SOUTHEASTERN COLORADO
**Water Conservancy District**
*"Your investment in water"*

December 14, 2009

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

Dear Veva,

The Southeastern Colorado Water Conservancy District (District) is seeking funding from the Colorado Water Conservation Board (CWCB) Water Efficiency Grant Program to develop a regional Water Conservation Plan (Plan) for the Arkansas Valley Conduit (Conduit).

It is the District's intent to develop the regional water conservation plan (Plan) based on the CWCB May 2005 Water Conservation Plan Development Guidance Document. In order to nurture buy-in from the Conduit participants the programs will be developed at their request and keeping the individual participant's needs in mind. The District intends to develop a Tool Box of conservation programs for the Plan. A participant will be able to access the Tool Box and choose to implement ready-made conservation programs that best suit their individual needs.

The District is requesting $39,926 in CWCB grant funding. To support this project the District will provide $29,982 in in-kind staff time and $39,926 the District has received from a USBR Water Conservation Field Services grant. In addition, the Conduit participants will provide $35,372 in-kind services for development of the Plan and Tool Box. The total cost of the Conduit Water Conservation Plan and Tool Box development will be $145,207.

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

Sincerely,

Jean Van Pelt

Jean Van Pelt

Cc: SECWCD District Files
Tracy Bouvette, Great Western Institute
MaryLou Smith, Aqua Engineering
Reed Dills, CWCB Board of Directors
Bill Long, SECWCD AVC Committee Chair

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# HB09-1017
# Grant Application to the Colorado Water Conservation Board
# Water Efficiency Grant Program

**Applicant:** Southeastern Colorado Water Conservancy District

**Project Name:** Arkansas Valley Conduit Regional Water Conservation Plan

**Goal:** The Southeastern Colorado Water Conservancy District (District) is seeking funding from the Colorado Water Conservation Board (CWCB) to develop a regional Water Conservation Plan (Plan) for the Arkansas Valley Conduit (Conduit).

It is the District's intent to develop the best programs regional water conservation plan (Plan) that is based on the CWCB May 2005 Water Conservation Plan Development Guidance Document. In addition, to nurture buy-in from the Conduit participants the programs will be developed at their request and keeping the individual participant's needs in mind.

The District intends to develop a Tool Box of conservation programs for the Plan. A participant will be able to access the Tool Box and choose to implement ready-made conservation programs that best suit their individual needs. The District will pursue grant funds to implement the Plan and will provide technical assistance to the Conduit participants in implementing the programs. In addition, the District will also require annual reporting from the participants on the success and the water savings found from implementing the various programs in the Plan.

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

## Project Overview and Background

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.

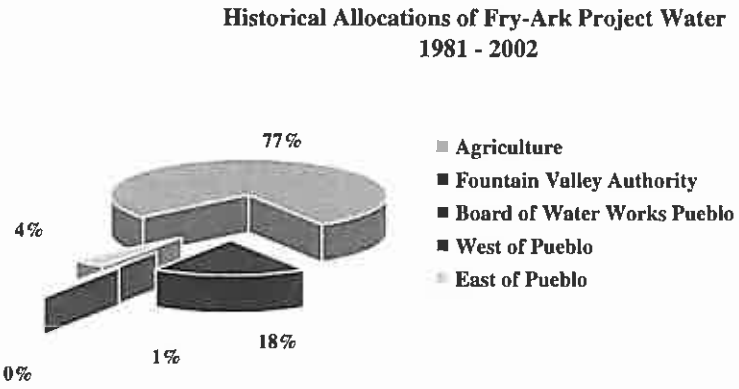
The Arkansas Valley Conduit will be the last component of the FAP to be built. It will provide clean drinking water to approximately forty communities and 46,000 people east of Pueblo in the lower Arkansas River Valley. When the Conduit is completed it will provide a reliable clean source of water for 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.

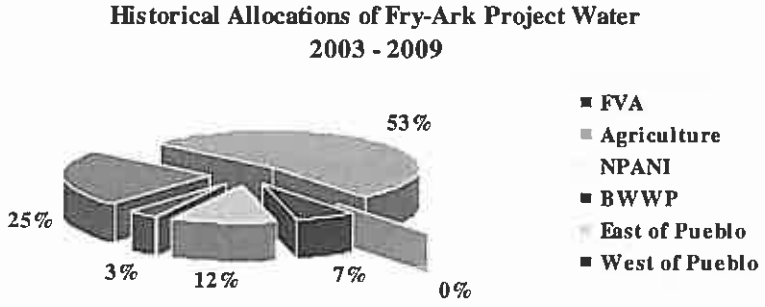
The request for FAP water must come from entities located within the District. Each spring the District entertains requests for allocation of FAP water from domestic, municipal, and agricultural entities. The District Water Allocation Principles state that a minimum of 51% of FAP water will be made available 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.

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.

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, and the cities of Fountain, Salida, Canon City, and Florence. The Board of Water Works of Pueblo, St. Charles Mesa Water District, and the Cities of La Junta and Lamar are currently in the process of developing or updating their water conservation plans and these plans should be completed by the end of 2010. 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. The District looks forward to working with CWCB on this valuable opportunity and appreciates CWCB's efforts to provide funding to develop such a plan.

