SOUTHEASTERN COLORADO
Water Conservancy District
"Your investment in water"

June 8, 2011

Ms. Veva DeHeza
Colorado Water Conservation Board
1313 Sherman St. Room 721
Denver, CO 80203

Dear Ms. DeHeza,

The Southeastern Colorado Water Conservancy District (District) is seeking funding from the Colorado Water Conservation Board (CWCB) Water Efficiency Grant Program to conduct water system audits for the Arkansas Valley Conduit (Conduit) participants.

The District is in the process of developing a Regional Water Conservation Plan that will support it efforts to complete the Arkansas Valley Conduit (AVC), and help create a regional partnership between the District and the AVC project partners. Work has begun on developing the Plan; however, after interviewing a great majority of the project participants, it became clear that the management and tracking of unaccounted for and/or non-revenue water was a vital issue for all entities involved in the AVC, and that the effective reduction of real and apparent losses would be the key yardstick for measuring future success of the Regional Water Conservation Plan.

To this end, a system wide audit of each project participant's distribution system is warranted to understand and characterize those key processes in place for each entity including: meter testing and replacement policies, meter reading timing and methods (both to track overall system deliveries and water sales), tracking and identification of unbilled (and perhaps unmetered) water uses, etc. In addition, information regarding customer categories and key water deliveries will also be requested to help support the development of appropriate tools in the Water Conservation Plan "tool box." Specifically, the data will be used to:

- Help develop specific, measureable water conservation goals;
- Design water conservation measures and programs that will be implemented on a regional basis; and
- Define future data collection requirements that will be conducted consistently by all project participants during Plan implementation.

The District is requesting $28,397 in CWCB grant funding. To support this project the District will provide $9,680 in in-kind staff time, $6,000 in a cash contribution and $15,000 the District has received from a USBR Water Conservation Field Services grant. In addition, the Conduit participants will provide $9,644 in-kind services for assisting with the water system audits. The total cost to conduct the Conduit participants water system audit totals $68,721.

31717 UNITED AVENUE • PUEBLO, CO 81001 • PHONE (719) 948-2400 • FAX (719) 948-0036
web site: www.secwcd.org

The District thanks CWCB for this opportunity and please contact us with any questions.

Sincerely,

James W. Broderick

Cc: SECWCD District Files
Tracy Bouvette, Great Western Institute

Grant Application to the Colorado Water Conservation Board
Water Efficiency Grant Program
For System Wide Water Audits to Support Ongoing Regional Water Conservation Planning

Southeastern Colorado Water Conservancy District

Section 1 – Introduction and Background Information

Southeastern Colorado Water Conservancy District was formed under Colorado State Statutes on April 29, 1958 by the District Court in Pueblo, Colorado. The District's purpose is to develop and administer the Fryingpan-Arkansas Project (FAP). The District holds the water rights to the FAP. The District contracted with the United State Department of Interior Bureau of Reclamation (Reclamation) for construction of the FAP. Public Law 87-590, the authorizing legislation for the FAP and the District's Repayment Contract with the Bureau of Reclamation provides the principles that govern the FAP's design and operations. The FAP consists of diversions, conveyances, and storage facilities designed primarily to divert water from Colorado River tributaries on the west slope for use in the water-short areas in the Arkansas River Valley on the east slope. The District annually allocates approximately 53,600 acre feet of FAP water to municipal and agricultural entities within the District.

As the largest wholesale water distributor in southeastern Colorado, the District's allocations, to some degree, influence all water activities in its service area. Policies established by the Board of Directors consistently have been aimed at yielding maximum possible benefits to its water users through flexibility of operations and adaptability to changing needs. The District Board members and staff encourage policies of wise and efficient use of all available water supplies. The District supports efficient water management, optimizes water resource operations, and enhances water availability and water resources within the FAP and the Arkansas River Basin.

The Arkansas Valley Conduit will be the last component of the FAP to be built. It will provide clean drinking water to approximately forty communities and 46,000 people east of Pueblo in the lower Arkansas River Valley. When the Conduit is completed it will provide a reliable clean source of water for communities that have been dealing with water quality issues for decades. Some of these communities are currently out of compliance with the Clean Water and Safe Drinking Water Acts enforced by the Colorado Department of Public Health and Environment. There are many more communities on the verge of falling out of compliance in the near future as water quality issues increase along the Arkansas River and standards become more rigid. Locally, the Conduit will provide an opportunity for the participants to have a long-range solution to an ongoing water quality problem that has limited the economic potential of the region.

