



## MEMORANDUM

---

**TO:** Mr. Kevin Reidy, CWCB, Water Conservation Technical Specialist  
**FROM:** Sarah Fleury, Eagle River Water & Sanitation District, Water Conservation Officer  
**DATE:** November 7, 2011  
**RE:** WATER CONSERVATION PLAN, 95% Progress Report for the Eagle River Water & Sanitation District, PO# 08-67

---

The Eagle River Water & Sanitation District (District) is working with AMEC Earth & Environmental (AMEC) (formerly Hydrosphere Resource Consultants, Inc.) and Leonard Rice Engineers, Inc. to complete an update of the Water Conservation Plan (WCP) that was approved by the CWCB in 1997. The District is following the CWCB's Guidance Document for the water conservation planning process. A summary of the District's progress on the nine Tasks and their percentage of completion to date are outlined below.

**Task 1: Profile Existing Water System** **100% complete**

All of the work in this task has been completed for the grant application. The District serves the Town of Vail, which is a resort community, and the Wolcott area located approximately 20 miles west of Vail. The Wolcott area is currently predominantly agricultural land that is planned for commercial and residential development. The majority of housing units in Vail are multi-unit condos/townhomes and hotel rooms, many of which are second homes that are not occupied year-round. The full-time population of Vail is approximately 4,832 residents but the District's service area population during high occupancy periods is over 25,000 people, not including daily visitors that come to Vail to work, ski, shop, dine, etc. Water usage therefore varies seasonally depending upon dwelling unit occupancy rates and outdoor water use. The District's water system includes, 7 groundwater wells, a water treatment plan, and 12 water storage tanks in Vail. The District also operates three wastewater treatment plants located in Vail, Avon, and Edwards.

**Task 2: Develop a Water Use Profile and Forecast Future Water Demand** **100% complete**

During the grant application process, it was determined that projecting service area populations and water use would be challenging due to the resort community nature and seasonality of the Town of Vail population. This plan provides an opportunity to test alternative population and water use calculation methodologies for utilities with similar challenges. The District has investigated multiple data sources that could be utilized to develop more reliable population and water use estimates including occupancy numbers from the hospitality industry and District billing data for individual neighborhoods/complexes. Through this effort, we have developed a good methodology for estimating the average monthly overnight population served. Additional data and research will be needed to develop reliable estimates of the number of daily visitors to the service area.

**Task 3: Profile Proposed Facilities** **100% complete**

The District's Water Conservation Officer has integrated information from the water, wastewater, capital improvement program and finance departments to adequately analyze information for this

section of the WCP. The 2008 Vail Water System Master Plan Update was also used to gather information on future proposed facilities.

**Task 4: Identify Conservation Goals, Screening Criteria, Measures and Programs 100% complete**

With the assistance of the Water Conservation Advisory Committee at a March 2008 meeting, a comprehensive list of conservation measures and programs was created. Screening criteria were developed that assisted in identifying the measures and programs to be further evaluated in Task 5. All of the preliminary water conservation goals have been completely analyzed and finalized using estimations of GPCD water use calculations.

**Task 5: Evaluate and Select Conservation Measures and Programs 100% complete**

The measures and programs were evaluated based on a variety of factors including potential water savings, costs, and community acceptance. Using this information the District was able to select the appropriate programs to be implemented.

**Task 7: Develop Plan to Implement, Monitor, Evaluate and Revise Conservation Activities and Water Conservation Program 100% complete**

The District has completed detailed evaluations for the programs and measures identified for the Water Conservation Plan and has also completed the feasibility analysis of each program in terms of its monitoring requirements. This task has provided an implementation program which defines data to be collected for each measure to effectively monitor and characterize water use and savings in future years.

**Task 8: Complete Final Draft Plan and Solicit Public Input 95% complete**

The District has been working to solicit public input throughout the updated WCP planning process. Most recently, there have been reminders included in the billing messages that the WCP will be available for public review and input after the November 17, 2011 Board of Directors meeting. Once the plan is submitted for the 30 day public comment period, a news release will go out in the local paper and hard copies of the WCP will be located at the Vail and Avon Libraries. The District is also going to send an email to the Advisory Committee to get their help evaluating the final plan.

There have been some staff changes since the grant application was submitted to the CWCB. Bob Weaver continues to provide technical guidance on the project but is now working for Leonard Rice Engineers, Inc. As the CWCB was made aware in early June 2008 and again in 2009, due to water rights litigation issues, the project schedule for completion of the plan has changed. Please note the current project schedule for completion of the WCP below.

<b>Task #</b>	<b>Task</b>	<b>Start</b>	<b>End</b>
1	Profile Existing Water System	January 2008	June 2008
2	Develop a Water Use Profile and Forecast Future Water Demand	January 2008	March 2009
3	Profile Proposed Facilities	February 2008	July 2008
4	Identify Conservation Goals, Screening Criteria, Measures and Programs	February 2008	May 2008
5	Evaluate and Select Conservation Measures and Programs	April 2008	January 2009
50% Progress Report to CWCB		August 2008	
6	Integrate Resources and Modify Forecasts	October 2008	February 2009
7	Develop Plan to Implement, Monitor, Evaluate and Revise Conservation Activities and Water Conservation Plan	December 2008	February 2009
95% Progress Report to CWCB		Nov. 2011	
8	Complete Final Draft Plan and Solicit Public Input on Plan	Nov. 2011	Dec. 2011
9	Incorporate Public Comments & final Board approval	Nov. 2011	Jan. 2012
Submit Plan to CWCB		Dec. 2011	
10	Project Administration	Jan. 2008	Jan. 2012

Please let me know if you have any questions or if you need any additional information.

c: RF, HS, BW