## Benefits to the State of Colorado

The development of a regional water conservation plan for the Arkansas Valley Conduit compliments the CWCB mission statement of "Conserve, Develop, Protect, and Manage Colorado's Water for Present and Future Generations". The development of a regional Plan will promote wider water use efficiency within the Arkansas River basin, which is the largest basin in Colorado. The regional Plan will provide ways for the water providers to set realistic conservation goals and to integrate supply and demand side analyses and programs. This will assist the State in taking the next logical step in the process of moving toward more meaningful water conservation statewide, as articulated by the CWCB Board as a goal for the Office of Conservation and Drought Preparedness.

The State's SWSI study indicates that the projected water demand in the Arkansas basin with level 1 conservation measure in place in 2030 will be approximately 355,000 AF. That is an increase of 98,000 AF or a 38% increase in demand. A major finding in the study was that competition for water will intensify due to significant increases in population, together with agricultural water needs, and an increased focus on recreational and environmental water uses.

Currently, setting goals and integrating conservation programs is difficult for small water providers, especially without the right tools in the Tool Box. By developing a Tool Box

of conservation measures and programs and assisting the water provider with technical expertise and funding mechanisms it is a win-win situation for the provider, the District, and the State. Although the Tool Box created for the District may have some biases related to the needs of the Conduit participants, a substantial amount of the Tool Box contents will be transferable to other Colorado geographies. In addition, the Tool Box will integrate and utilize the Water Conservation Best Management Practices (BMP) Guidebook, which is being developed with CWCB funding, by Colorado WaterWise (CWW). This will provide excellent feedback to the State, CWW, and the District on how the BMPs could be implemented by many different types of entities, including on a regional basis.

Due to the current economic conditions, the CWCB may be interested in supporting the development of regional Plans that encompass many water providers rather than funding the development of individual Plans. This is very true for the Conduit participants, three Conduit participants are covered entities and are required by the State to develop and implement a Plan. The CWCB grant funds needed to develop the three Plans has been approximately $50,000. The District is requesting only $39,926 to develop a regional Plan (the three covered entities have an option and will be encouraged to use the Tool Box as well as the resources). This opportunity represents a significant saving and the CWCB will be able to extend limited financial resources further by supporting regional Plans.

Another benefit to the State and CWCB will be that District will be responsible for the management, facilitation, collection of data, and track the successes and actual water savings when the regional Plan is implemented. This will provide CWCB with valuable data not only about the covered entities, but also data from the small water providers and the savings recorded from a regional perspective.

In order to insure the Conduit participants' participation and cooperation in fulfilling the goals of the project, the District will ask each participant to sign a Memorandum of Understanding (MOU). The MOU will not only obligate the participant financially to support the construction and operation of the Conduit, but it will also necessitate them to work with the District in implementing and fulfilling the goals of the Water Conservation Plan.

## Plan Development Contributors

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 develop the Plan and the Tool Box for the participants use. Mr. Bouvette was the primary author of the State's Water Conservation Document. In addition, Great Western Institute will build a project team that will include MaryLou Smith, with the Colorado Water Insitute. Mrs. Smith will develop a communication plan and facilitate meetings with the Conduit participants. A written statement of their roles and contributions to this project as well as contact information is included in Attachment 1.

## Arkansas Valley Conduit Participants

A list of the Conduit participants is included in Attachment 2. Many of them have provided letters of support for the development of the Water Conservation Plan. The letters of support can be found in Attachment 3.

## Specific Goals of the Project

The target audience will be the Conduit participants, but the programs developed for the Plan will be made available not only to the Conduit participants but also to other communities within the District, if they desire to access and implement them.

1. The first goal of the Plan will be to increase the knowledge level of the constituents of the Arkansas Valley Conduit and within the District concerning the value of water and water conservation.
2. The second goal for the regional Plan is to provide ways for the water providers to set conservation goals and to integrate supply and demand side analyses and programs.
3. The third goal will be to document actual water savings from the implementation of the regional Water Conservation Plan.

## Project Description

The District will develop a regional Water Conservation Plan for the Conduit participants, to the best extent possible, which adheres to the requirements of the Bureau of Reclamation and the State of Colorado. As a part of this effort, the District surveyed the Conduit participants in 2008, to determine their needs and desires for conservation and water education (see Attachment 4 for a summary of the survey results). The scope of work was developed based, in part, on the results of the survey.

The District found from the survey that the participants had:

1. Varying levels of needs related to water conservation planning and implementation;
2. Varying degrees of current and/or ongoing water conservation programs; and
3. Varying interests in implementing potential water conservation measures and programs.

## Scope of Work

Therefore, the scope of work was crafted to:

1. Expand and facilitate the level of Conduit participants engagement in this Project such that the diverse degrees of interest and need could be served.
2. Develop a Tool Box, as well as a regional water conservation plan, to assist local water conservation planning efforts and the implementation of the plan.
3. Provide the participants with technical assistance related to learning how to use the Tool Box for purposes of developing meaningful Water Conservation Plan and implementation of the Plan.
4. The District will provide coordination and technical assistance to assist participants in implementing the measures and programs of the Plan.

Attachment 5 provides a detailed task list for the scope of work and the deliverables.

## Project Budget

A detailed project budget is provided in Attachment 6. The District is requesting $39,926 in CWCB grant funding. To support this project the District will provide $29,982 in in-kind staff time and $39,926 the District has received from a USBR Water Conservation Field Services grant. In addition, the Conduit participants will provide $35,372 in-kind services for development of the Plan and Tool Box. The total cost of the Conduit Water Conservation Plan and Tool Box development will be $145,207.

## Project Timeline

A detailed timeline for the project is provided in Attachment 7. The project will begin in May 2010 and should conclude by April 2011. A 50% progress report will be submitted to CWCB in October 2010, a 75% progress report in January 2011, and a final report in April 2011.