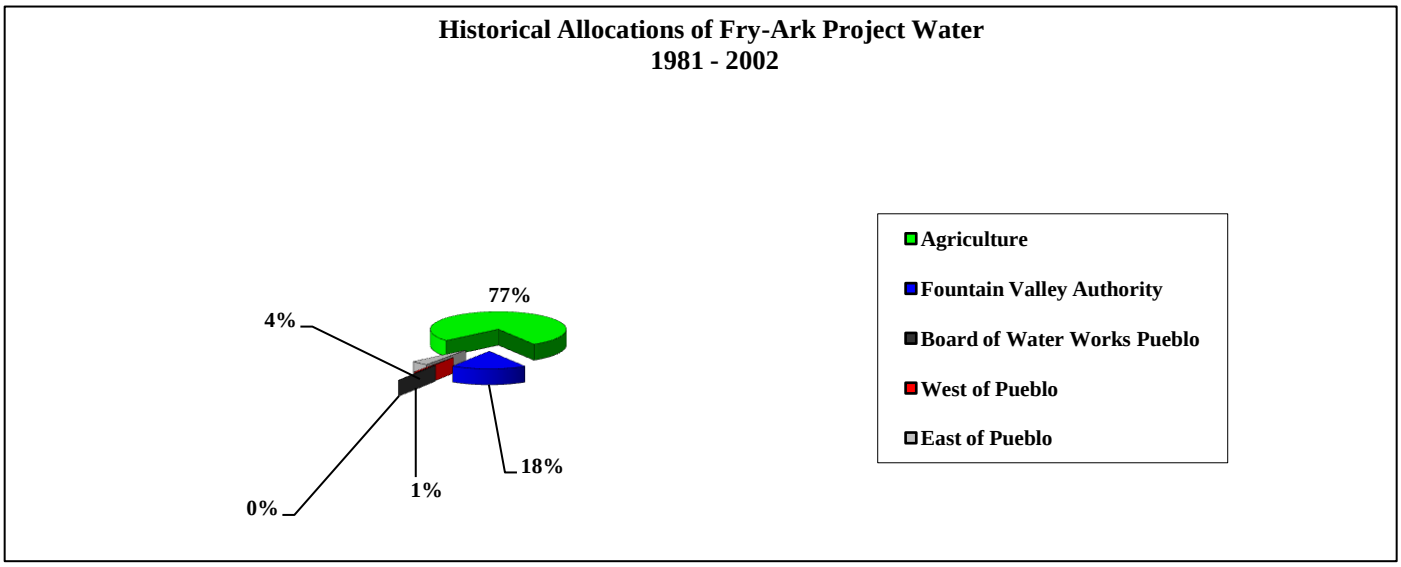
In keeping with the District's policies of promoting the wise use of FAP water, the District intends to develop and oversee the implementation of a water conservation plan for the Conduit participants. The District will provide technical support and funding to implement the Plan. In addition, the District will be responsible for tracking the success of the Plan and water savings derived from its implementation.

The District has grown steadily in population since its creation. According to the State Water Supply Initiative (SWSI) the total population within the Arkansas basin in the year 2000 was 835,000. It is

expected to grow by 55% to 1,300,000 in the year 2030. The majority of the population lives in the cities and towns that receive water from the FAP.

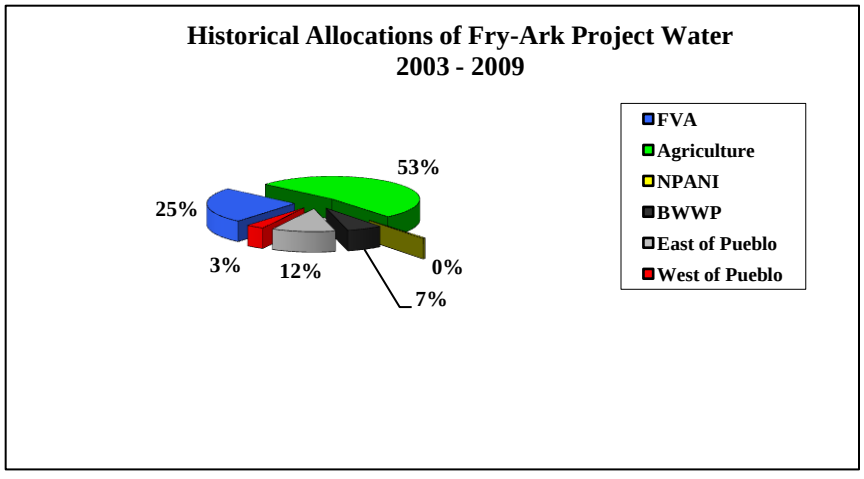
The request for FAP water must come from entities located within the District. Each spring the District entertains requests for allocation of FAP water from domestic, municipal, and agricultural entities. The District Water Allocation Principles state that a minimum of 51% of FAP water will be made available to municipal use, leaving 49% available to agricultural use. Historically allocation of FAP water has been 77% agricultural use and 23% municipal use because of less municipal demand (Figure 1).

Figure 1



The District has observed since the drought of 2002 and 2003 that the municipal water users have began to request their full 51%. (Figure 2) This in turn hurt agricultural water users, who had previously been able to utilize the unallocated municipal water. This is an indication that water use within the District is changing more toward municipal than agriculture uses.

Figure 2



The main source of water for the Conduit will be water from the FAP. The District has a perpetual right to divert and use this water. Twelve percent of the water produced by the FAP is dedicated to entities east of Pueblo. During an average year, this amounts to about 6,200 acre-feet. This is the primary source of water that will be brought down the Conduit. In addition, Return Flows are a potential source of water for the Conduit. The District has an exchange right with a 1939 priority for exchanging municipal FAP Return Flows back upstream to Pueblo Reservoir where they will be available for use in the Conduit. These Return Flows will need further engineering but can be expected to provide from 1,200 to 2,500 acre-feet of additional water for the Conduit.

As growth occurs and more water is needed, the participants will need the ability to obtain water within the basin. Some of these sources include, Twin Lakes water, interruptible supply leases with agricultural entities within the lower Arkansas River valley and the purchase of agriculture water rights.

Current and Ongoing Water Conservation Planning and Implementation by the District

The District has developed and implemented a five year water conservation plan that is required and approved by the Bureau of Reclamation. The Plan focuses on the efficient management of FAP water resources. The programs within the Plan include public education, municipal and agricultural conservation, and riparian restoration. In addition, the District is currently preparing a Regional Water Conservation Plan with funding support from the Bureau of Reclamation and the State of Colorado (through the Water Efficiency Grant Fund).

The District encourages its municipal water users to develop and implement Water Conservation and Drought Management Plans. The District has assisted and reviewed state approved water conservation plans completed by Colorado Springs Utilities, Security Water and Sanitation District, Board of Water Works of Pueblo, St. Charles Water District, and the cities of Fountain, Salida, Canon City, La Junta, Lamar, and Florence. The intent is that these covered entities will utilize the Conduit Water Conservation Plan and the Tool Box programs as a valuable resource in implementing their individual plans.

