



SOUTHEASTERN COLORADO

Water Conservancy District

"Your investment in water"

To: Ben Wade, Colorado Water Conservation Board

From: Jean Van Pelt, Southeastern Colorado Water Conservancy District

Subject: 75% Report on Status of Regional Water Conservation Plan Project – Review of Project Budget and Scope Revisions

Date: November 7, 2014

The Southeastern Colorado Water Conservancy District (hereafter the "District") contracted with Sustainable Practices to execute the above referenced project in accordance with two grant awards that the District received – one from the US Bureau of Reclamation (Reclamation) and the other from the Colorado Water Conservation Board (CWCB). The scope of work, budget and schedule developed for the project, which was included in the grant application to the CWCB and was referenced in the application to Reclamation, included tasks with the following headings:

- Project Communications
- Perform System Wide Audits for the Master Contract Participants (and collect baseline data)
- Develop the Draft Addendum to the Existing Regional Water Conservation Plan
- Develop the Final Addendum to the Existing Regional Water Conservation Plan
- Prepare Two (2) Water Conservation Plans for the Upper and Lower Arkansas Districts
- Prepare Four (4) Local Water Conservation Plans
- Develop Enhancements to the District's BMP Tool Box (Case Studies, Water Rates and FAQs)
- Conduct Project Administration

The total budget for this effort was budgeted at \$107,126.26. The budget includes Reclamation funding of \$40,000, CWCB funding in the amount of \$37,976.26 and District and participants in-kind contributions of \$29,150. Table 1 presents a summary of the costs incurred through October 28, 2014, and an estimate of costs to complete each task as per the recommendations provided in this report.

Table 1 – Summary of Current Project Budget				
Tasks	Budget	Incurred	Remaining	Estimate to Complete
Project Communications	\$ 12,265.00	\$ 10,586.15	\$ 1,678.85	\$ 1,678.85
System Wide Audits	\$ 15,350.00	\$ 22,133.46	\$ (6,783.46)	\$ 4,200.00
Draft Addendum	\$ 6,900.00	\$ 2,850.00	\$ 4,050.00	\$ 4,050.00
Final Addendum	\$ 3,200.00	\$ -	\$ 3,200.00	\$ 1,600.00
Two Water Conservation Plans	\$ 10,000.00	\$ 5,300.00	\$ 4,700.00	\$ 4,700.00
Four Water Conservation Plans	\$ 24,915.00	\$ 15,600.90	\$ 9,314.10	\$ 1,180.64
BMP Tool Box Enhancements	\$ 4,046.26	\$ 1,996.26	\$ 2,050.00	\$ 800.00
Project Administration	\$ 1,300.00	\$ 800.00	\$ 500.00	\$ 500.00
Total	\$ 77,976.26	\$ 59,266.77	\$ 18,709.49	\$ 18,709.49

Project Task Status

There are a number of tasks that have required the expenditure of resources above the budget estimate included in the grant application. The increases in costs to perform the work contained in the scope include the following items by task.

- i) The system wide audits required substantially more effort to complete than originally budgeted. This occurred for numerous reasons. Note that even though only 10 of the originally scheduled 13 audits were completed, meetings were scheduled and held with all 13 organizations.
 - a. First, the Master Contract participants that were scheduled to be audited were at times difficult to schedule, and in more than one case, multiple site visits were required to collect data. This included attempting to schedule an audit with Colorado Springs Utilities which ended up not occurring since this organization withdrew from this project. In addition, audit meetings were held with the Upper Arkansas Water Conservancy District and the Lower Arkansas Valley Water Conservancy District; however, they did not have the data to support a water audit that follows the AWWA M-36 methodology.