## Task Responsibilities

- **District staff will work closely with Great Western Institute:**
  - Management and reporting for the grant project.
  - Development of the Plan.
  - To conduct facilitated meetings with participants.
  - Review and discuss the qualitative and quantitative assessments of the suggested measures and programs.
  - Identify goals and objectives for the Plan.
  - Identify and evaluate water conservation measures and programs.
  - Develop qualitative and quantitative goals for the selected measures and programs.
  - Develop a Tool Box of conservation programs.
  - Develop a website to post the Plan and Tool Box for use. Distribute hardcopies of Plan upon request.
  - Develop a tracking system or data base to determine which programs are being utilized and if goals are being met.
  - Develop future funding plan to ensure funding for implementation of the Plan.
- Serve as a regional coordinator, facilitator, mentor, and provide technical assistance to the participants.
- Insure Conduit participants report annually to the District rather goals are being met for the selected measures and programs and provide data to CWCB.

- **Great Western Institute will work closely with the District:**
  - On the development of the Plan.
  - To conduct facilitated meetings with participants
  - Review and discuss the qualitative and quantitative assessments of the suggested measures and programs.
  - Identify goals and objectives for the Plan.
  - Identify and evaluate water conservation measures and programs.
  - With the District develop a Tool Box of conservation programs.

- Develop qualitative and quantitative goals for the selected measures and programs.
- Develop a tracking system or data base to determine which programs are being utilized and if goals are being met.
- Develop future funding plan to ensure funding for implementation of the Plan.

## Authorized Signature

The undersigned acknowledges that significant resources will need to be designated to this grant project and that the above information is accurate to the greatest extent possible.

James W. Broderick
Executive Director
Southeastern Colorado Water Conservancy District

14 DEC 2009
Date

# Attachment 5
# Project Scope and Tasks

### Southeastern Colorado Water Conservancy District
### Regional Water Conservation Planning Grant Application

**Approach**

The Southeastern Colorado Water Conservancy District's (the "District's") Regional Water Conservation Plan (the "Plan") is being developed in conjunction with the development of the Arkansas Valley Conduit (Conduit). The Plan will generally be developed following the CWCB May 2005 Water Conservation Plan Development Guidance Document to the extent possible given the number and relatively small size of as many of the 40 Project Participants. This attachment outlines the tasks that the District will conduct to complete a Regional Water Conservation Plan.

Included in the scope to complete the Plan will be two sets of supplemental tasks that are deemed critical to the development of the Plan by the District. These two sets of supplemental tasks are:

- Communications with the Conduit Project Participants – this set of tasks include conducting focused outreach and engagement efforts to support the development and selection of water conservation measures and programs that are meaningful and beneficial for the Project Participants, given their circumstances, customer make-up, and water deliveries.
- Development of a Tool Box – this set of tasks include developing and producing a water conservation Tool Box that allow the Project Participants to select and implement key water conservation measures and programs that support there specific needs and circumstances. The Tool Box is expected to chiefly contain measures and programs that address commercial, industrial, and institutional water conservation, although some residential measures and programs will be included.

The key deliverables associated with this project are the Draft and Final Water Conservation Plans, the Draft and Final Tool Box, and the two progress reports which will be provided to the CWCB at 50% and 75% completion of the project. A Draft Plan will be prepared for District staff and the various partner organizations to review and comment. The Draft Plan will also be made available to the public for review and comment at roughly the same time. Following the review process, all staff, stakeholders, and public comments will be compiled and incorporated into the Plan, such that a Final Plan can be adopted and submitted to CWCB for final approval.

The development of the Plan is divided into subtasks similar to what is indicated in the CWCB Model Plan Template. These subtasks list the items that will be included in the Plan for CWCB approval. Where possible, studies conducted by the District and the other Project Participants will be used to support Plan development.

**Project Communications Tasks**

**Purpose**

The activities described under this task will be used to engage and communicate with the 40 Project Participants during the water conservation planning effort. These tasks will be chiefly compromised of meetings with the individual water providers (AKA Project Participants) to support data organization and collection, individual water conservation plan development support, and organizational approval.

**Tasks**

C.1 Kickoff meetings with SECWCD and individual providers – The Great Western Institute (GWI) project team will meet with the District to organize project communications and develop key messaging for communications with the various Project Participants. Next, the key members of the project team will contact and visit with each of the individual Project Participants in face-to-face meetings, to the extent possible, to introduce the project, identify needs and issues, and establish project communications protocol. Follow-up phone calls will be made to those Project Participants that were not available for face-to-face meetings.

C.2 Create "Straw Man" Water Conservation Plan template – a Straw Man Regional Water Conservation Plan will be developed to support future discussions and meetings with the Project Participants, based in part on the insights and issues identified during the meetings conducted during Task C.1. The Straw Man will be circulated to the project participants along with information regarding the project schedule and timing, location and agenda for the facilitated meetings, and the roles of the Project Participants and the District in the regional planning effort.

C.3 First facilitated workshop – The District will convene a meeting with all of the Project Participants to discuss the project status, review data collection and identify potential data gaps. The first facilitated meeting will also be used to present potential goals for the Plan, and the status of water conservation measure and program identification and screening to help the Project Participants identify those measures and programs that may best fit the needs of their customers and water community.

