

# CASTLE PINES

METROPOLITAN DISTRICT

## Memorandum

To: Ben Wade CWCB  
From: Emily Coll, Castle Pines Metropolitan District  
Date: October 9, 2012  
Subject: Advanced Meter Infrastructure (AMI) Grant Project 50% Completion Report, C154200

Castle Pines Metropolitan District (CPMD) has realized great success with its Advanced Demand Side Leak Detection and Irrigation Efficiency Pilot Program. CPMD staff has found numerous accounts with abnormal usage and has enhanced its level of customer service with regard to water conservation. One customer said, "I am very impressed with the level of service Metro provides." This customer had returned home from a trip to Florida and watered his trees with significantly more water than his historical winter average. CPMD staff estimates a prevented the loss of over 4 million gallons (12.44 acre-feet) since the program inception. These savings are projected to be realized annually.

CPMD received a grant totaling \$115,752.00 from the CWCB which is just over half of the estimated cost of purchase and installation of the AMI fixed base system. CPMD estimates annual avoided water acquisition costs of approximately \$268,527.00 using the assumption that these costs are \$35,000.00 per acre-foot. This cost savings would be realized if the 7.6 acre-foot water savings solely from leak detection was attained each year. However, in only nine months of collecting usage data on a decreased latency time scale, the avoided cost is estimated to be \$184,500.00 using only \$15,000.00 in the avoided cost model.

All of the equipment was delivered between the end of August and middle of September. Ms. Coll emailed the packing slips to Ben Wade at the CWCB. A necessary component to the system that was not itemized in the grant is the handheld programming device that was delivered but was not an extra expense to the District.

The first basestation (TGB) was installed September 18<sup>th</sup>. The installation took two days. The Sensus Project Manager programmed the TGB September 25<sup>th</sup> and confirm proper communications to and from the TGB and Regional Network Interface hosting site.

The first five endpoint radios will be installed the third week of October. As each endpoint radio is upgraded (on the outside of most houses in the Village), this radio will also be programmed and tested to ensure it is adequately communicating to the TGB.

Staff will be communicating these activities to residents via weekly CPHA e-blasts, Village Reporter articles, one bill insert, gate signs and roadside signage.

The estimated timeline for the project is as follows:

8/27 – AMI equipment shipped  
 9/06 – AMI equipment delivered  
 9/18 – Sensus installed first TGB  
 9/25 – Sensus programs first TGB  
 9/25 – Staff prepares 1<sup>st</sup> CWCB grant report  
 10/1 – Sensus, staff, and installer training sessions  
 10/3 - Contractor begins installation of endpoint radio's (radio's at each meter)  
 10/15 – Sensus Project Manager and staff ensure billing software correctly integrated with AMI software  
 10/22 – Sensus installs second TGB and repeater.  
 10/25 - Sensus and staff confirm Metro's and repeaters properly communicating to endpoints and Metro office  
 12/30 – Contractor completes installation of endpoint radio's

As per Task 1 in the grant document, CPMD purchased the 2 TGB's, 1 Remote Repeater, and 1679 MXU's. The table below details the funding as per the grant request. CPMD has paid for all of the equipment that has been delivered. The invoice associated with this progress report is for the amount outlined in the grant SOW, \$57,297.24.

CPMD AMI Grant			
Task 1	CPM Staff + Hours	CPMD Cash Contribution	CWCB Grant Request Task 1
Task 1 - Purchase AMI	109 @ \$33.75/hr Emily Coll, Jeff Coufal Sue Mantz, LeAnna Gonzalez, Phil Hunt		
2 TGB's		\$ 52,500	-
1 Remote Repeater		\$ 9,350	-
932 MXU's		\$ 80,152	-
747 MXU's		\$ 64,280	-
Task 1 Total In-kind Costs:	\$ 3,678.75	-	-
Task 1 Total Contributions:	-	\$ 206,281.50	\$ 57,297.24