

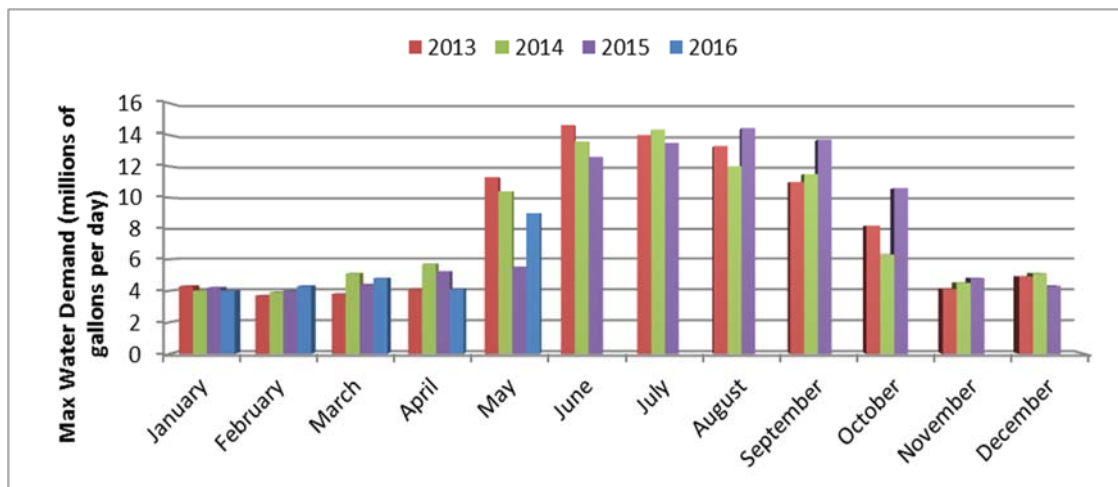
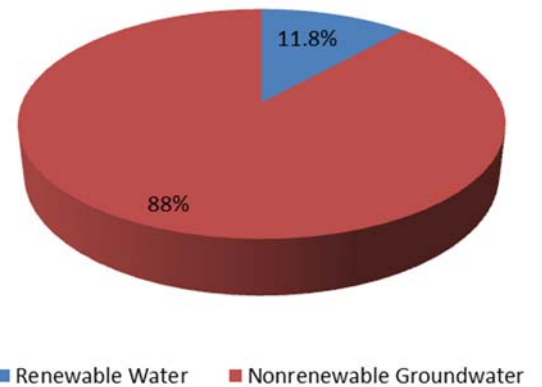
## 2016 Water Demands

By: Sheri Scott, Water Resources Program Analyst

The maximum daily water demands are plotted by month from 2013 to the current month. As observed by the data, the maximum demand for the month of May was 9 million gallons per day (MGD) which was about 11% less than the 5-year average maximum daily demand for the month. Summer time maximum demands inform us of the size of the infrastructure necessary to provide water service over short periods of time and help us to plan future water resources needs. An average of the winter month (November, December, January, and February) usages, reflect indoor or base demand. The water demand total for May was 181.2 million gallons (MG), which was about a 55% increase from the April 2016 total of 117.3 MG, and a 33% increase from the May 2015 demand of 136.4 MG.

The Town's nine alluvial wells produced a total of 17.9 MG of renewable water during May, which represents 9.3% of the total water supply for the month and 11.8% (79.8 MG or 245 acre-feet) of the water supply year to date. The total renewable water produced since the opening of the PCWPF has surpassed 825 MG, which represents 11.4% of the Town's total water supply since the alluvial wells began pumping in May 2013. Currently, the Town's renewable water rights surpass the capacity of the alluvial wells. The alluvial well project the Town is currently constructing will help close this gap.

