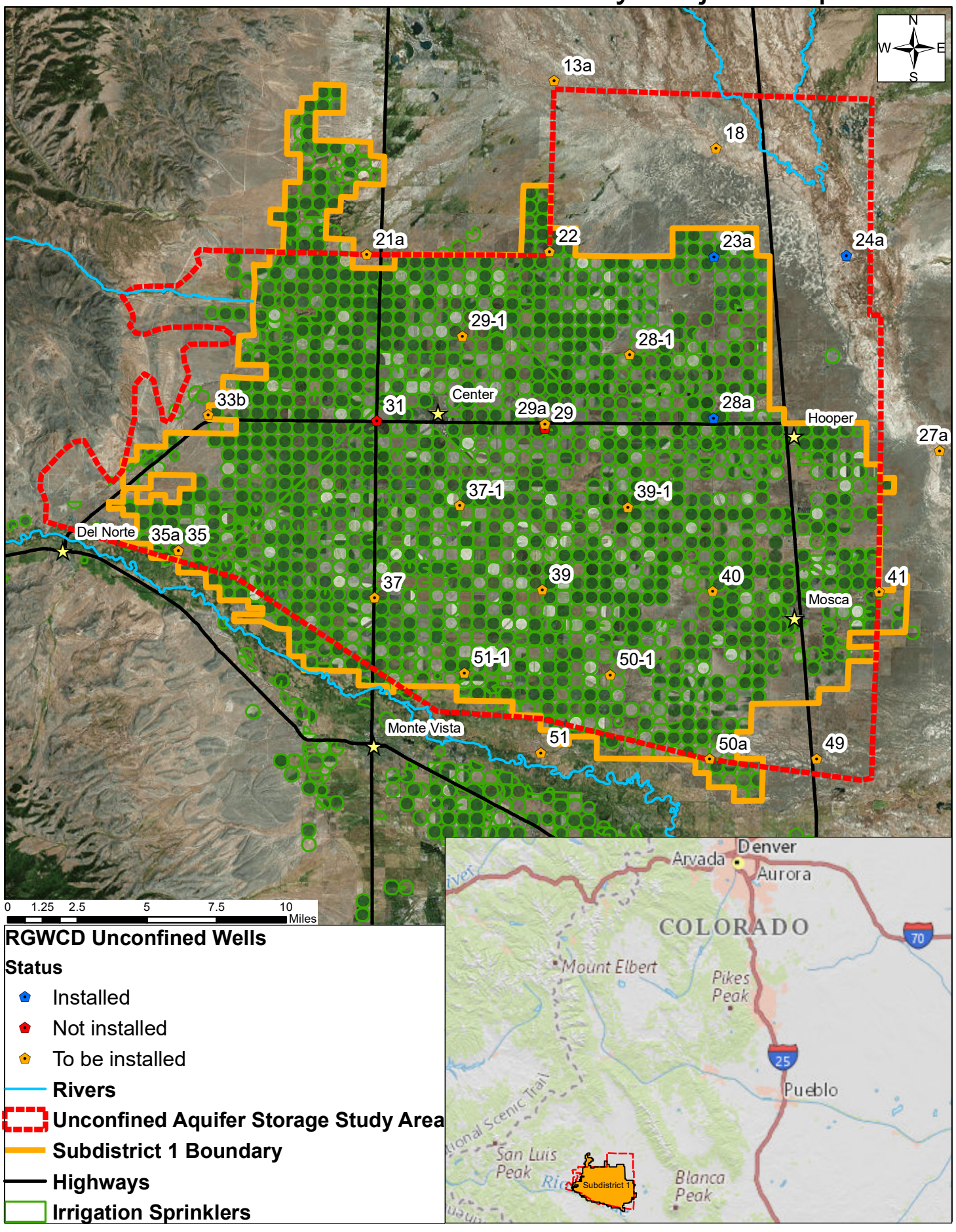
We, Special Improvement District Number One, hereby support the project known as the "Rio Grande Water Conservation District Groundwater Telemetry Project" as the primary Grantee for the Water Supply Reserve Fund grant application. Management and operations for the project will be carried out by the Rio Grande Water Conservation District on behalf of Special Improvement District Number One.