Knowing the value of FAP water resources, both now and in the future, the District embraces the importance of water conservation, efficiency, and wise use within the District and the Arkansas River basin.

Water Efficiency Grant Request

As the State of Colorado is aware, the District is currently developing a Regional Water Conservation Plan which will support the District's regional water conservation efforts and local planning and implementation activities. During the development of the Regional Plan, it became apparent to the District that the management of non-revenue water by the AVC project participants was a key component of future water conservation efforts to be performed on a local and regional scale. In addition, the District was able to collect data to suggest that the characterization of current non-revenue water issues within the project partnership was not adequate to support Regional Water Conservation Planning efforts. Specifically, the following information is needed by the District to allow for the adequate estimation of future project costs and development of implementation prioritization:

- Quantification of non-revenue water;
- Understanding of ongoing meter testing and replacement programs;

- Characterization of current meter reading accuracy; and
- Characterization of ongoing water loss prevention efforts.

The focus of this grant request scope will be to assist all project participants in collecting and organizing the information that they currently have on file to help the District organize, evaluate and prioritize its overall Regional Planning efforts.

Based on the scope of work presented in Attachment A, the total project cost is estimated to be $68,721, with approximately 37% of the project provided in match from the District and the project participants through in-kind and cash contributions. Details of the project budget and match can be found in Attachment B of this grant application.

Section 2 – Application

1. Contact Information

   Southeastern Colorado Water Conservancy District
   Jean Van Pelt, 719-948-2400, jean@secwcd.com
   31717 United Avenue, Pueblo, CO 81001

2. Project Team Organization

   The District will take the lead in the Plan development and implementation. Ms. Jean Van Pelt, Conservation Outreach Coordinator will be responsible for this Project. The District has contracted with Mr. Tracy Bouvette, Executive Director of the Great Western Institute to plan for and conduct the system wide audits with each project participant. He will also be the primary author of the audit report, which will be prepared to support and inform the Regional Water Conservation Plan. Mr. Bouvette will be supported by Ms. MaryLou Smith of the Colorado Water Research Institute. Mrs. Smith will support Great Western Institute and the District by coordinating the audits with each of the project participants. This is the same team that is currently developing the Regional Water Conservation Plan.

   Finally, the Project Participants will be involved in the project, by providing information about and access to their individual water systems. A list of the AVC project participants is included in the detailed scope of work (Attachment 1). Most of the project participants have provided letters of support for the District's efforts to develop the Regional Water Conservation Plan. The letters of support can be found in Attachment 2.

3. Past Retail Water Deliveries

   The District does not make retail water deliveries to any customers. Its function is to provide reliable, high quality water to the project participants for their use and retail delivery to their customers. The project participant customer base consists of those entities with residential, industrial, commercial, institutional and agricultural uses. Table 1 summarizes the water use classifications for each of the project participants.[1]

[1] Five years of water use data has not been available from the project participants, due to the nature of the organizations and their current record keeping practices.

Table 1 also summarizes the 2010 water deliveries by each project participant. The total retail water deliveries by the combined project participants are approximately 10,500 acre-feet.

4. Does the District qualify as a covered entity?

The District does not deliver retail water to its customers. Therefore it is not a covered entity. However, three of the AVC project participants – the City of Lamar, the City of La Junta and St. Charles Mesa Water District are considered by the State to be covered entities. In addition, the combined project participants deliver well over 2,000 acre-feet of retail water a year to their customers.

5. Background Water Use Characterization

a. Current per capita water use
Per capita water use for 2010 as estimated for each of the project participants is included in Table 1. As can be seen in this listing, per capita water use varies from about 50 to over 500 gallons per capita per day (gpcd) for the AVC project participants. The vast variability of per capita water use is a result of the customer mixes served by individual project participants. In general, any project participant with a per capita use over 200 gpcd has agricultural customers that utilize water for feedlots. The larger cities such as La Junta have per capita water use over 200 gpcd in part due to water treatment requirements[2], outdoor irrigation uses and/or water loss about 15% of total treated water demand.

b. Past, current and predicted population served
Table 2 presents the current and predicted population served by each project participant. Table 3 summarizes the total population served for the combined project participants for 2010 through 2070.

Table 3 – Estimated Population Served by the Combined Project Participants

Year	Estimated Population
2010	53,177
2020	56,992
2030	60,801
2050	68,423
2070	76,047

c. Estimated water saving goals to be achieved by the implementation of the proposed project.

Non-revenue water is not well characterized currently by the project participants collectively, although some entities have more information than others. For example, in the La Junta, Lamar and St. Charles Mesa Water District Water Conservation Plans on

[2] La Junta utilizes reverse osmosis to treat its potable water supply, which has a reject stream equivalent to 30% of the City's total treated water demand.

file with the CWCB, they show non-revenue water at 10%, 20% and 19%, respectively. Other entities do not have data currently available o report on their non-revenue water. Table A-1 summarizes reported non-revenue water amounts (as percentage of total water deliveries) for the project participants.

Based on the information presented in Table A-1, it appears that a substantial amount of future water demand reductions can be realized through better management of system wide leaks. In addition, it is anticipated that an important component of the non-revenue water for each entity is apparent water loss attributed to inaccurate meter readings. This project will help those entities with apparent losses improve revenue generation by identifying and characterizing the need for improved meter testing and replacement programs.

Improved water loss management could reduce current treated water demand by 5 to 10%, which is equivalent to about 500 to 1,000 acre-feet of treated water. In addition, increased water sales revenues for the combined project participants could be in the range of 5 to 10% as well, representing as much as $650,000 in loss water sales revenues per year for the project participants.

d. Adequacy, Stability and Reliability of the District's Water Supply

The area that the District serves has a water supply that is under stress from a number of sources. First, the majority of the project participants have been and will continue to have to manage local water quality issues associated with the presence of dissolved metals and/or radionuclides in their water supply. A number of project participants are operating their water systems under an order with the CDPHE concerning water quality management and treatment.