## Water Supply Sources YTD



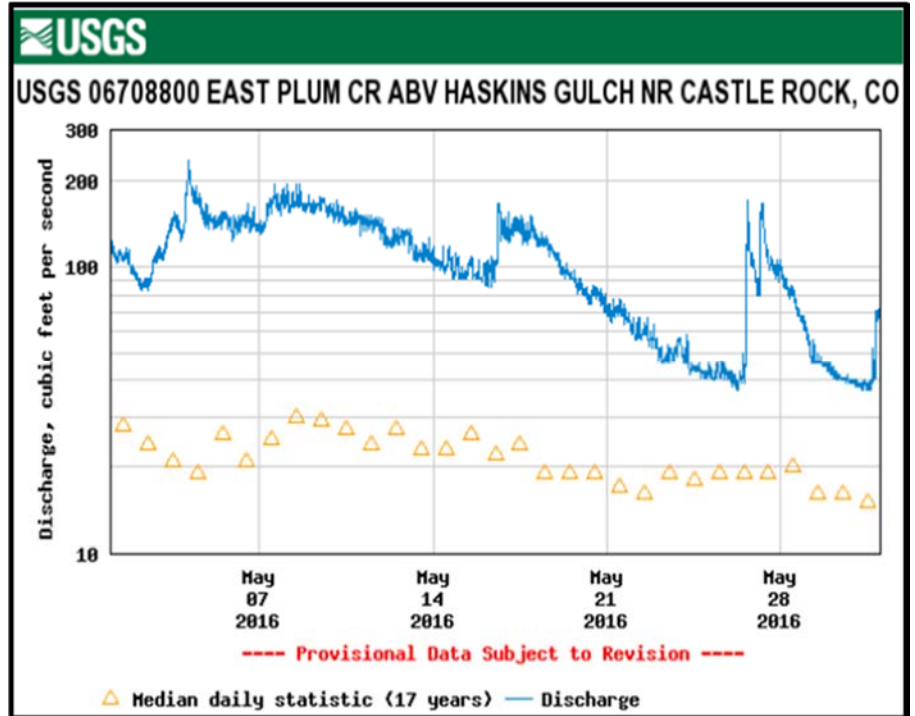
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## OUR VISION

*We will be a national leader among water utilities focused on customer satisfaction and delivering outstanding quality and value.*

## 2016 Water Demands, continued

The flow hydrograph (to the right) represents stream flows in East Plum Creek taken from the stream gauge located at Haskins Gulch. The hydrograph shows that flows in the East Plum Creek basin ranged between 82 to 200 cubic feet per second (cfs) during the first half of the month and steadily declined to approximately 40 cfs by May 26. Precipitation events at the end of the month caused short lasting spikes in stream flow. During the month there were no calls on the main stem of the South Platte, therefore a Free River condition and no out-of-priority depletions needed to be made up. The river call may change at any time as a result of downstream water diversion calls. The South Platte River Basin is through the snow accumulation season and water managers are beginning to fill reservoirs from the snow melt. As of June 1, 2016, the NRCS Colorado SNOTEL report shows the snow/precipitation for the South Platte River Basin is at 107% of average.



## Plan Review Update

By Kurtis Cotton  
Plan Review Engineer

The applications reviewed consisted of:

- 42 1<sup>st</sup> Submittals
- 14 2<sup>nd</sup> Submittals
- 9 Special reviews

Utilities reviewed 78 applications this month which compares to 52 during the same time period in 2015. The average assigned due date by Development Services was 2.2 weeks, and Utilities completed the reviews in 2.2 weeks, which included:

- 4 Agreements
- 4 County Referrals
- 3 Field Change Orders
- 4 Grading, Erosion and Sediment Control (GESC) Plans
- 1 GESC Permit
- 1 Lot Line Vacation
- 2 Planned Development Plans
- 8 Plats
- 2 Preliminary Project Applications
- 11 Site Development Plans
- 8 Technical Criteria Variances
- 1 Use by Special Review

In addition to completing the above listed applications as scheduled, Utilities completed 87 building permit reviews and associated system development fees.

