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MEMORANDUM

CWS File #07-190

To: Ms. Veva Deheza, CWCB
cc: Jan Schmidt, City of Salida
From: Michelle Hatcher
Date: November 25, 2008
Subject: 95% Progress Report for the City of Salida Water Conservation Plan

Clear Water Solutions (CWS) has completed the final draft of the City of Salida ("City" or "Salida") Water Conservation Plan in accordance with the Guidance Document produced by the Colorado Water Conservation Board (CWCB). The Guidance Document outlines nine steps in the water conservation planning process. To date, CWS and the City have completed eight of the nine steps per the scope of work and the Plan is close to being presented to the public through the public review period. The review period is projected to start on December 20, 2008 and is scheduled to end February 18, 2009. The Draft Plan was reviewed by City staff and is currently being reviewed by the City Council. All Staff and Council comments will be incorporated prior to the public review period.

Table 1 shows the water conservation goals as they evolved throughout the planning process. Original goals were set after characterizing the Salida's water distribution system, customer categories and past and future water use in each of those categories. Water conservation measures were then selected by the City staff and City Council through two screening processes including a cost/benefit analysis. Estimated savings from the final measures were then compared to the original water saving goals and those goals were adjusted to better meet expected water savings.

Table 1 – Water Conservation Goals

Water Use Categories:	Total Projected Water Use (2008 to 2017)	Reduction Goals for Planning Horizon		Total Water Savings from Selected Programs	Resulting Reduction
	(AF)	(%)	(AF)	(AF)	(%)
Residential	10,211	10%	1,104	1,245	11%
Multi-Family	829				
Commercial	7,161	4%	288	272	4%
Industrial	34				
Municipal Parks	953	1%	10	9	1%
Unaccounted-for Losses (13% of total production)	2,867	7%	1,544	1,434	7%
Total Water Production:	22,054			2,960	
Total Demand Reduction:			2,945		
Total Percent Reduction:			13%	13%	

The categories targeted for savings are Residential, Multi-Family, Commercial, Industrial, Municipal Parks and System Losses.

There were 43 water conservation measures and programs on the universal list that the City initially considered. Four of these were existing measures with plans for improving or continuing effort. The first screening included the following criteria and narrowed the list down to 18 measures and programs.

1. Staff and Council approval
2. Financial implications
3. Additional staff time required
4. Existing or planned City project

The cost/benefit analysis and second screening ranked the measures in order of importance, but after careful consideration did not eliminate any additional measures. The resulting rank of the cost/benefit analysis is shown in Table 2.

Table 2 – Cost/Benefit Analysis Results

Conservation Measure or Program	Cost per 1000 Gallons Saved	Rank
Rate Structure Changes	\$0.26	1
Leak Detection & Repair Program	\$0.33	2
Rebate for Low-Flow Faucet	\$0.40	3
Distribute Pre-Rinse Spray Heads to Restaurants and Institutions	\$0.51	4
Billing Software Upgrades	\$0.75	5
Residential Water Audit Kits	\$0.80	6
Rebate for Low-Flow Showerhead	\$0.94	7
Rebate for Low-Flow Toilets	\$1.17	8
Commercial Toilet Rebate	\$1.29	9
School Education Program (K-12)	\$1.80	10
Public education - newsletter, bill stuffers, website	\$2.31	11
Post commercial BMPs on website or as bill stuffers	\$2.75	12
Rebate for High Efficiency Clothes Washers	\$3.54	13
Park Irrigation Efficiency Audit	\$4.64	14
Commercial and Industrial Water Audits	\$6.90	15
Chisholm Park Xeriscape	\$12.11	16
Rebate for High Efficiency Dishwashers	\$16.45	17
Meter Testing and Replacement Program	\$38.39	18

The second screening was accomplished by evaluating each measure/program based on the screening criteria and Salida's overall goal of this water conservation plan. The final list of water conservation measures and programs, and the proposed schedule are shown in Table 3.