Second, most of the project participants do not have adequate data to accurate estimate the real and apparent losses in their distribution systems. Additional information will be needed to determine if the water distribution systems being operated by the project participants will operate efficiently in distributing project water to their customers. Finally, a number of project participants will need additional infrastructure to reliably connect to the proposed AVC pipeline such that the high quality water can be transported to their distribution systems.

Water conservation will play an important role in improving the efficiency of the individual system transportation and distribution system line losses thereby improving the overall efficiency of the AVC delivery system to local water users throughout the lower Arkansas River basin. The proposed AVC project will be vital in helping to address the water supply gap identified in SWSI for the Arkansas River Basin. The AVC is included in SWSI 2010 as one of the basin's Identified Projects and Processes (IPPs).

Attachment A

System Wide Water Audits to Support the Regional Water Conservation Planning Effort

Proposed Scope of Work and Budget

Southeastern Colorado Water Conservancy District

Background

The District is in the process of developing a Regional Water Conservation Plan that will support its efforts to complete the Arkansas Valley Conduit (AVC), and help create a regional partnership between the District and the AVC project partners. Work has begun on developing the Plan; however, after interviewing a great majority of the project participants, it became increasingly clear that the management and tracking of unaccounted for and/or non-revenue water was a vital issue for all entities involved in the AVC, and that the effective reduction of real and apparent losses would be the key yardstick for measuring future success of the Regional Water Conservation Plan[1].

Data characterizing current practices regarding tracking and measuring real and apparent system losses is not well documented by the various project participants – small and large (see Table A-1). Estimates of system wide losses, especially of treated water, are needed from all the project participants. In addition, the estimates need to be reported in a consistent manner, to support Plan development. To this end, a system wide audit of each project participant's distribution system is warranted to understand and characterize those key processes in place for each entity including: meter testing and replacement policies, meter reading timing and methods (both to track overall system deliveries and water sales), tracking and identification of unbilled (and perhaps unmetered) water uses, etc.

To address the data needs of the District in its planning processes this proposed scope of work has been designed to collect and evaluate system wide data and non-revenue water management for each of the project participants, such that these data can be characterized, evaluated and used to develop the Regional Water Conservation Plan. In addition, information regarding customer categories and key water deliveries will also be requested to help support the development of appropriate tools in the "tool box." Specifically, the data will be used to:

- Help develop specific, measureable water conservation goals;
- Design water conservation measures and programs that will be implemented on a regional basis; and
- Define future data collection requirements that will be conducted consistently by all project participants during Plan implementation.

[1] Although other measures and programs would be included in the Plan, the reduction of real losses is expected to provide for most of the actual future demand reductions resulting from implementation of the Plan.

Attachment A

Scope of Work

The system wide audits will be conducted using a modification of the methodology contained in Manual-36 – Water Audits and Loss Control Programs – prepared by the American Water Works Association (AWWA). This manual of water supply practices defines a water audit program that "is an effective tool available to utilities to quantify consumption and losses that occur in the distribution system and the management of these processes." The manual provides step-by-step instructions on how to compile the information and calculate performance factors for water distributors.

The scope of the AWWA's methodology is admittedly grander than what is needed for many of the AVC project participants; however, the themes and the concepts remain the same regardless of the size or sophistication of the distributer. Therefore, slight modifications to the M-36 methodology are proposed to address the needs of the project without creating undue hardship on the project participants.

The proposed scope of work for the project includes five tasks which allow for the planning for the audits, conducting the audits and analyzing the data collected during the audits; as well as the documentation of each of the individual audits and the integration of the suit results into the Regional Water Conservation Planning effort. Each of the relevant proposed project tasks is described in more detail below.

Task 1 - Preliminary Audit Tasks

Task 1.1 - Prior to the audits being performed, communications will be made with each project participant to inform them of the nature and intent of the water audit; and to request that specific data be made available (in any format that is easy for the project participant) for the audit team on their arrival. The transmittal will include:

- A request for the definition of the system boundaries and area;
- A request for information on the largest customers for each project participant and the breakdown of water delivery by customer category (i.e., residential, commercial, industrial);
- Setting a specific time period over which data will be collected; and
- Setting the units of measure.

Based on this request, the project participants will be asked to assemble the data and have it prepared to provide to the audit team when they arrive. Data can be in either electronic or hard copy; however, it will be necessary for the data to be taken by the audit team to our home office for evaluation and interpretation. All original files and maps will be returned to the project participants as needed to help support the project's progress.

Task 1.2 - Once the appropriate project information has been gathered for informing and engaging the project participants, the project team will conduct outreach to schedule the site visits for the system wide audits. It is anticipated that no more than 2 or 3 audits will be able to be completed in a single day, such that the project team will be conducting audits over about a 3 week period.

Task responsibilities: and Deliverables

District – provide information regarding the status of the project and contact information associated with each of the project participants

GWI/CSU – Develop the project communications tools/fact sheet; create the audit schedule through phone calls, emails and other techniques.

Task 2 - Conduct the Audit

The in-the-field audit team will perform the following tasks in conducting the audit:

- Collect water distribution information (including a map of the system and the location of key metering locations (e.g., source water metering, customer metering, treatment system water use, fire hydrants, etc.)
- Collect water delivery information (including deliveries to customers and any unbilled uses)[2]
- Collect water billings information (to verify water rate information and to determine correlation of water delivery with water billings (for example to check on billings to municipal users for those utilities with municipal uses))
- Collect other key water distribution system information and policies (e.g., system pressure, length of pipelines, number of customer tie-ins, history of recent leaks, leak detection and repair policies, meter testing and replacement policies)

These data will be used by the audit team to determine the key characteristics of each of the project participant systems; to estimate non-revenue water; and characterize real and apparent system losses for each operating system.