C.4 Second facilitated workshop – Once the project team has substantially completed the tasks related to screening and evaluating the candidate water conservation measures and programs, and has developed the general structure and content of the Tool Box, the second facilitated workshop will be held to continue the engagement of the Project Participants. Specific goals of this facilitated meeting will be to obtain feedback from the Project Participants regarding the proposed Tool Box content and delivery mechanisms. Also critical to this meeting will be a discussion of Plan implementation issues and processes.

C.5 Regional Tool Box Workshops –The District is planning on conducting three regional workshops to provide hands-on training regarding the content, format and use of the Tool Box, which is critical to the overall acceptance, use and applicability of this key project deliverable. These half day workshops will provide an opportunity for Project Participants to understand the use of the Tool Box and establish how the Tool Box supports their individual needs. The workshops will also provide the forum for the District to obtain direct feedback regarding the value and applicability of the Tool Box. This information will be used to help develop the implementation plan for the Plan since the comments obtained from the Project Participants will provide insight into how the Tool Box will support local water conservation efforts.

C.6 Make Board presentations – To assist the Project Participants with their individual water conservation efforts, the project team will make presentations to those entities that request support, to describe the regional water conservation planning process and outcomes, as well as discuss specifics regarding the Plan, the Tool Box and the role of the District in local water conservation planning and implementation efforts.

**Regional Water Conservation Plan Development Tasks**

**Step 1 – Profile the Existing Water System**

**Purpose**
Provide information on the existing water supply systems utilized by the various Project Participants.

**Tasks**
1.1 Profile physical characteristics of the existing water supply system - describe the physical characteristics of the water systems using Worksheet 1-1 as a guide. Included in the summary will be key system characteristics, geographic area served, population and connections served, types of key water users, key existing facilities, and water demand by segment or customer type (if possible) for each of the Project Participants**.**

1.2 Identify all water sources - identify and describe all of the system's water supply sources including attributes, age, and conditions of its use, if possible, for the District and each of the Project Participants.

1.3 Identify system limitations – identify and describe system limitations on the water supply focusing on capacity, reliability and growth related issues.

1.4 Characterize water costs and pricing structures - in coordination with the District, document past and current history of water sales, and current water pricing structures for all municipal, commercial, industrial and institutional uses of water for each of the Project Participants.

1.5 Summarize current water conservation activities - in coordination with the District, using Worksheet 1-3 as a guide. Of particular note will be ongoing system leak detection and repair efforts, tiered water rate structures, meter reading and billing activities, and customer education efforts currently conducted by the District and each of the Project Participants, to the extent that information is available.

**Step 2 – Characterize Water Use and Demand Forecast**

**Purpose**
Provide information on the existing and projected water use for the District and each of the Project Participants.

**Tasks**
2.1 Characterize current water use - in coordination with the District Project Participants, review sales records, production and treatment records and billing records to summarize water use for the District and each of the Project Participants, to the extent practical. Included in the discussion will be quantifications of indoor and outdoor water use, and potable and non-potable water use, if possible.

2.2 Select forecasting method - A demand forecasting method will be selected and described.

2.3 Prepare demand forecast - estimate future water demand by segment or customer class for the District and, to the extent possible, for each of the Project Participants. Worksheet 2-1 will be used as a guide.

**Step 3 – Profile Proposed Facilities**

**Purpose**
Provide information on the facility needs of the District and each of the Project Participants, as appropriate.

**Tasks**
3.1 Identify potential facility needs - identify and describe options to improve and add capacity to the existing water supply systems to meet the water demands outlined in Step 2 for the District and each of the Project Participants, as appropriate (given that some water providers may not have needs for new water facilities). Analyses will include water rights and water storage acquisitions, implementation of the conduit, expansions of water and wastewater treatment plants, treated water storage, major transmission lines, and pump station improvements. Worksheet 3-1 will be used as a guide for this subtask.

3.2 Develop preliminary supply-capacity forecasts – Estimate the timing for new infrastructure construction based on demand projections and current infrastructure capacity. Develop a timeline estimating the capacity of the water supply system, describing new additions and replacements. Evaluate the cost for new facilities and the related debt service, as appropriate.

**Step 4 – Identify Conservation Goals**

**Purpose**
Identify conservation goals for the District and the Project Participants.

**Tasks**
4.1 Identify areas of key savings – identify water savings needs and opportunities by water use type and project partner, based on past uses, ongoing water conservation efforts, recent growth and expected impacts of future measures and programs.

4.2 Develop preliminary water conservation goals - working with the District and the Project Participants, develop preliminary water conservation goals for the District and for local water conservation efforts. A specific water savings target, including percentage of water savings, timeframe during which water savings will occur, as well as how the savings will be measured and verified will be identified for District and Project Partner consideration.

**Step 5 – Identify, Evaluate and Select Conservation Measures and Programs**

**Purpose**
Identify, screen, evaluate and select conservation measures and programs that the District will and the Project Participants may implement.

**Tasks**
5.1 Identify conservation measures and programs – identify candidate water conservation measures and programs using CRS 37.60.126, the Colorado WaterWise Council BMPs, and Worksheets 5-1 and 5-2 as a guide.

5.2 Develop and define screening criteria - Describe the screening criteria used to eliminate some water conservation measures and programs from current use or consideration for short- or mid-term implementation. Long-term implementation of screened measures and programs may be considered in the Plan, but will not be included in any detail.

5.3 Screen conservation measures and programs – use the above-developed criteria to screen the full list of conservation measures and programs to determine which ones will be evaluated further for short- and mid-term implementation. Note that given the nature of the Project Participants and the current water uses in the lower Arkansas River Valley, it is expected that the majority of the measures and programs to be considered for implementation will include those focused on commercial,

industrial and institutional water uses. Some residential uses may also be considered.

