

## 1st Place for Tastiest Water

Who has the tastiest water in the Rocky Mountains? According to the judges of a taste test at the 2015 Rocky Mountain Section (Colorado, New Mexico and Wyoming) of the American Water Works Association (RMSAWWA) annual conference, Castle Rock Water does.

Nine municipalities from a three state region competed for the title of best drinking water based on taste, odor and appearance. Winning this competition entitles, Castle Rock Water to represent the Rocky Mountain Section at the national "BEST OF THE BEST" taste test at the American Water Works Association (AWWA) national conference in 2016.



*Tim Lambert, Water Treatment Supervisor; David Montgomery, Treatment Services Superintendent; Matt Benak, Water Resources Manager; John Ferguson, Water Operator; Walt Schwarz, Project Manager; and Rich Platt, Maintenance Supervisor-Collections*

### **OUR VISION**

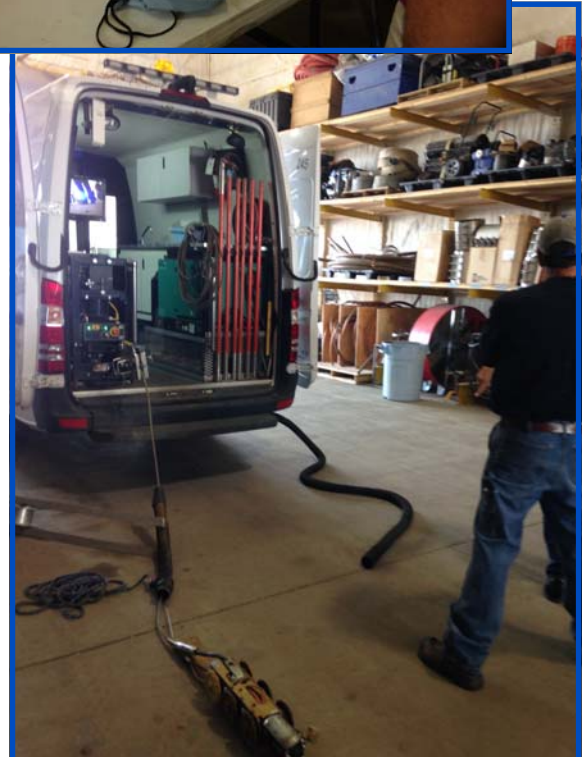
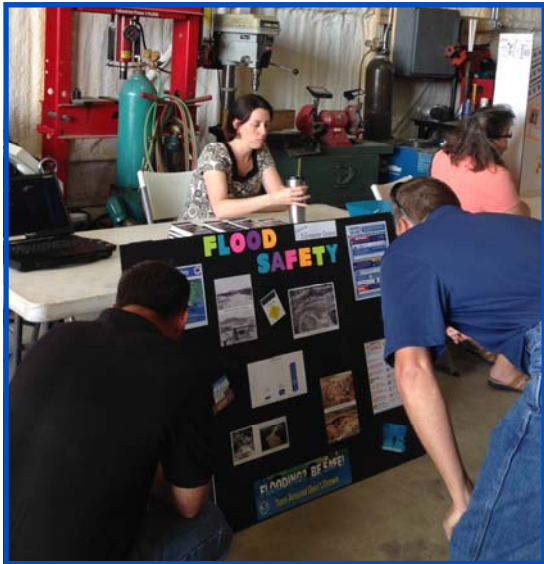
***We will be a national leader among water utilities focused on customer satisfaction and delivering outstanding quality and value.***



## Castle Rock Water Holds 1st Annual Safety Fair

As part of our ongoing efforts to work safely every day, our safety team hosted a safety fair. Each division focused their display on safety issues they keep in mind when out in the field or in offices. The demonstrations included flooding, recognizing aggressive dog behavior, use of safety equipment, onsite cameras, etc.

A big thanks to our safety team for this innovative idea to promote safety awareness to members of the team.