Special Improvement District Number One – Board of Managers President

Signature: Date:

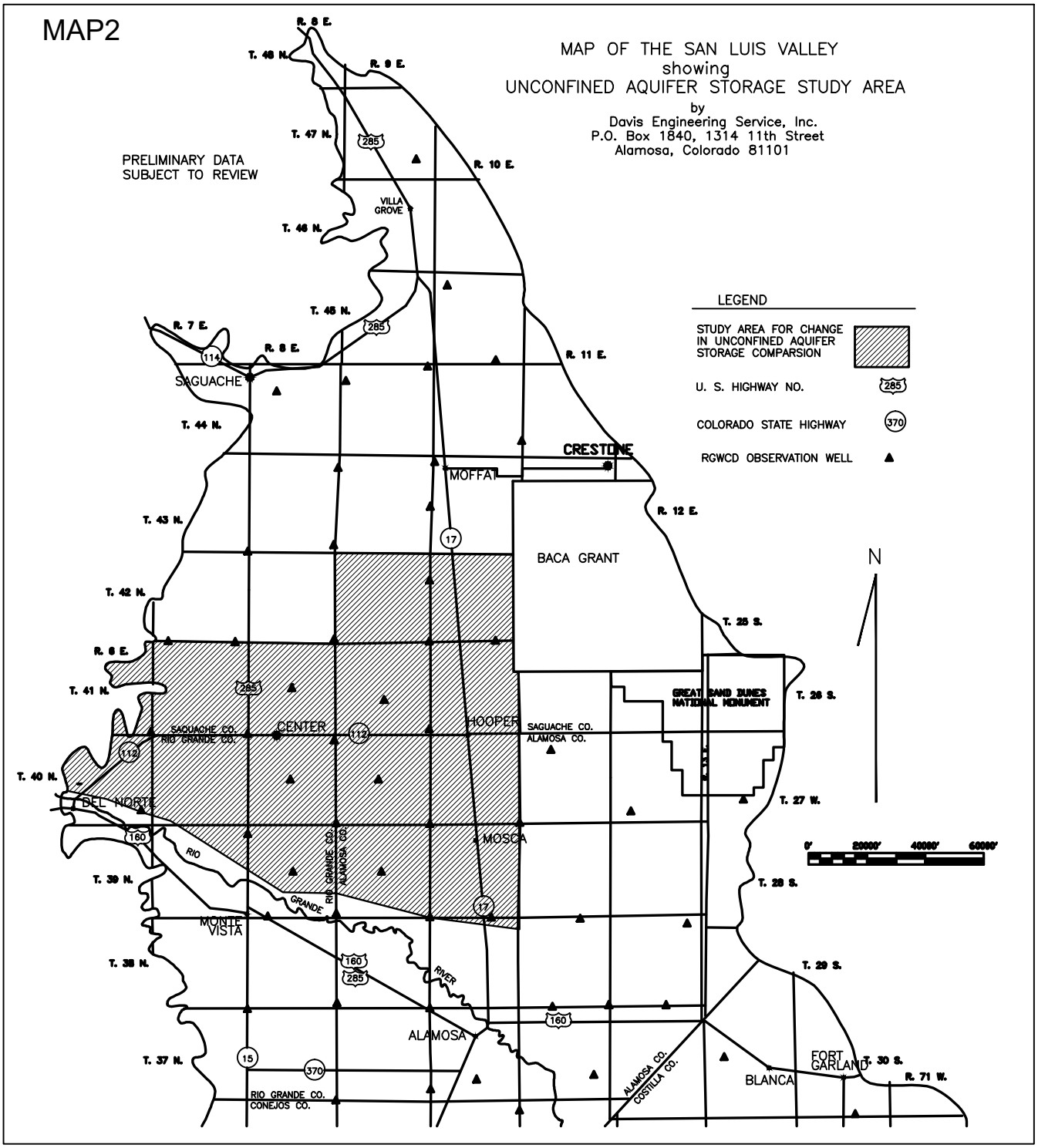
Brian D. Brownell 5-22-2018

RGWCD Groundwater Telemetry Project Map



MAP #1: Map of the project area for the proposed well telemetry installations.

MAP2



EXPLANATION

Change in unconfined aquifer storage has been calculated for a defined area which is shown on the above map. The changes in aquifer storage were based on approximately 27 RGWCD monitoring wells located within the area. The method of computing the change in aquifer storage was in accordance with the Thiessen mean method whereby a polygon is constructed around each observation well and the assumption is made that the change in water level throughout the area of the polygon is the same as the change in the well within the polygon. A graph showing changes since 1976 is attached. Zero on the vertical axis of the graph was assumed as corresponding to 1976 for graphing purposes; however, it should not be assumed that the unconfined aquifer was at equilibrium as of that date.