5.4 Estimate costs and water savings of conservation options - Using Worksheet 6-1 as a guide, estimate the cost of conservation measures and programs, and the associated water savings. A benefit/cost analysis will be included in the Plan based on implementation cost and expected water savings using ranges to incorporate variations between the different Project Partner water uses and customer types.

5.5 Compare benefits and costs - summarize conservation measure costs and water savings for each of the Project Participants, including a net benefit from all suggested measures based on estimated water savings.

5.6 Select conservation measures and programs - summarize the evaluation of each measure/program and indicate which measures/programs will be implemented by the District and/or included in the Tool Box based on cost and benefit and the ability of the Project Participants to implement the selected measures and programs. The District will also evaluate the overall ability of the District and the Project Participants to measure and verify the effectiveness of the selected conservation measures and programs. The overall water savings from the implementation of the selected measures and programs will be estimated using Worksheet 6-3 as a guide.

**Step 6 – Integrate Resources and Modify Forecasts**

**Purpose**

Modify the supply and demand forecasts to account for water savings from selected conservation measures and programs. The benefits of conservation will be quantified. Effects of water conservation on future revenue and costs will also be evaluated.

**Tasks**

6.1 Revise demand forecast - revise the demand forecast prepared in Step 2 to account for the water savings of the measures/programs from Step 5. Worksheet 7-1 will be used as a guide.

6.2 Summarize forecast modifications and benefits of conservation - develop a graph showing demand and supply with and without conservation. Adjust water conservation goals if necessary.

6.3 Consider impacts on future revenue - quantify impacts on Project Partner revenue related to implementation of selected water conservation measures and programs. Savings in capital improvement projects will be presented, as appropriate. A discussion will also be presented regarding avoided future costs related to water treatment and delivery, wastewater collection and treatment, and replacement water costs.

**Step 7 – Develop Implementation Plan**

**Purpose**
Establish the activities that will be performed to implement the Plan and support local water conservation efforts. This is an important step for it will describe what each of the Project Participants plan to implement and how the Project Participants and the District will work together to track water use, and verify and measure water savings.

**Tasks**
7.1 Develop implementation schedule - identify significant implementation actions, and challenges that may impact the implementation of the selected conservation measures.

7.2 Develop plan for Project Partner implementation efforts - describe how to involve and educate the Project Participants and their customers in the implementation process.

7.3 Develop plan for monitoring and evaluation processes - describe how water conservation will be measured and verified for effectiveness, and what the role of each of the Project Participants, as well as the District will be during monitoring and reporting efforts.

7.4 Develop plan for updating and revising the Plan - describe when and how the Plan will be updated, in part, in accordance with CRS 37.60.126.

7.5 Develop funding strategy for the plan – identify potential funding needs and options related to District and local water conservation implementation efforts. Include listing of potential grants and other relevant funding sources, as well as funding requirements and submittal requirements.

**Step 8 –Prepare Draft Water Conservation Plan and Tool Box**

**Purpose**
Compile Plan components and configure Plan in Draft format.

**Tasks**
8.1 Prepare Draft Plan – compile and format information, data and other content into the Draft Plan for review and comment by the District and each of the Project Participants. Produce adequate copies for public, District and Project Partner review. Include review cycle for District staff prior to completion and circulation of the Draft Plan.

8.2 Prepare Draft Tool Box – compile and format the Tool Box contents in an electronic medium to be accessed via the internet, and reproduced and distributed on CDs. The Tool Box will be prepared to support local water conservation planning and

implementation efforts; be ADA compliant; and contain that information that the Project Participants and the District deem necessary for the consistent implementation of water conservation measures and programs throughout the planning area.

**Step 9 – Finalize and Adopt Plan**

**Purpose**
Revise Draft Plan (including the individual plans for each of the Project Participants and the Regional Plan) based on comments, document public review process, finalize Plan and have the District adopt Final Plan.

**Tasks**
9.1 Gather public and partner comments – distribute the Draft Plan for comment by the public and the Project Participants. Gather and organize public and Project Partner comments, including comments on the Draft Tool Box obtained via the three regional workshops conducted as per Task C.5, and develop comment responses.

9.2 Develop Final Plan – finalize Plan based on comments received, document public comments and comment responses, and produce.

9.3 Develop the Final Tool Box – finalize the Tool Box based on comments received and make available via the internet and on CDs for distribution.

9.4 Adopt Plan – have the District Board, and to the extent necessary the Project Participants, formally adopt the Final Plan.

**Project Administration Tasks**

**Purpose**
Track project budgets, schedules and deliverables, prepare progress reports and invoices.

**Tasks**
P.1 Track project budgets, schedules and deliverables – to support preparation of monthly project invoices, District updates, and CWCB required progress reports.