# NEW CERTIFICATIONS

*The water, wastewater and stormwater utility business is highly technical and regulated. As such, Castle Rock Water has to maintain an extensive staff of professionally licensed individuals. Most of these licenses require specialized education and the passing of state testing, as well as proof of continuing education. Below is a list of those passing various certifications this month:*



**Thomas Hecker**  
Collections II



**Casey Stevenson**  
Collections 1



**Kurtis Cotten**  
Colorado Professional Engineer



**Kristen Reaves**  
Collections 1

*Congratulations on your recent promotion!*



**Kurtis Cotton**  
Water Resources Program Analyst

## APRIL LEVELS OF SERVICE

### Drinking Water Compliance

Castle Rock Water will deliver water that meets or exceeds both Primary Drinking Water Regulations and Secondary Maximum Contaminant Levels 100% of the time. Seventy routine samples were completed. All samples were within the parameters set forth by the Federal Safe Drinking Water Act and Colorado Drinking Water Standards.

### Pressure Adequacy

< 1% of our customers will experience less than 43 pounds per square inch (psi) of pressure at the meter during normal operations.

Pressure has been maintained at or above 43 psi throughout the distribution system.

### Sewer System Effectiveness

<1% of our customers will experience a sewer backup caused by the utility's sewer system per year.

There were no sanitary sewer issues.

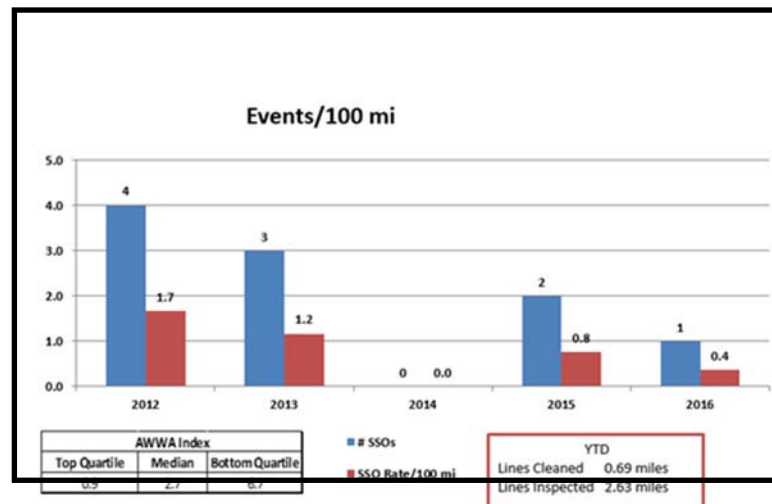
### Drinking Water Supply Outages

<5% of our customers will experience water outages for one or more events totaling more than 30 hours/year.

There were two water main breaks in Glovers neighborhood. One break affected ten customers with limited to no pressure, and the other affected 12 homes being without water for less than one hour.

## Sanitary Sewer Overflows

We are also tracking in the Top Quartile in the Sanitary Sewer Overflow Rate since 2014, according to the American Water Works Association, showing one incident for the year, but none in May.

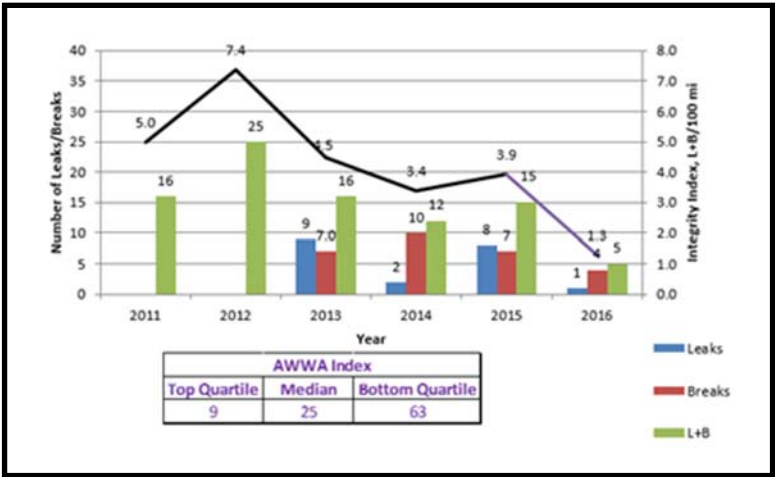


## How do we avoid overflows?

Our team runs a camera through the sewer mains to look for problems. When problems are identified they are cleared with a high pressure water jet.

