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MEMORANDUM

CWS File #08-110

To: Ben Wade, CWCB
From: Michelle L. Hatcher
cc: Earl Smith, City of Evans Director of Public Works
Date: December 18, 2008
Subject: 50% Progress Report for City of Evans Water Conservation Plan

Clear Water Solutions is working with the City of Evans to complete a Water Conservation Plan in accordance with State regulations following 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, the City has completed Steps 1-4.

Evans served approximately 18,000 residents within the City in 2008. The City has a 25-year agreement with the City of Greeley where Greeley provides treated potable water to Evans through 15 master meters. In the agreement, Evans transfers raw water they own to Greeley in the amount of their projected annual water demand plus 15 percent for shrinkage. The water supply provided by the City of Greeley is limited annually. If Evans exceeds their annual allotment, charges are incurred for overuse. Several limitations have been identified including Evans' growth, costs for purchase and associated change of use of water rights, water treatment and unaccounted for system losses.

Evans has considered water conservation in its planning for many years and has developed a number of measures to promote efficient water use. In addition to the water conservation ordinances the City has instituted the following water conservation measures and programs:

- Water Reuse System at the WWTP, which saves approximately 6-8 AF each year.
- Evans sends out billing statements that encourage water savings. Bills show the customers water usage for the past 12 months, in graphical form.
- Summer Water Conservation Officer.
- Participation in area Children's Water Festivals.

The City has a drought response plan in place which outlines the various criteria considered when determining the extent of water conservation measures. The plan defines the severity of drought and the City's responses.

Evans delivered 2,578 AF of potable water in 2007. Billed water demand for potable customers totaled 2,326 AF. Non-potable deliveries are estimated to be 250 AF. Billed water demand for non-potable customers totaled 202 AF. Projected water demands were estimated based on previous studies and planning efforts completed by the City. Total water demand (potable and non-potable) is projected to reach 5,283 AF in ten years and approximately 8,803 AF by build out.

During discussions with City staff regarding their water conservation goals, they expressed their desire to continue and potentially expand Evans' water education programs. Educational programs encourage Residential category water conservation and may also impact the Commercial and Irrigation customers as well. In addition, City staff discussed the need for a water rate study which would ensure that the City has a fair rate structure that also provides incentive for customers to save water. The need for updated billing software was discussed as the City's software is twenty years old. New software will give the City flexibility and ability to help their customers save water. Leak detection and meter replacement programs are also high priorities for the City.

In setting initial water savings goals for the City, we looked at the current water use per customer category and the limitations of the water supply system. Table 1 shows initial goals established for each customer category.

Table 1 – Evans Water Conservation Goals

Water Use Categories:	Total Projected Water Use (2009 to 2018)	Reduction Goals for Planning Horizon	
	(AF)	(%)	(AF)
Potable - Residential	24,025	12.0%	2883
Potable - Multi-Family	9,026	5.0%	451
Potable - Commercial	8,196	12.0%	983
Potable - Irrigation	1,082	15.0%	162
Potable - City Usage	1,912	1.5%	29
Non-Potable - Residential	1,616	12.0%	194
Non-Potable - Multi-Family	61	5.0%	81
Non-Potable Commercial	579	12.0%	7
Non-Potable City Usage	520	1.5%	9
Potable Unaccounted-for Losses (currently 9%)	4,133.4	2.5%	1,292
Total Water Production:	51,668		
Total Demand Reduction:			6091
Total Percent Reduction:			11.8%