**Project Deliverables**

- Monthly invoices and project status reports (50% and 75%)
- Meeting notes (as needed)
- Draft Regional Water Conservation Plan for District, Project Partner and Public review (Step 8)
- Final Regional Water Conservation Plan for Adoption by the District and submittal to CWCB for approval (Step 9)
- Draft Tool Box (Step 8)
- Final Tool Box (Step 9)

**Attachment 6**
Project Budget

**Southeastern Colorado Water Conservancy District**
**Regional Water Conservation Planning Grant Application**

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| ITEMS OF WORK | T. Bouvette/GWI HOURS $95 | T. Bouvette/GWI SUB TOTAL | MaryLou Smith/CSU Water Center HOURS $75 | MaryLou Smith/CSU Water Center SUB TOTAL | E. Jordan/GWI HOURS $65 | E. Jordan/GWI SUB TOTAL | Expenses | District Project Manager (in-kind) HOURS $78 | District Project Manager (in-kind) SUB TOTAL | District Water Conservation Coordinator (in-kind) HOURS $55 | District Water Conservation Coordinator (in-kind) SUB TOTAL | District Executive Director (in-kind) HOURS $138 | District Executive Director (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 Cash 50% | USBR/WCFS Grant Cash 50% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Communications Tasks** | | | | | | | | | | | | | | | | | | | |
| C.1 Kick-Off Meetings with SECWCD, Project Partners | 48 | $4,560 | 80 | $6,000 | 0 | $0 | $1,688 | 4 | $312 | 16 | $880 | 4 | $552 | 53 | $1,866 | $15,858 | $12,248 | $6,124 | $6,124 |
| C.2 Create Plan "Straw Man" for Project Partners | 12 | $1,140 | 8 | $600 | 0 | $0 | $0 | 0 | $0 | 8 | $440 | 0 | $0 | 0 | $0 | $2,180 | $1,740 | $870 | $870 |
| C.3 First Facilitated Workshop | 16 | $1,520 | 20 | $1,500 | 0 | $0 | $260 | 6 | $468 | 12 | $660 | 6 | $828 | 80 | $2,800 | $8,036 | $3,280 | $1,640 | $1,640 |
| C.4 Second Facilitated Workshop | 12 | $1,140 | 20 | $1,500 | 0 | $0 | $260 | 6 | $468 | 12 | $660 | 6 | $828 | 80 | $2,800 | $7,656 | $2,900 | $1,450 | $1,450 |
| C.5 Regional Toolbox Workshops | 24 | $2,280 | 32 | $2,400 | 0 | $0 | $960 | 0 | $0 | 24 | $1,320 | 0 | $0 | 90 | $3,150 | $10,110 | $5,640 | $2,820 | $2,820 |
| C.6 Presentations at Partner Board Meetings | 24 | $2,280 | 0 | $0 | 0 | $0 | $260 | 12 | $936 | 48 | $2,640 | 12 | $1,656 | 45 | $1,575 | $9,347 | $2,540 | $1,270 | $1,270 |
| **Sub-Total** | ***136*** | ***$12,920*** | ***160*** | ***$12,000*** | ***0*** | ***$0*** | ***$3,428*** | ***28*** | ***$2,184*** | ***120*** | ***$6,600*** | ***28*** | ***$3,864*** | ***348*** | ***$12,191*** | ***$53,187*** | ***$28,348*** | ***$14,174*** | ***$14,174*** |
| **Regional Planning Tasks** | | | | | | | | | | | | | | | | | | | |
| **Step 1 - Profile of Existing Water System, Water Conservation and Water Use** | | | | | | | | | | | | | | | | | | | |
| 1.1 Profile Physical System | 2 | $190 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 6 | $330 | 0 | $0 | 21 | $718 | $1,316 | $190 | $95 | $95 |
| 1.2 Identify Water Sources | 6 | $584 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 4 | $220 | 0 | $0 | 10 | $359 | $1,241 | $584 | $292 | $292 |
| 1.3 Identify System Limitations | 6 | $584 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 6 | $330 | 0 | $0 | 21 | $718 | $1,710 | $584 | $292 | $292 |
| 1.4 Characterize Water Costs and Pricing Structures | 10 | $974 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 4 | $220 | 0 | $0 | 6 | $215 | $1,487 | $974 | $487 | $487 |
| 1.5 Summarize Current Water Conservation Activities and Effectiveness | 21 | $1,948 | 0 | $0 | 0 | $0 | $0 | 2 | $156 | 12 | $660 | 2 | $276 | 41 | $1,435 | $4,475 | $1,948 | $974 | $974 |
| ***Sub-Total*** | ***45*** | ***$4,280*** | ***0*** | ***$0*** | ***0*** | ***$0*** | ***$0*** | ***6*** | ***$468*** | ***32*** | ***$1,760*** | ***2*** | ***$276*** | ***98*** | ***$3,444*** | ***$10,228*** | ***$4,280*** | ***$2,140*** | ***$2,140*** |
| **Step 2 - Characterize Water Use and Demand Forecasts** | | | | | | | | | | | | | | | | | | | |
| *2.1* Characterize Current Water Use | 10 | $974 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 2 | $110 | 0 | $0 | 21 | $718 | $1,879 | $974 | $487 | $487 |
| 2.2 Select Forecasting Method | 4 | $380 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 2 | $110 | 0 | $0 | 2 | $70 | $638 | $380 | $190 | $190 |
| *2.3* Prepare Demand Forecast | 21 | $1,948 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 8 | $440 | 0 | $0 | 14 | $478 | $2,943 | $1,948 | $974 | $974 |
| ***Sub-Total*** | ***35*** | ***$3,301*** | ***0*** | ***$0*** | ***0*** | ***$0*** | ***$0*** | ***3*** | ***$234*** | ***12*** | ***$660*** | ***0*** | ***$0*** | ***36*** | ***$1,265*** | ***$5,461*** | ***$3,301*** | ***$1,651*** | ***$1,651*** |
| **Step 3 - Profile Proposed Facilities and Projects** | | | | | | | | | | | | | | | | | | | |
| *3.1* Identify Potential Facility Needs | 21 | $1,948 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 4 | $220 | 0 | $0 | 10 | $359 | $2,604 | $1,948 | $974 | $974 |
| 3.2 Develop Preliminary Supply-Capacity Forecasts | 41 | $3,895 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 6 | $330 | 0 | $0 | 14 | $474 | $4,777 | $3,895 | $1,948 | $1,948 |
| ***Sub-Total*** | ***62*** | ***$5,843*** | ***0*** | ***$0*** | ***0*** | ***$0*** | ***$0*** | ***2*** | ***$156*** | ***10*** | ***$550*** | ***0*** | ***$0*** | ***24*** | ***$832*** | ***$7,381*** | ***$5,843*** | ***$2,921*** | ***$2,921*** |
| **Step 4 - Identify Conservation Goals** | | | | | | | | | | | | | | | | | | | |
| 4.1 Identify Areas of Key Water Savings | 6 | $584 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 4 | $220 | 0 | $0 | 14 | $490 | $1,372 | $584 | $292 | $292 |