## Water System Integrity

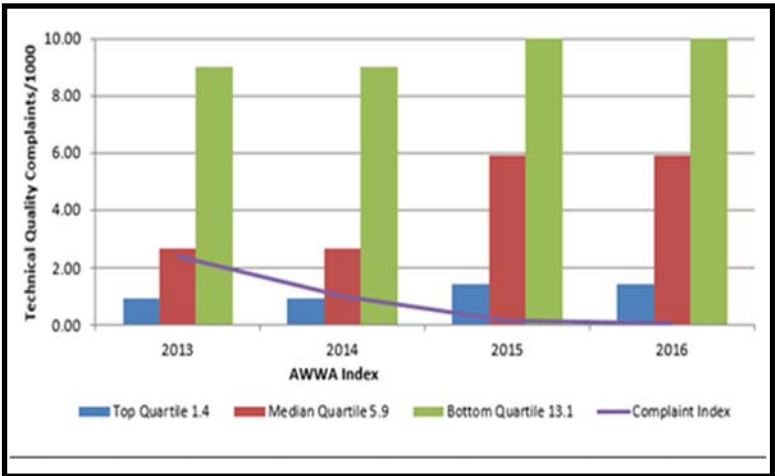
As the Water System Integrity chart indicates, our occurrence rate has generally decreased over the last four years. We have been in the top quartile, the top 25%, for water system integrity based on American Water Works Association benchmarking since 2011. There were two water system integrity issues in May.



## Water Quality Complaints

The Water Quality Complaint index shows that we are doing very well in this category; rating in the Top Quartile in 2015, according to the American Water Works Association. We did not have any Water Quality Complaints in May.

For more information, view the current water quality report at [CRgov.com/waterquality](http://CRgov.com/waterquality).





## Customer Statistics

*By: Anne Glassman, Business Solutions Manager*

*Our Business Solutions Team continues to track a host of statistics and data as we continue to evaluate our levels of service and look for efficient ways to improve on these levels.*

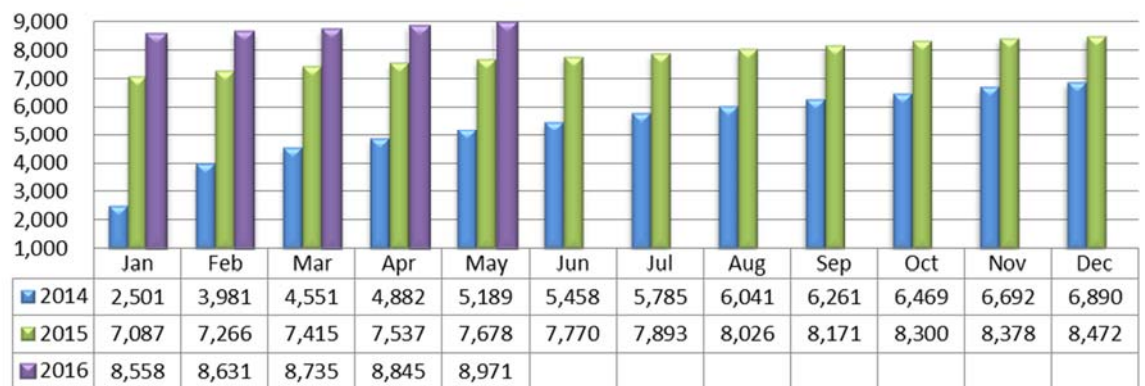
Customer enrollments have continued to increase from launching the H<sub>2</sub>O Access Online Billing Solution in January 2014.

