



OFFICE OF THE CITY AUDITOR COLORADO SPRINGS, COLORADO

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18-02 Colorado Springs Utilities September 2017 High Water Bills Review

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Purpose

The purpose of this review was to evaluate the accuracy of Colorado Springs Utilities (Utilities) September 2017 water charges for customers in bill cycle 19 and 20. Our review included verifying Utilities' analysis as to the cause for the higher bills.

Highlights

Based on our review, we concur with Utilities' analysis that the September 2017 customer water bills were calculated correctly by the Utilities' billing system, and that higher September bills were primarily related to weather and precipitation variables, which increased consumption. We concur with Utilities' analysis that the September billing period for billing districts 19 and 20 was two days longer than the August billing period, which resulted in higher bills for some customers, but was not the primary driver for the higher September water bills.

As background, residential customers in the northeast part of Colorado Springs, who were in bill cycle 19 and 20, expressed concern that their September water bill was excessively high. In response, Utilities began a review of the billing data for these customers. A Utilities spokesperson said their review indicated the billing was accurate and higher bills were due to consumption. Utilities noted the bill cycle was 32 days long and the longer period could impact charge increase. Utilities also noted September was a warm and dry month where the prior month of August had more precipitation.

The Office of the City Auditor reviewed the following three areas: billing calculation accuracy, temperature and precipitation data that could affect consumption, and the impact of the number of days in the billing period.

Billing Accuracy - We validated the water bill data and reviewed the methodology used in Utilities' analysis. We recalculated a sample of customer bills, including verification to the customer billing system and noted no billing errors.

Temperature and Precipitation - Consumption (water usage) aligned with temperature and precipitation data supporting higher billing in September over August as follows:

	July	August	September
Consumption	27,832,365	18,239,745	31,175,824
Precipitation in inches	2.83	3.35	1.18
Average temperature	85	82	74

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Days in Billing Cycle - We determined that the number of days in the billing cycle had an impact but was not the primary driver of the higher September water bills for bill cycle 19 and 20 customers.

Utilities' analyzed the impact of a 32 day billing period as compared to 30 day for bill cycle 19 and 20 customers. The longer period resulted in an additional \$163,000 in total customer water charges distributed among the 19,498 residential customer in cycle 19 and 20 billing. An average water bill for cycle 19 and 20 residential customers was \$100.82 for 30 days as compared to \$109.15 for 32 days

The Office of the City Auditor performed additional analysis of the 32 day billing period impact for bill cycle 19 and 20 September residential water bills :

- 35% of customers were billed on Tier 1 (average bill was \$40.32)
- 45% of customers were billed on Tier 2 (average bill was \$104.83)
- 20% of customers reached Tier3 usage (average bill was \$244.33)

Approximately 17% of the customers reached Tier 3 before day 31. This indicates that the 32 day billing period contributed to higher bills for these customers but was not the primary source of increased water bills for residential water customers within our review scope.

The billing number of days in a billing period vary between 28 and 34 throughout the calendar year. The residential water tariff includes a daily charge \$0.7079, as well as, commodity charges which vary based on usage.

Residential water tariff (W-R)				
Daily charge	Tier 1	Tier 2	Tier 3	
	0-999cf	1,000-2,499cf	2,500cf or greater	
\$ 0.7079	\$ 0.0349	\$ 0.0654	\$ 0.0988	

This audit was conducted in conformance with the International Standards for the Professional Practice of Internal Auditing, a part of the Professional Practices Framework promulgated by the Institute of Internal Auditors.