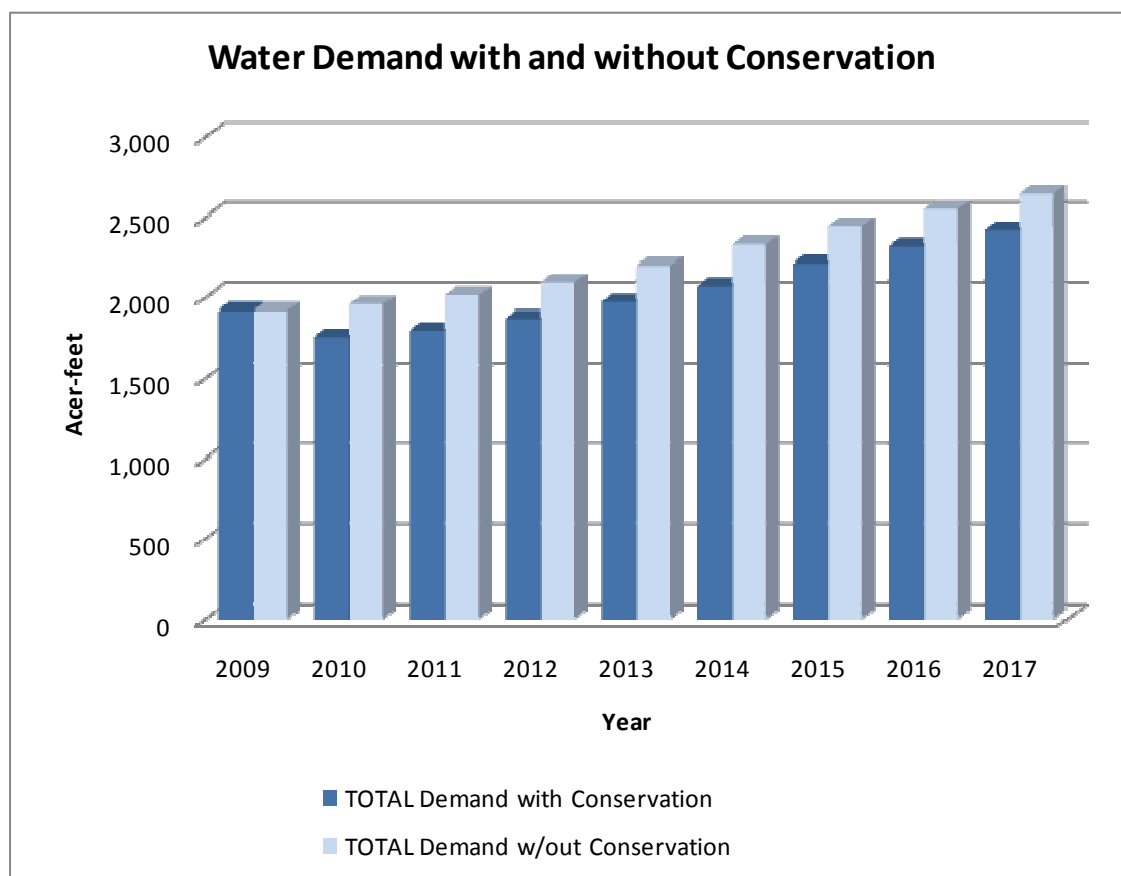
Table 3 – Final List of Measures/Programs and Implementation Schedule

Conservation Measure or Program	2009	2010	2011	Action Required
Rate Structure Changes		Jan.		Apply for grant; Contract for Rate Study, contingent on grant approval
Leak Detection & Repair Program	Aug.			Apply for grant; research equipment and training
Rebate for Low-Flow Faucet			Aug.	Apply for grant; research products and set up rebate
Distribute Pre-Rinse Spray Heads to Restaurants and Institutions			March	Order and install spray heads
Billing Software Upgrades	Aug.			Apply for Grant, research software
Residential Water Audit Kits		March		Have available prior to summer irrigation and tourism season
Rebate for Low-Flow Showerhead			Aug.	Apply for grant; research products and set up rebate
Rebate for Low-Flow Toilets			Aug.	Apply for grant; research products and set up rebate
School Education Program (K-12)		Sept.		Send selected teachers to training
Public education - newsletter, bill stuffers, website		Sept.		Research; identify web developer
Post commercial BMPs on website or as bill stuffers		Sept.		Research; identify web developer
Commercial and Industrial Water Audits		Jan.		Apply for grant; Acquire training; Start with Schools and Institutions, continue with Hospitality during tourist season
Chisholm Park Xeriscape		March		In-house research and planning by staff
Meter Testing and Replacement Program	Aug.			Apply for grant; continue program as planned

The water conservation measures that the City intends to implement will result in an efficient system, fair water rates and plenty of information for customers to evaluate their own water use. The City has chosen to continue with the meter testing and replacement program despite the high cost to the City. The meter testing and replacement program is an existing program that is replacing old meters with radio-read meters which will make water use data more quickly available. Salida intends to pursue grants for implementing some of these measures, which are shown in Table 3.

Figure 1 shows the forecasted water demand for the City with and without water conservation.

Figure 1 – Comparison of Demand Forecast with and without Conservation



The total water saved over the ten year planning period will be 2,960 AF and will reduce the total demand by 13%. Meter testing and replacement, which is a City initiative already in progress, is nearly 55% of the total anticipated cost over the ten-year planning period. Without the cost of meter testing and replacement, the cost of water conservation implementation for Salida over the next ten years is \$448,400.

The City's public-review process will be from December 20, 2008 to February 18, 2009. After the 60-day public process, public comments, if any, will be addressed in the plan, and the City Council will formally adopt the Water Conservation Plan at their March Council Meeting. The Plan will then be submitted to CWCB for final approval.