The number of customers enrolled choosing paperless billing has remained steady at 53%, and 46% of all customers

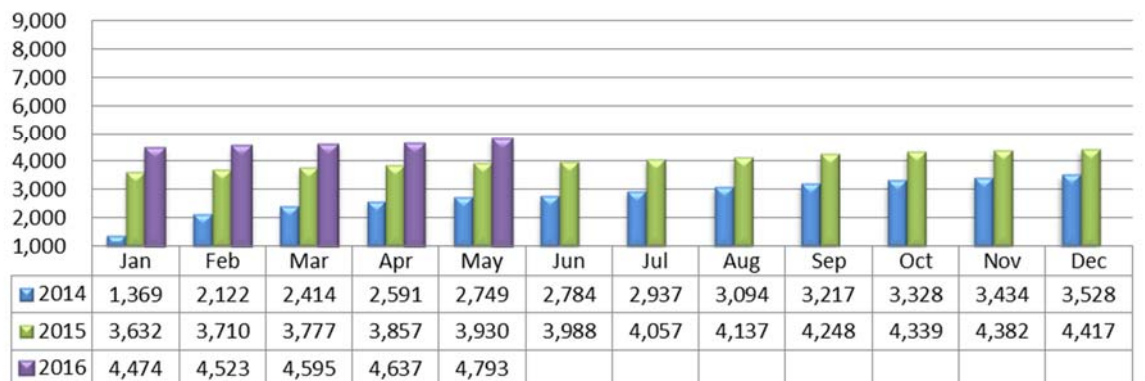
we serve are enrolled with an online account. To encourage further paperless adoption, all customers who have or will sign up for paperless billing by July 31 will be entered into a drawing with a chance to win a \$50 credit on their water bill.