Task responsibilities: and Deliverables

District – provide support to the audit team as needed.

GWI/CSU – conduct all the audits and site visits to collect data, maps and other operational information that will help characterize current system wide water losses; develop field trip report and audit methodology content for the Grant Report.

Task 3 - Perform Calculations

The audit team will use the data collected from each of the project participants to perform those key calculations detailed in the M-36 Manual including:

- Total water supplied (including cross connects with other water sources (e.g., water supplied by the Crowley County)) per period
- Calculate billed authorized consumption per period
- Calculate non-revenue water per period

[2] These data will include verification of water deliveries to key customer categories and identification of largest water users for each project participant.

- Estimate unbilled consumption per period
- Estimate total water losses per period
- Estimate apparent losses per period

These calculations and supporting data will be organized into MS Excel spreadsheets developed for each system wide audit conducted by the project team. The spreadsheets will be used to summarize the data collected from each project participant and perform calculations characterizing system wide real and apparent water losses.

Task responsibilities: and Deliverables

District – provide support to the audit team as needed.

GWI/CSU – conduct all the audits and site visits to collect data, maps and other operational information that will help characterize current system wide water losses; develop field trip report and audit methodology content for the Grant Report.

Task 4 - Develop White Paper for Each Project Participant

The audit team will prepare a white paper summarizing the results of the audit for each project participant, including a data compilation and the results of the calculations. These white papers will be used to provide information to each project participant regarding the findings of the audit, and make recommendations for future tasks and activities that the project partner may consider to reduce ongoing water loss.

These white papers will be circulated to each of the project partners during the planned facilitated project meeting(s) currently contained in the scope of the Regional Water Conservation Plan.

Task responsibilities: and Deliverables

District – provide support to the audit team as needed, including a review of the data analyses and the draft white papers.

GWI/CSU – configure the spreadsheets using the data provided by the project participants; prepare all data analyses; and prepare the Draft and Final white papers for District review and comment and for distribution to the project participants.

Task 5 – Amend the Regional Water Conservation Plan

The results of the system wide audits will be used to support the development of a more robust Regional Water Conservation Plan. In particular, information collected during this project will help identify the true nature and need of local water loss control programs for each of the project participants by estimating actual current real and apparent water loss in each distribution system; current practices related to meter testing and replacement, balancing of treated water delivery with billed water, and accuracy of past real and apparent water loss calculations prepared by each of the 38 project participants. These data will be used to inform that Regional Water Conservation Plan regarding the need for and cost of improved local water loss accounting and related activities. In addition, the results of the system wide water audits will be used to

assist the District in its efforts to prioritize the implementation phase of the Regional Water Conservation planning effort; identifying where assistance can be best focused and funded, and where the most cost effective water savings can be realized.

Task responsibilities: and Deliverables

District – provide support to the audit team as needed; including review of the Draft and Final project summary and recommendations.[3]

GWI/CSU – complete the integration of the project white papers and project summary into the Regional Water Conservation Plan for District review and comment; and finalize for public review and finally CWCB review as part of the Regional Water Conservation Planning effort.

Task P – Project Administration

Project administration will involve the preparation and review of project invoices; and preparation of the project status reports at 50% and 75% complete.

Task responsibilities: and Deliverables

District – provide information to the project team regarding project costs incurred and in-kind and cash support; review and approve all project invoices; review and approve all project status reports.

GWI/CSU – compile and prepare all project invoices; compile and prepare draft project progress reports for District review and use.

[3] As conceived, there is no scope item included in this grant proposal to create a stand-alone project report for submittal to the CWCB. Rather, the project summary and the white papers developed as part of this proposed project will be included as an appendix in the Regional Water Conservation Plan, which will be provided to the CWCB for its review and assessment.

Attachment A

Budget

The system wide water audits would be performed for all 38 project participants included in Table A-1. The water audit would include costs to visit each entity, collect data, conduct the analyses and prepare a white paper. The budget also includes time and costs for meetings with the District to prepare for the audits, and share information and guidance on reporting and the evaluations. The budget also includes time and costs to amend the Regional Water Conservation Plan with information and analyses resulting from the audits.

Summary of Estimated Project Costs					
Tasks		Total Task Cost	District Match[4]	Participant Match[5]	Requested CWCB Grant
1	Preliminary Audit Tasks	$ 4,553	$ 1,058	$ 439	$ 3,056
2	Conduct the Audit	29,619	6,986	6,650	15,983
3	Perform Analyses	15,776	2,257	0	13,519
4	Develop White Papers	11,933	3,022	1,995	6,916
5	Amend Regional Water Conservation Plan	4,022	1,011	560	2,451
P-1	Project Administration	2,818	1,396	0	1,472
	USBRec Grant				**(15,000)**
	Total	**$68,721**	**15,680**	**9,644**	**28,397**

[4] Includes cash and in-kind match budgeted by the District
[5] Includes in-kind match provided by the project participants

