



February 21, 2019

Kevin Reidy
Colorado Water Conservation Board
1313 Sherman St., Rm. 721
Denver, CO 80203

RE: PDAA6500 Water efficiency grant water meter replacement

Dear Kevin,

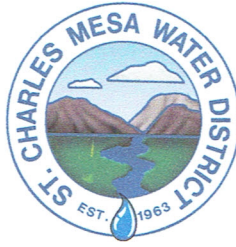
Attached is an invoice for \$49,950 and back up documentation for a reimbursement request from the District's Water Efficiency grant. This is the final request for reimbursement and this letter will serve as the final report for the project.

The District successfully completed the Long-Term Potable Water Supply for the Zinno Subdivision Project on October 31, 2019. The scope of work for this project was accomplished by annexing the Zinno Subdivision into St. Charles Mesa Water District (SCMWD) service area and installing a new distribution system, services lines and meters. The Water Efficiency grant funds of \$49,950 were used to support the purchase and installation of 2,700 feet of meter service pipe, 97 saddle tap assemblies and 97 AMR meters.

The project encountered a sixteen month delay due to the need to receive a Declaratory Judgement by the Court stating that subdivision residents have the legal right to receive service from SCMWD and if so, it does not constitute a condemnation of property and does not constitute unlawful interference with Joseph Corporation's economic interests by SCMWD. The District appreciates CWCB's patience during this long drawn out legal process. Although in the end, the judgement provided the means to move the project forward. Once these matters were settled the project progressed smoothly and came in under budget and ahead of schedule.

As stated in the grant application, "Due to the precarious and turbulent relationship between the Zinno Subdivision water users and the Joseph Water Corporation we are unable to access any information or data on the subdivision's water usage from Joseph Water. Thus, the historical data that is presented in this application is from SCMWD. Any future projected data includes the 100 taps within the Zinno Subdivision." Thus, we have no data to base an estimate of savings within the subdivision itself.

Although, the replacement of existing inaccurate meters was a key component of the 2010 Water Conservation Plan. Meter replacement is also included in the current and future Long-Range Capital Improvement Plan and the approved 2019 Updated Water Conservation Plan.



The 2010 program entailed replacement of all existing meters over a 10-year span. This was intended to benefit the District, and the individual customer(s) in the following manner:

1. The new meters provide a more accurate accounting of the individual customer usage. This allows the District to better determine the amount of water which is being lost through leaks.
2. The new meters are radio-read, which saves the District time and money, related to the actual reading of the meters.
3. The new meters provide the District more accurate accounting of the effects of the various conservation measures and programs, that the District has and will continue to implement.

The goal for this program is the replacement of all individual meters, commencing in 2009, and finishing in 2022 (Approximately 330 meters annually). In 2010, 19% of the District's treated finished water was unaccounted for. The vast majority of the loss was due to the inaccuracies in the older existing water meters. From 2009 to 2017, the District has implemented its meter replacement program by replacing 2,977 old meters with Automated Meter Reading (AMR) units, 69% of all meters.

The District provided \$404,654 towards this effort from 2009 - 2017. The District also received support through CWCB Water Efficiency Grants to implement this program in 2011, 2012, and 2013 for a total of \$149,754. The Total cost of the replacement program was \$554,409.

In 2017, the difference between the amount of water produced and the amount registered by meters indicated the District's water loss was 12%. This is a reduction of 7% in water loss when compared with the 19% losses in 2010.

The District has included in its capital improvement plan for 2018 – 2022 the replacement of an additional 1,323 (31%) meters with AMR meters. All older meters will have been replaced by the new AMR meters in 2022 when the program is completed. Note in 2018 100 meters were replaced this includes the 97 new AMR meters installed in the subdivision.

Table 3 illustrates the water savings and cost over the five-year period.

Table 4 – 2018- 2022 Meter Replacement Program Water Savings and Costs

	METERS REPLACED	AF ANNUAL SAVINGS	ANNUAL COST
2018	100	7	\$18,623
2019	330	23	\$61,456
2020	330	23	\$61,456
2021	330	23	\$61,456
2022	233	16	\$43,392
TOTALS	1,323	92	\$246,383

This will meet the 2020 goal of replacing 100% of all of the old meters with AMR meters throughout the entire District. SCMWD goal is to reduce water loss by 5% through the meter replacement program over



the next five-year period. This will result in an average of 18 AF per year water savings or 92 AF for the five-year period. The anticipated implementation cost is \$246,383.

From 2022 – 2027 the District will continue the meter replacement program by monitoring, testing, and replacing older AMR meters if they malfunction or reach their life expectancy. This expense will continue to be a part of the District's annual budget.

St. Charles Mesa Water District is very appreciative of the support the CWCB board and staff have provided this important project. This project has given a deserving community the ability to receive an affordable and sustainable potable water supply that will serve them well far into the future.

Sincerely,

A handwritten signature in blue ink, reading "David K. Simpson".

David Simpson
District Manager