| 4.2 Develop Preliminary Water Conservation Goals | 12 | $1,140 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 8 | $440 | 2 | $276 | 21 | $735 | $2,669 | $1,140 | $570 | $570 |
| ***Sub-Total*** | ***18*** | ***$1,724*** | ***0*** | ***$0*** | ***0*** | ***$0*** | ***$0*** | ***2*** | ***$156*** | ***12*** | ***$660*** | ***2*** | ***$276*** | ***35*** | ***$1,225*** | ***$4,041*** | ***$1,724*** | ***$862*** | ***$862*** |
| **Step 5 - Identify, Screen and Evaluate Conservation Measures and Programs** | | | | | | | | | | | | | | | | | | | |
| 5.1 Identify Conservation Measures and Programs | 6 | $570 | 0 | $0 | 0 | $0 | $0 | 0 | $0 | 4 | $220 | 0 | $0 | 16 | $560 | $1,350 | $570 | $285 | $285 |
| 5.2 Develop and Define Screening Criteria | 2 | $190 | 0 | $0 | 0 | $0 | $0 | 0 | $0 | 4 | $220 | 0 | $0 | 4 | $140 | $550 | $190 | $95 | $95 |
| 5.3 Screen Conservation Measures and Programs | 6 | $570 | 0 | $0 | 0 | $0 | $0 | 0 | $0 | 2 | $110 | 0 | $0 | 16 | $560 | $1,240 | $570 | $285 | $285 |
| 5.4 Estimate Costs and Water Savings of Conservation Options | 34 | $3,254 | 0 | $0 | 0 | $0 | $0 | 0 | $0 | 4 | $220 | 0 | $0 | 24 | $840 | $4,314 | $3,254 | $1,627 | $1,627 |
| 5.5 Compare Benefits and Costs | 12 | $1,140 | 0 | $0 | 0 | $0 | $0 | 2 | $156 | 6 | $330 | 0 | $0 | 12 | $420 | $2,046 | $1,140 | $570 | $570 |
| 5.6 Select Conservation Measures and Programs | 8 | $760 | 0 | $0 | 0 | $0 | $0 | 2 | $156 | 4 | $220 | 2 | $276 | 21 | $718 | $2,130 | $760 | $380 | $380 |
| ***Sub-Total*** | ***68*** | ***$6,484*** | ***0*** | ***$0*** | ***0*** | ***$0*** | ***$0*** | ***4*** | ***$312*** | ***24*** | ***$1,320*** | ***2*** | ***$276*** | ***93*** | ***$3,238*** | ***$11,629*** | ***$6,484*** | ***$3,242*** | ***$3,242*** |
| **Step 6 - Integrate Resources and Modify Goals** | | | | | | | | | | | | | | | | | | | |
| 6.1 Revise Demand Forecast | 6 | $584 | 0 | $0 | 0 | $0 | $0 | 0 | $0 | 2 | $110 | 0 | $0 | 10 | $348 | $1,043 | $584 | $292 | $292 |
| 6.2 Summarize Forecasted Modifications and Conservation Benefits | 12 | $1,140 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 4 | $220 | 2 | $276 | 10 | $348 | $2,062 | $1,140 | $570 | $570 |
| 6.3 Consider Impacts on Future Costs | 10 | $974 | 0 | $0 | 0 | $0 | $0 | 2 | $156 | 4 | $220 | 2 | $276 | 10 | $348 | $1,974 | $974 | $487 | $487 |
| ***Sub-Total*** | ***28*** | ***$2,698*** | ***0*** | ***$0*** | ***0*** | ***$0*** | ***$0*** | ***3*** | ***$234*** | ***10*** | ***$550*** | ***4*** | ***$552*** | ***30*** | ***$1,045*** | ***$5,079*** | ***$2,698*** | ***$1,349*** | ***$1,349*** |
| **Step 7 - Develop Implementation Plan** | | | | | | | | | | | | | | | | | | | |
| 7.1 Develop Implementation Schedule | 6 | $570 | 4 | $300 | 0 | $0 | $0 | 1 | $78 | 6 | $330 | 0 | $0 | 21 | $735 | $2,013 | $870 | $435 | $435 |
| 7.2 Develop Plan for Partner Participation in Implementation | 21 | $1,948 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 16 | $880 | 1 | $138 | 82 | $2,870 | $5,914 | $1,948 | $974 | $974 |
| 7.3 Develop Plan for Monitoring and Evaluation Processes | 21 | $1,948 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 16 | $880 | 1 | $138 | 82 | $2,870 | $5,914 | $1,948 | $974 | $974 |
| 7.4 Develop Plan for Updating and Revising the Conservation Plan | 4 | $380 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 4 | $220 | 1 | $138 | 6 | $215 | $1,031 | $380 | $190 | $190 |
| 7.5 Develop Funding Strategy | 16 | $1,520 | 0 | $0 | 0 | $0 | $0 | 1 | $78 | 4 | $220 | 1 | $138 | 12 | $420 | $2,376 | $1,520 | $760 | $760 |
| ***Sub-Total*** | ***67*** | ***$6,365*** | ***4*** | ***$300*** | ***0*** | ***$0*** | ***$0*** | ***5*** | ***$390*** | ***46*** | ***$2,530*** | ***4*** | ***$552*** | ***203*** | ***$7,110*** | ***$17,247*** | ***$6,665*** | ***$3,333*** | ***$3,333*** |
| **Step 8 - Prepare Draft Water Conservation Plan and Tool Box** | | | | | | | | | | | | | | | | | | | |
| 8.1 Prepare Draft Plan | 32 | $3,040 | 4 | $300 | 0 | $0 | $250 | 2 | $156 | 12 | $660 | 1 | $138 | 21 | $718 | $5,262 | $3,590 | $1,795 | $1,795 |
| 8.2 Prepare Draft Tool Box | 32 | $3,040 | 2 | $150 | 72 | $4,680 | $250 | 2 | $156 | 8 | $440 | 1 | $138 | 21 | $718 | $9,572 | $8,120 | $4,060 | $4,060 |
| ***Sub-Total*** | ***64*** | ***$6,080*** | ***6*** | ***$450*** | ***72*** | ***$4,680*** | ***$500*** | ***4*** | ***$312*** | ***20*** | ***$1,100*** | ***2*** | ***$276*** | ***41*** | ***$1,435*** | ***$14,833*** | ***$11,710*** | ***$5,855*** | ***$5,855*** |
| **Step 9 - Prepare Final Water Conservation Plan and Tool Box** | | | | | | | | | | | | | | | | | | | |
| 9.1 Gather Public and Partner Comments | 8 | $760 | 16 | $1,200 | 0 | $0 | $0 | 2 | $156 | 12 | $660 | 0 | $0 | 41 | $1,435 | $4,211 | $1,960 | $980 | $980 |
| 9.2 Finalize Plan | 16 | $1,520 | 0 | $0 | 0 | $0 | $250 | 2 | $156 | 4 | $220 | 1 | $138 | 21 | $718 | $3,002 | $1,770 | $885 | $885 |
| 9.3 Finalize Tool Box | 8 | $760 | 0 | $0 | 24 | $1,560 | $250 | 2 | $156 | 4 | $220 | 1 | $138 | 21 | $718 | $3,802 | $2,570 | $1,285 | $1,285 |
| 9.4 Adopt Plan | 4 | $380 | 4 | $300 | 0 | $0 | $0 | 2 | $156 | 2 | $110 | 2 | $276 | 21 | $718 | $1,940 | $680 | $340 | $340 |
| ***Sub-Total*** | ***36*** | ***$3,420*** | ***20*** | ***$1,500*** | ***24*** | ***$1,560*** | ***$500*** | ***8*** | ***$624*** | ***22*** | ***$1,210*** | ***4*** | ***$552*** | ***103*** | ***$3,588*** | ***$12,954*** | ***$6,980*** | ***$3,490*** | ***$3,490*** |
| **Project Administration Tasks** | | | | | | | | | | | | | | | | | | | |