Attachment A

Table A-1 Summary of Project Participant Unaccounted and Unbilled Water

County		Participant	Water unaccounted (%)[1]	Water unbilled (%)[1]
Bent	1	Hasty Water Company	6	-
	2	Las Animas, City of	1	3
	3	McClave Water Assoc.	15	15
Crowley	4-7	Crowley County Commissioners (includes #1 96 Pipeline Company, #8 Crowley County Water Association, #9 Town of Crowley, and #29 Town of Ordway)[2]	8.4	8.4
	8	Olney Springs, Town of	7.5	5
	9	Sugar City, Town of	-	10
Kiowa	10	Eads, Town of	5	-
Otero	11	Beehive Water Assn	-	-
	12	Bents Fort Water Co.	10	10
	13	East End Water Assn.	5	5
	14	Eureka Water Co.	18	18
	15	Fayette Water Assn.	-	-
	16	Fowler, Town of (potable only)	5	35
	17	Hancock Inc.	6	-
	18	Hilltop Water Co.	-	15
	19	Holbrook Center Soft Water	5	5
	20	Homestead Improvement Assn.	5	5
	21	La Junta, City of	7	1
	22	Manzanola, Town of	17.5	-
	23	Newdale-Grand Valley Water Co.	-	16
	24	North Holbrook Water	-	-
	25	Patterson Valley Water Co.	11	11
	26	Rocky Ford, City of	-	-
	27	South Side Water Assoc. (La Junta)	-	-
	28	South Swink Water Co.	14	14
	29	Swink, Town of	12	12
	30	Valley Water Co.	17	17
	31	Vroman	-	-
	32	West Grand Valley Water Inc.	-	10
	33	West Holbrook Water	-	-
Prowers	34	Lamar, City of	17.5	17.5
	35	May Valley Water Assoc.	15	-
	36	Wiley, Town of	5	-
Pueblo	37	Boone, Town of	-	-
	38	St. Charles Mesa Water District	17	17

1 From the “Merrick Participant Surveys”
2 Weighted based on population data provided in the “Merrick Participant

Attachment A

Based on the size of the proposed project, and the scope of work presented above, the total project cost is estimated to be $68,721, with approximately 37% of the project provided in match from the District and the project participants through in-kind and cash contributions. Details of the project budget and match can be found in Attachment B of this grant application.

Schedule

The proposed schedule for the above defined scope of work will be integrated into the ongoing Regional Water Conservation Planning effort. The revised project schedule is proposed to be as follows:

Receive authorization to proceed with system wide audits	June 20, 2011
Developing talking points and initiate data collection and meetings with project participants	July 10
Conduct audits with project participants	August 8 – 26
Complete data analyses	September 23
Complete Draft Regional WC Plan	November 11
Conduct meeting with project participants	November 29
Finalize Regional WC Plan for Public Comment	December 30
Public Comment Period	January 1 – March 1, 2012
Finalize Regional WC Plan for submittal to CWCB	March 15, 2012

Deliverables

The project will produce the following deliverables:

- Project Progress Reports (50% and 75%, in August and December, respectively)
- White Papers for the Individual Project Participants
- System Wide Audit Summary Report (which will be an appendix to the Regional WC Plan)

Attachment B
Project Budget

Southeastern Colorado Water Conservancy District
Systemwide Audits to Support Regional Water Conservation Planning

6/30/11

ITEMS OF WORK	T. Bouvette/GWI HOURS $98	T. Bouvette/GWI SUB TOTAL	MaryLou Smith/CSU Water Center HOURS $75	MaryLou Smith/CSU Water Center SUB TOTAL	Expenses	District Water Conservation Coordinator (in-kind) HOURS $55	District Water Conservation Coordinator (in-kind) SUB TOTAL	Project Participants Staff (In-Kind) HOURS $35	Project Participants Staff (In-Kind) SUB TOTAL	Total Project Cost	Cash Required	CWCB Grant Request	SECWCD Cash Contribution	USBRec Grant Funds
Step 1 - Prepare for Audits														
1.1 Develop Audit Communications	8	$784	8	$600	$75	8	$440	0	$0	$1,899	$1,459	$878	$166	$415
1.2 Schedule Audits	2	$196	24	$1,800	$0	4	$220	13	$439	$2,655	$1,996	$1,185	$232	$579
Sub-Total	***10***	***$980***	***32***	***$2,400***	***$75***	***12***	***$660***	***13***	***$439***	***$4,554***	***$3,455***	***$2,063***	***$398***	***$994***
Step 2 - Conduct Audits														
2.1 Conduct Audits	152	$14,896	8	$600	$3,073	80	$4,400	190	$6,650	$29,619	$18,569	$9,518	$2,586	$6,465
Sub-Total	***152***	***$14,896***	***8***	***$600***	***$3,073***	***80***	***$4,400***	***190***	***$6,650***	***$29,619***	***$18,569***	***$9,518***	***$2,586***	***$6,465***
Step 3 - Perfom Analyses														
3.1 Input Data	76	$7,448	0	$0	$0	8	$440	0	$0	$7,888	$7,448	$5,037	$689	$1,722
3.2 Develop Analyses	76	$7,448	0	$0	$0	8	$440	0	$0	$7,888	$7,448	$5,037	$689	$1,722
Sub-Total	***152***	***$14,896***	***0***	***$0***	***$0***	***16***	***$880***	***0***	***$0***	***$15,776***	***$14,896***	***$10,075***	***$1,377***	***$3,444***
Step 4 - Develop White Papers														
4.1 Develop Draft White Papers	57	$5,586	12	$900	$75	28	$1,540	0	$0	$8,101	$6,561	$4,088	$707	$1,766
4.2 Develop Final White Papers	14	$1,397	0	$0	$0	8	$440	57	$1,995	$3,832	$1,397	$226	$335	$836
Sub-Total	***71***	***$6,983***	***12***	***$900***	***$75***	***36***	***$1,980***	***57***	***$1,995***	***$11,933***	***$7,958***	***$4,314***	***$1,042***	***$2,602***
Step 5 - Integrate Results of Audits into Regional Water Conservation Plan														
5.1 Integrate with Regional Plan	24	$2,352	6	$450	$0	12	$660	16	$560	$4,022	$2,802	$1,572	$351	$879
Sub-Total	***24***	***$2,352***	***6***	***$450***	***$0***	***12***	***$660***	***16***	***$560***	***$4,022***	***$2,802***	***$1,572***	***$351***	***$879***
Project Administration Tasks														
P.1 Develop Monthly Invoices, Status Reports and Progress Reports	16	$1,568	2	$150	$0	20	$1,100	0	$0	$2,818	$1,718	$856	$246	$616
Sub-Total	***16***	***$1,568***	***2***	***$150***	***$0***	***20***	***$1,100***	***0***	***$0***	***$2,818***	***$1,718***	***$856***	***$246***	***$616***
Total Project Costs	**425**	**$ 41,674.50**	**60**	**$ 4,500.00**	**$ 3,222.50**	**176**	**$ 9,680.00**	**276**	**$ 9,643.90**	**$ 68,720.90**	**$ 49,397.00**	**$ 28,397**	**$ 6,000**	**$ 15,000**