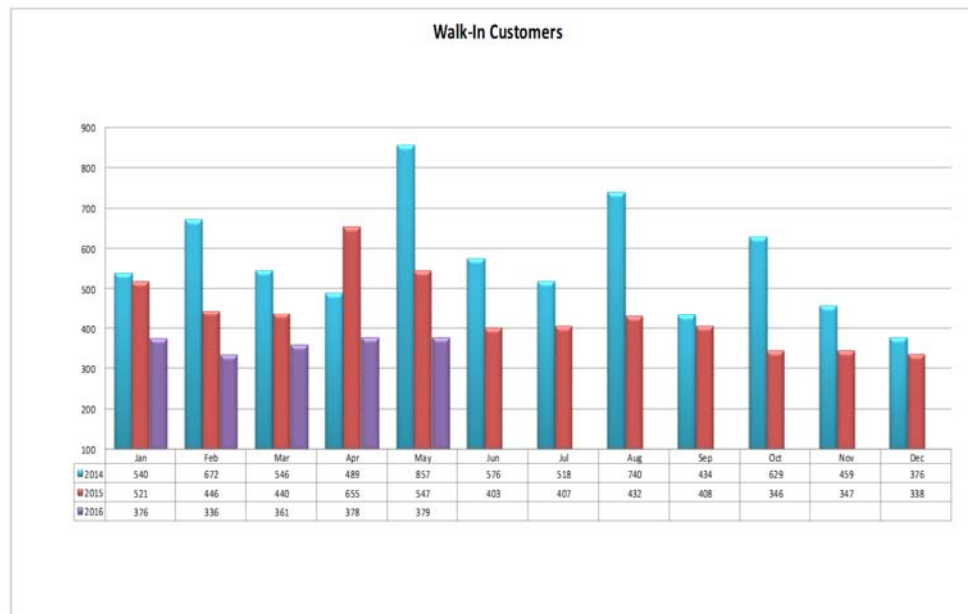


### H<sub>2</sub>O Access Online Billing Solution Customer Enrollments

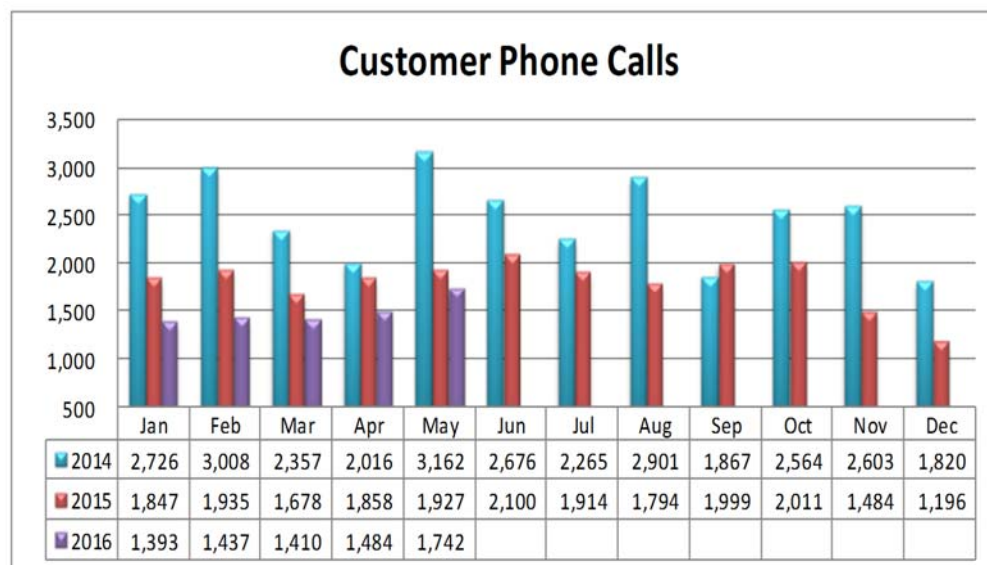


### H<sub>2</sub>O Access Online Billing Solution Paperless Adoption





The number of walk-in customers has been consistent over the past few months.

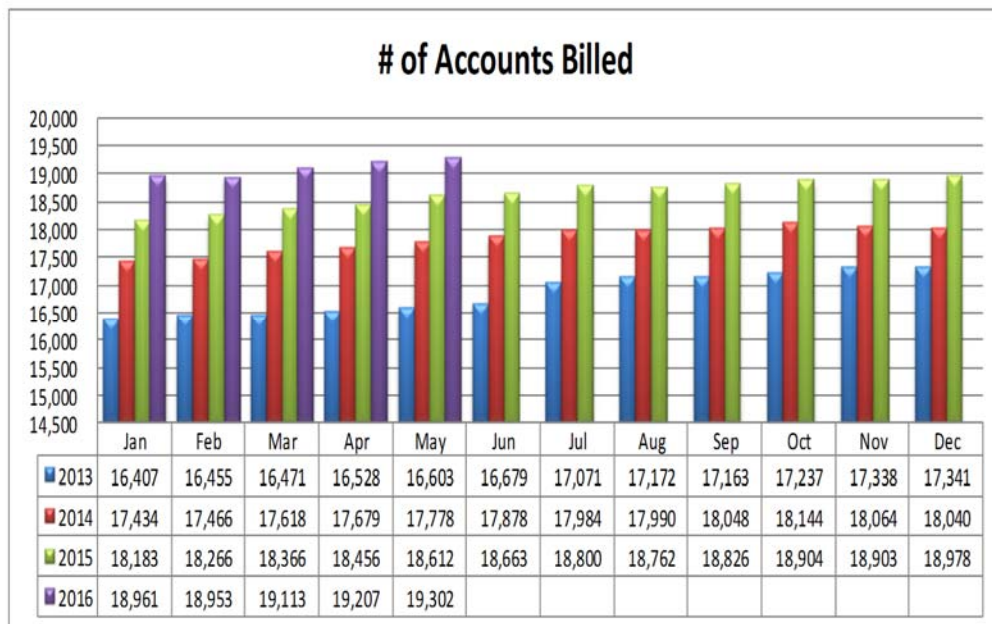


The number of customer phone calls are up in May due to the increase in property transfers experienced this time of year, and calls surrounding the bulk water station program changes (see story below).