**Southeastern Colorado Water Conservancy District**
**Regional Water Conservation Planning Grant Application**

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| ITEMS OF WORK | | T. Bouvette/GWI | | MaryLou Smith/CSU Water Center | | E. Jordan/GWI | | Expenses | District Project Manager (in-kind) | | District Water Conservation Coordinator (in-kind) | | District Executive Director (in-kind) | | Project Participants Staff (In-Kind) | | Total | Cash | CWCB Grant | USBR/WCFS Grant |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HOURS $95 | SUB TOTAL | HOURS $75 | SUB TOTAL | HOURS $65 | SUB TOTAL | | HOURS $78 | SUB TOTAL | HOURS $55 | SUB TOTAL | HOURS $138 | SUB TOTAL | HOURS $35 | SUB TOTAL | Project Cost | Required | Cash 50% | Cash 50% |
| P.1 | Develop Monthly Invoices, Status Reports and Progress Reports | 16 | $1,520 | 4 | $300 | 0 | $0 | $0 | 6 | $468 | 16 | $880 | 0 | $0 | 0 | $0 | $3,168 | $1,820 | $910 | $910 |
| | ***Sub-Total*** | ***16*** | ***$1,520*** | ***4*** | ***$300*** | ***0*** | ***$0*** | ***$0*** | ***6*** | ***$468*** | ***16*** | ***$880*** | ***0*** | ***$0*** | ***0*** | ***$0*** | ***$3,168*** | ***$1,820*** | ***$910*** | ***$910*** |
| | **Total Project Costs** | **575** | ***$54,635*** | **194** | ***$14,550*** | **96** | ***$6,240*** | ***$4,428*** | **71** | ***$5,538*** | **324** | ***$17,820*** | **48** | ***$6,624*** | **1,011** | ***$35,372*** | ***$145,207*** | ***$79,853*** | ***$39,926*** | ***$39,926*** |

**Attachment 7**
**Proposed Project Schedule**
**SECWCD Regional Water Conservation Plan Development Project**

**Southeastern Colorado Water Conservancy District**
**Regional Water Conservation Planning Grant Application**