District Contributions			**% of Project**
In-Kind	$	9,680	14%
Cash	$	6,000	9%
Partner Contributions			
In-Kind	$	9,644	14%
US BRec Grant			
Grant	$	15,000	22%
CWCB Grant Request			
	$	28,397	41%
Total	**$**	**68,721**	

Total Project Match **59%**

BOARD OF
County Commissioners
CROWLEY COUNTY
603 MAIN ST. • SUITE 2
ORDWAY, COLORADO 81063
Phone (719) 267-5555 Ext. 2 • Fax (719) 267-3114

MATTHEW HEIMERICH, DIST. 1
FRANK GRANT, DIST. 2
T.E. (Tobe) ALLUMBAUGH, DIST. 3

September 21, 2009

RECEIVED
SEP 22 2009
Southeastern Colorado Water Conservancy District

SECWCD OFFICIAL ORIGINAL

COPIED TO:
Jean
Phil

Ms. Genoveva Deheza
Office of Water Conservation and Drought Planning
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, CO 80203

Dear Ms. Deheza,

Re: Support of a regional Arkansas Valley Conduit Water Conservation Plan

Our organization is in support of the Southeastern Colorado Water Conservancy District's (District) intentions to develop a regional Water Conservation Plan (Plan) for the Arkansas Valley Conduit (Conduit). The Conduit will provide clean water to the communities east of Pueblo in the lower Arkansas River Valley in southeastern Colorado. Knowing how precious our water resources are now and into the future, we embrace the importance of water conservation, water use efficiency, and wise water use in our community.

The regional Plan will provide the Conduit participants with a "toolbox" of water conservation measures and programs in which the participants can choose the particular programs that best suit their individual needs. In addition, the District will provide technical assistance and funding to implement the Plan.

Our organization applauds the Colorado Water Conservation Board (CWCB) for developing its water efficiency grant program, and we will continue to support this important state program into the future. We strongly encourage the CWCB and Office of Water Conservation and Drought Planning to consider the worthwhile and important merits of a regional Water Conservation Plan for the Arkansas Valley Conduit and award the requested funds to this project.

To help move water conservation to the next level in the Arkansas River Valley and in the State our organization fully supports this project. Thank you for your consideration.

Sincerely,

T.E. (Tobe) Allumbaugh

Town of Eads

P.O. Box 8 • 110 W. 13th Street
Eads, CO 81036-0008
719.438.5590
Fax 719.438.5652
townofeads10@hotmail.com

August 31, 2009

Ms. Genoveva Deheza
Office of Water Conservation and Drought Planning
Colorado Water Conservation Board 1313 Sherman Street, Room 721
Denver, CO 80203

RE: Support of a regional Arkansas Valley Conduit Water Conservation Plan

Dear Ms. Deheza:

The Town of Eads is in support of the Southeastern Colorado Water Conservancy District's (District) intentions to develop a regional Water Conservation Plan (Plan) for the Arkansas Valley Conduit (Conduit). The Conduit will provide clean water to the communities east of Pueblo in the lower Arkansas River Valley in southeastern Colorado. Knowing how precious our water resources are now and into the future, we embrace the importance of water conservation, water use efficiency, and wise water use in our community.

The regional Plan will provide the Conduit participants with a "toolbox" of water conservation measures and programs in which the participants can choose the particular programs that best suit their individual needs. In addition, the District will provide technical assistance and funding to implement the Plan.

The Town of Eads applauds the Colorado Water Conservancy Board (CWCB) for developing its water efficiency grant program, and we will continue to support this important state program into the future. We strongly encourage the CWCB and Office of Water Conservation and Drought Planning to consider the worthwhile and important merits of a regional Water Conservation Plan for the Arkansas Valley Conduit and award the requested funds to this project.

To help move water conservation to the next level in the Arkansas River Valley and in the State, the Town of Eads fully supports this project. Thank you for your consideration.

Sincerely,

Cardon D. Berry

Cardon Berry
Mayor
Town of Eads

SOUTH SWINK WATER COMPANY
P.O. Box 442
Swink, CO 81077
719-384-5458

COPY

August 19, 2009

Ms. Genoveva Deheza
Office of Water Conservation and Drought Planning
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, CO 80203

Dear Ms. Deheza,

Re: Support of a regional Arkansas Valley Conduit Water Conservation Plan

Our organization is in support of the Southeastern Colorado Water Conservancy District's (District) intentions to develop a regional Water Conservation Plan (Plan) for the Arkansas Valley Conduit (Conduit). The Conduit will provide clean water to the communities east of Pueblo in the lower Arkansas River Valley in southeastern Colorado. Knowing how precious our water resources are now and into the future, we embrace the importance of water conservation, water use efficiency, and wise water use in our community.

The regional Plan will provide the Conduit participants with a "toolbox" of water conservation measures and programs in which the participants can choose the particular programs that best suit their individual needs. In addition, the District will provide technical assistance and funding to implement the Plan.