- b. Second, for nearly all the organizations that were audited, follow up communications were required to collect those data that had been requested, and often times hard copy data entry was needed to develop workable spreadsheet models to prepare the water audits.
 - c. Third, one of the organizations, Security, was found to have a grant from CWCB for a System Wide Audit. Although Security was conducting an audit, it proved to be difficult to coordinate the two auditing efforts, requiring multiple data requests and numerous hours spent identifying the differences between the data that Sustainable Practices received from the organization and the data that was provided to the third party doing the audit for Security under the CWCB grant. In addition, the system wide audit that was performed by Security independent of the District's work required that the District adhere to a more stringent assessment of the audit data, developing performance indicators in a manner consistent with the AWWA M-36 methodology. Although this methodology was included by reference in the grant application, the level to which it was applied was not as extensive in the scope as was necessary during project execution. The additional methodology was added to not only Security, but all 10 Master Contract participants and all 39 Arkansas Valley Conduit participants such that a consistent data base could be established and maintained by the District in support of the Regional Water Conservation efforts.
 - d. Fourth, follow-up meetings with the Master Contract participants are anticipated as the system wide audit reports are delivered for their review and comment since many of the reports indicate that numerous best management practice improvements are needed to better characterize water loss. These meetings were not originally envisioned in the scope since it was not anticipated that as many issues were to be identified as a result of the auditing effort.
- ii) The development of four local water conservation plans has required more effort to complete than originally budgeted. This occurred for numerous reasons:
- a. First, two of the organizations that were identified in the original four entities that were slated for this scope task (La Junta and Lamar, in addition to South Swink and Las Animas) were determined to be larger planning projects than could be reasonably funded under this project, such that both organizations chose to pursue alternative funding with the CWCB. La Junta has since received funding and Lamar is in the process of completing its application. Costs were incurred under this project to meet with both organizations and initiate data collection before the decision was made to seek alternative funding sources.
 - b. Second, once funds were freed up for other local water conservation planning efforts, Rocky Ford was identified as a local community with need for a local water conservation plan and the interest to support a planning effort. Numerous meetings with the new Town Manager and Town staff have helped to develop a data base robust enough to support development of a local water conservation plan, however the labor required to

meeting multiple times with Rocky Ford and organize and hard copy enter the data from the Town substantially impacted the task budget.

- c. Third, it is apparent that the costs that have been needed to perform the system wide audits and develop the audit reports has exceeded that tasks budget, such that the remaining budget for this task should be reallocated to cover those costs.

Proposed Scope and Budget Revisions

Based on the budget implications of the system wide audits and the local water conservation plans, the following list details the proposed set of project scope and budget revisions that are proposed to complete the project without increasing the project cost. Table 1 summarizes the costs and budget revisions that are presented below.

Note that additional grant funding will be pursued at a later date to continue the implementation of the Regional Water Conservation Plan, and support regional and local water conservation efforts in accordance with the goals of the State of Colorado. However, no additional funding will be needed for this project as long as the proposed scope and budget revisions are agreed to by Reclamation and CWCB.

Project Communications

Complete this task as scoped, with two more trips to southeastern Colorado related to coordinating the completion of the project and presenting the updated Regional Water Conservation Plan to the District Board. One trip will be funded in part with monies contained in the System Wide Audit budget (as proposed below) and one trip will be conducted in conjunction with other project trips funded separately by Sustainable Practices.

System Wide Audits

Completion of this task will include providing the draft audit reports to each of the ten audited organizations and performing follow-up phone calls and/or face-to-face meetings to review the audit report and clarify recommendations. This effort will require one prolonged trip to the area to support and/or facilitate the review process.

Preparation of Two Water Conservation Plans (for the Water Conservancy Districts)

A draft of the Water Efficiency and Management Plan has been prepared for the Upper Arkansas Water Conservancy District and it is in review. A draft of the Water Efficiency and Management Plan for the Lower Arkansas Valley Water Conservancy District is waiting for a response to a recent data request, which has been partially addressed. Both plans are anticipated to be completed within the limits of the proposed project budget. Additional face-to-face meetings are anticipated to complete these efforts. It may be necessary to request some funding from the Upper and Lower Arkansas Districts to support travel reimbursement if these entities require more support than is available within the limits of this project.