## Changes to Bulk Water Station Program

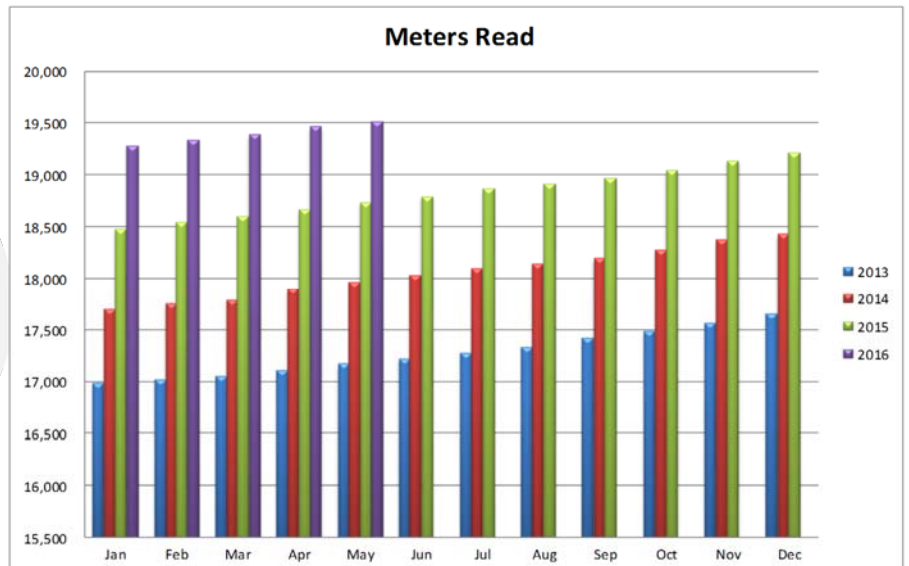
Customers no longer are required to make pre-payments on their account to draw water from the bulk water station. They will now be able to access the station 24/7 without the inconvenience of putting money on their account first. However, with this change we required a refundable \$150 deposit on each account.

Bulk water is typically used for construction projects, development and other temporary water needs.



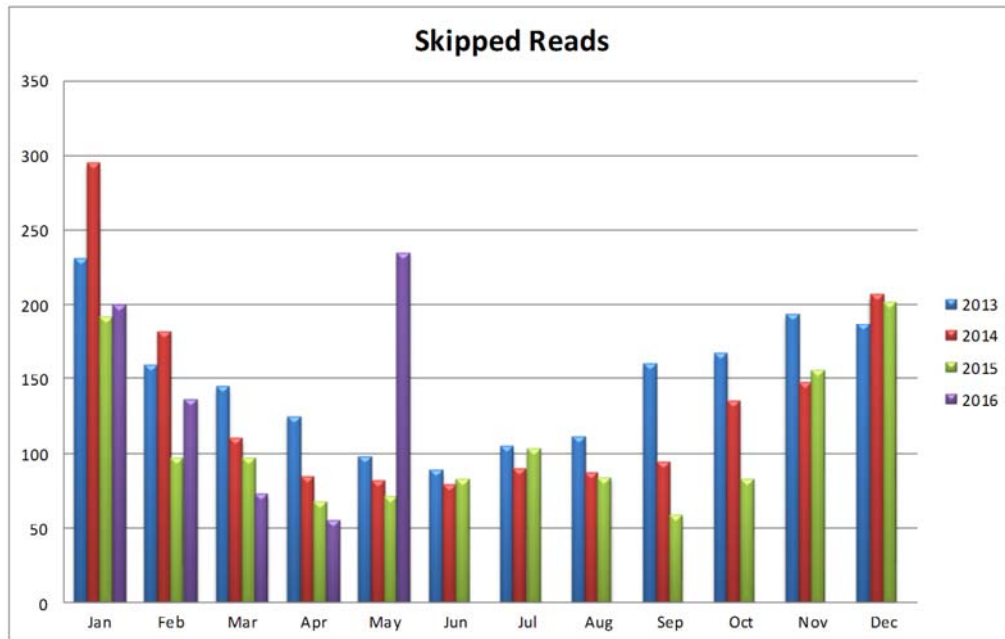
The number of accounts billed compared to May last year is up due to new residential and commercial growth.