Our organization applauds the Colorado Water Conservation Board (CWCB) for developing its water efficiency grant program, and we will continue to support this important state program into the future. We strongly encourage the CWCB and Office of Water Conservation and Drought Planning to consider the worthwhile and important merits of a regional Water Conservation Plan for the Arkansas Valley Conduit and award the requested funds to this project.

To help move water conservation to the next level in the Arkansas River Valley and in the State our organization fully supports this project. Thank you for your consideration.

Sincerely,

LAMAR COLORADO

EXCELLENCE & PRIDE CITY WIDE

August 31, 2009

Ms. Genoveva Deheza
Office of Water Conservation and Drought Planning
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, CO 80203

Dear Ms. Deheza,

Re: Support of a regional Arkansas Valley Conduit Water Conservation Plan

Our organization is in support of the Southeastern Colorado Water Conservancy District's (District) intentions to develop a regional Water Conservation Plan (Plan) for the Arkansas Valley Conduit (Conduit). The Conduit will provide clean water to the communities east of Pueblo in the lower Arkansas River Valley in southeastern Colorado. Knowing how precious our water resources are now and into the future, we embrace the importance of water conservation, water use efficiency, and wise water use in our community.

The regional Plan will provide the Conduit participants with a "toolbox" of water conservation measures and programs in which the participants can choose the particular programs that best suit their individual needs. In addition, the District will provide technical assistance and funding to implement the Plan.

Our organization applauds the Colorado Water Conservation Board (CWCB) for developing its water efficiency grant program, and we will continue to support this important state program into the future. We strongly encourage the CWCB and Office of Water Conservation and Drought Planning to consider the worthwhile and important merits of a regional Water Conservation Plan for the Arkansas Valley Conduit and award the requested funds to this project.

To help move water conservation to the next level in the Arkansas River Valley and in the State our organization fully supports this project. Thank you for your consideration.

Sincerely,

Doug Montgomery
Water and Wastewater Director
City of Lamar

CITY OF LAMAR
102 EAST PARMENTER • LAMAR, COLORADO 81052-3299
719/336-4376 • FAX 719/336-2787

Board of County Commissioners

Prowers County
301 SOUTH MAIN, SUITE 215
LAMAR, COLORADO 81052-2857
(719) 336-8025 FAX: (719) 336-2255

HENRY SCHNABEL, HOLLY
FIRST DISTRICT

JOE D. MARBLE, LAMAR
SECOND DISTRICT

GENE MILLBRAND, LAMAR
THIRD DISTRICT

JANA COEN
CLERK TO THE BOARD

REGINA J. DORENKAMP
COUNTY ADMINISTRATOR

JOHN LEFFERDINK
COUNTY ATTORNEY

September 29, 2009

Ms. Genoveva Deheza
OFFICE OF WATER CONSERATION
AND DROUGHT PLANNING
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, CO 80203

RE: Support of a Regional Arkansas Valley Conduit Water Conservation Plan

Dear Ms. Deheza:

The Prowers County Board of County Commissioners is in support of the Southeastern Colorado Water Conservancy District's (District) intentions to develop a regional Water Conservation Plan (Plan) for the Arkansas Valley Conduit (Conduit) which will provide clean water to the communities east of Pueblo in the lower Arkansas River Valley in Southeastern Colorado. Our water resources are and forever will be of paramount importance. Therefore, we embrace water conservation, water use efficiency, and wise water use in our community.

We understand that the regional Plan will provide the Conduit participants with a "toolbox" of water conservation measures and programs in which the participants can choose the particular programs that best suit their individual needs. In addition, we understand that the District will provide technical assistance and funding to implement the Plan.

We applaud the Colorado Water Conservation Board (CWCB) for developing its water efficiency grant program, and we will continue to support this important state program into the future. We strongly encourage the CWCB and Office of Water Conservation and Drought Planning to consider the worthwhile and important merits of a regional Water Conservation Plan for the Arkansas Valley Conduit and award the requested funds to this project. We fully support this project to help move water conservation to the next level in the Arkansas River Valley and in the State of Colorado. Thank you for your consideration.

Sincerely yours,
PROWERS COUNTY BOARD OF COMMISSIONERS

Gene Millbrand, Chairman

Joe D. Marble, Vice-Chairman

Henry Schnabel, Commissioner

/rjd

August 31, 2009

Ms. Genoveva Deheza
Office of Water Conservation and Drought Planning
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, CO 80203

Dear Ms. Deheza,

Re: Support of a regional Arkansas Valley Conduit Water Conservation Plan

Our organization is in support of the Southeastern Colorado Water Conservancy District's (District) intentions to develop a regional Water Conservation Plan (Plan) for the Arkansas Valley Conduit (Conduit). The Conduit will provide clean water to the communities east of Pueblo in the lower Arkansas River Valley in southeastern Colorado. Knowing how precious our water resources are now and into the future, we embrace the importance of water conservation, water use efficiency, and wise water use in our community.

The regional Plan will provide the Conduit participants with a "toolbox" of water conservation measures and programs in which the participants can choose the particular programs that best suit their individual needs. In addition, the District will provide technical assistance and funding to implement the Plan.

Our organization applauds the Colorado Water Conservation Board (CWCB) for developing its water efficiency grant program, and we will continue to support this important state program into the future. We strongly encourage the CWCB and Office of Water Conservation and Drought Planning to consider the worthwhile and important merits of a regional Water Conservation Plan for the Arkansas Valley Conduit and award the requested funds to this project.

To help move water conservation to the next level in the Arkansas River Valley and in the State our organization fully supports this project. Thank you for your consideration.

Sincerely,

Town of Crowley
Town Clerk, Paula Wyeno