Preparation of Four Local Water Conservation Plans (for Local Water Utilities)

Two local water conservation plans have been delivered – one to the City of Las Animas and one to South Swink Water Company. These plans will be in public review for the next two months and then finalized in the first quarter of 2015. Limited additional costs will be incurred to complete these two plans.

Another trip to Rocky Ford will be needed to help move that local water conservation planning effort forward (and to help complete the case study related to the Rocky Ford performance contract – see the write up in the section on the BMP Tool Box Enhancements provided below). It is anticipated that Rocky Ford will chose to pursue separate funding for a local water conservation plan, since funds for their local water conservation plan will not be available within the limits of this proposed project budget.

Enhancements to the BMP Tool Box

This scope item includes the development of four case studies and the publishing of water rates for as many of the AVC and Master Contract participants as are willing to provide rates to the District. To date, four case studies have been identified – South Swink Water Company’s Submetering of a trailer park, the Town of Swink’s installation of AMR and AMI, the City of Lamar’s installation of AMR and the Town of Rocky Ford’s installation of AMR/AMI. Data has been collected for all four case studies; however, the data from Lamar, and to a lesser extent Rocky Ford, have been shown to not support the expected water savings, in part due to the lack of reliable data collection methodologies and/or inaccurate metering efforts. Two case studies are ready to publish, and at least one more and perhaps two more may be published if the data can be attained.

Water rates data will be published on the BMP Tool Box website by creating a page with website links to the various project participants. A listing of all the Master Contract and AVC participants’ water rates will be available by having those with some content be “clickable” going to either a pdf or a weblink. Southeastern can update the Tool Box yearly as new rates are provided through the annual reporting.

Finally, FAQs will be developed to the extent that additional FAQs are identified for BMP Tool Box use.

Proposed Schedule

The project schedule has been extended out to April 2015 due to some of the issues described in this report, and due to some delays with data review and data exchanges. Currently, the proposed project schedule includes the following¹:

November 2014

- Prepare 75% complete report for CWCB
- Deliver draft audit reports to Master Contract Participants

¹ Some tasks are shown that are not part of the RWCP contract, but are part of the extension of the work being conducted by the District related to the RWCP and associated efforts by Sustainable Practices

- Schedule follow-up phone calls and/or meetings (to take place in December) with Master Contract Participants
- Schedule meeting with Rocky Ford and Upper Arkansas Water Conservancy District for December
- Complete Draft Addendum of the Regional Water Conservation Plan (RWCP) for District review

December 2014

- Complete second draft of Lower Arkansas Valley Water Conservancy District Water Efficiency and Management Plan
- Conduct meetings with Master Contract Participants, Rocky Ford, and Upper Arkansas Water Conservancy District
- Receive staff comments on Draft Addendum from District Staff

January 2015

- Respond to Master Contract Participant comments and finalize audit reports
- Prepare final draft of RWCP for presentation to District Board and Public Comment
- Present Draft RWCP to District Board
- Meet with Lower Arkansas Valley Water Conservancy District
- Develop Rocky Ford grant application (under separate agreement)
- Coordinate development of Basin Implementation Plan Update (under separate agreement)

February 2015

- Finalize South Swink Water Company and Las Animas Water Conservation Plans after Public Review and Comment
- Prepare Lower Arkansas Valley WCD and Upper Arkansas WCD Water Efficiency and Management Plans for Public Comment
- Begin process of collecting and organizing data from Project Participants associated with contract terms (under separate agreement)
- Organize Radionuclide Issue Working Group (under separate agreement)
- Coordinate Development of Basin Implementation Plan Update (under separate agreement)

March 2015

- Receive Public Comment on RWCP
- Finalize Tool Box Enhancements
- Finalize Draft of La Junta Water Conservation Plan for public review (under separate agreement)
- Prepare grant application for Las Animas to pursue funding from CWCB for water meters (under separate agreement)

April 2015

- Finalize RWCP after Public Review and Comment
- Finalize Lower Arkansas Valley WCD and Upper Arkansas WCD Water Efficiency and Management Plans after Public Review and Comment