## METERS



The meters read continues to increase month-to-month due to new residential and commercial accounts, with a significant increase year over year.

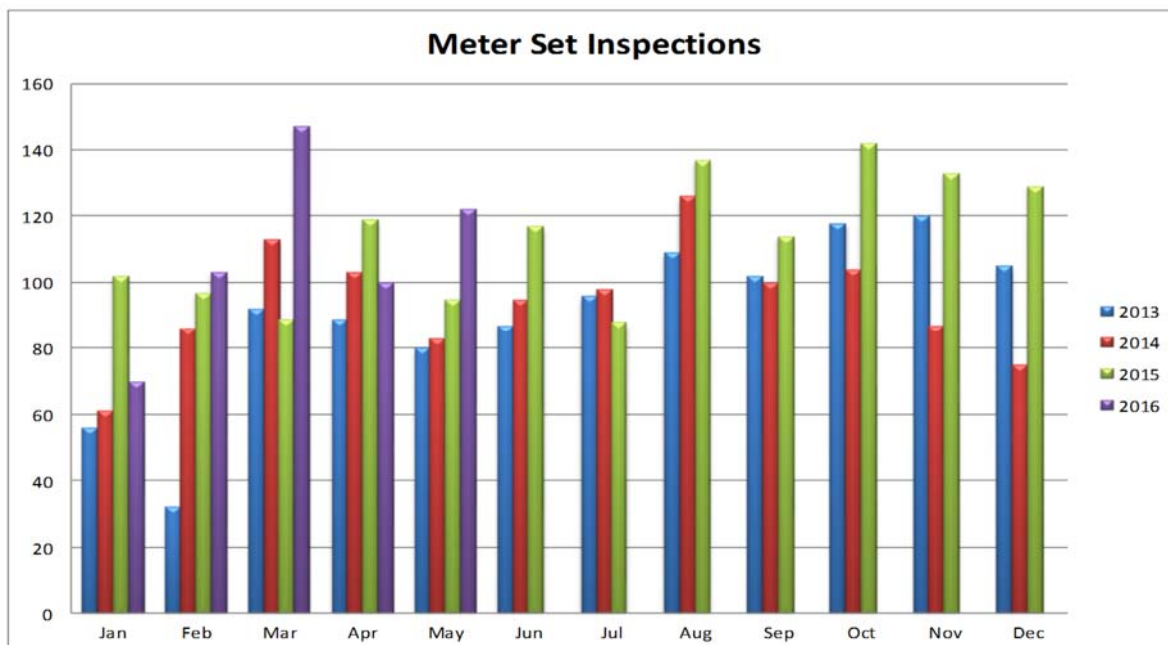




The American Water Works Association (AWWA) standard is 2 percent, so at 1.2 percent, we continue to stay below the industry average. This is a result of continued maintenance and repair efforts on meter infrastructure. Skipped reads were high in May due to 169 that were a result of a software issue. The remaining 66 were actual equipment failure.

## *Why is this important?*

It is a strong indication of the level of preventative maintenance being done by our team. A skipped read is indicative of a problem with the meter. Less skipped reads means more properly working meters, which is good for all our customers.



Meter set inspections are up due to new commercial and residential growth.