## 2015 Water Demands

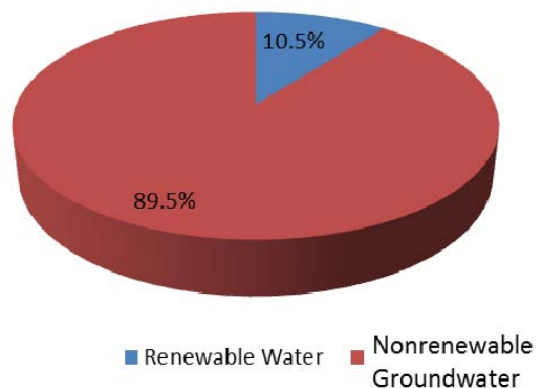
By: Heather Justus, Water Resources Program Analyst

The maximum daily water demands are plotted by month from 2012 to the current month. As observed, the maximum demand of 13.7 million gallons per day (MGD) for September is about the same as the August maximum of 14.4 MGD. 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 September was 368.7 million gallons (MG), which was a 5.5% decrease from the August 2015 total of 390.2 MG, and an increase (50%) from September 2014 demand of 246 MG.

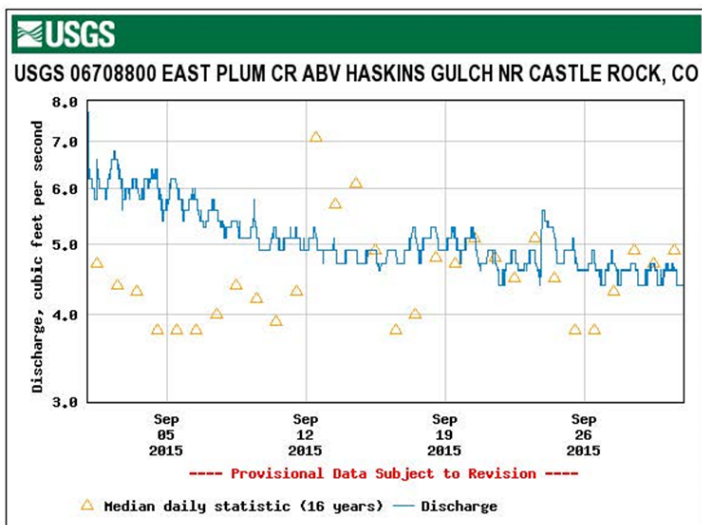
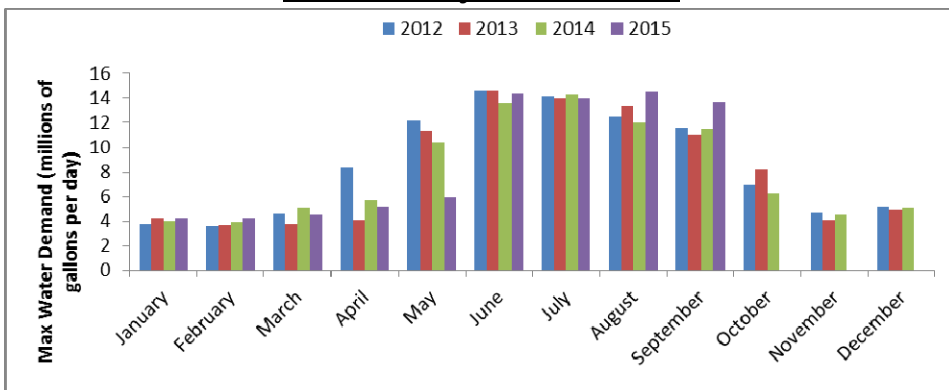
The Town's nine alluvial wells produced a total of 22.7 MG of renewable water during August, which represents 5.9% of the total water supply for the month and 10.5% (208 MG or 639 acre-feet) of the water supply year to date. The total renewable water produced since the opening of the PCWPF has surpassed 681 MG, which represents 11.2% of the Town's total water supply since the alluvial wells began pumping in May of 2013. Currently, the Town's renewable water rights surpass the capacity of the alluvial wells.

The flow hydrograph represents stream flows in East Plum Creek taken from the stream gauge located at Haskins Gulch. The hydrograph shows that the Plum Creek basin experienced stream flows between 4.5 to 7 cubic feet per second (cfs). During the month there were several active calls on the main stem of the South Platte River. Several of the calls have higher adjudication dates than our Meadows Alluvial Wells which is our Central Well Field. This means that those wells are now out-of-priority, so the depletions from those wells will now be covered by our nontributary return flows and/or our Douglas Park water rights. This also means that the Town will now have slightly less reusable water going down Plum Creek. As of September 30, 2015 the call on the South Platte is Free River. The priority date on a river call may change each day depending on the stream flow available, and the seniority of the diversions that need water on that day.

## Water Supply Sources YTD



### Maximum Daily Water Demands

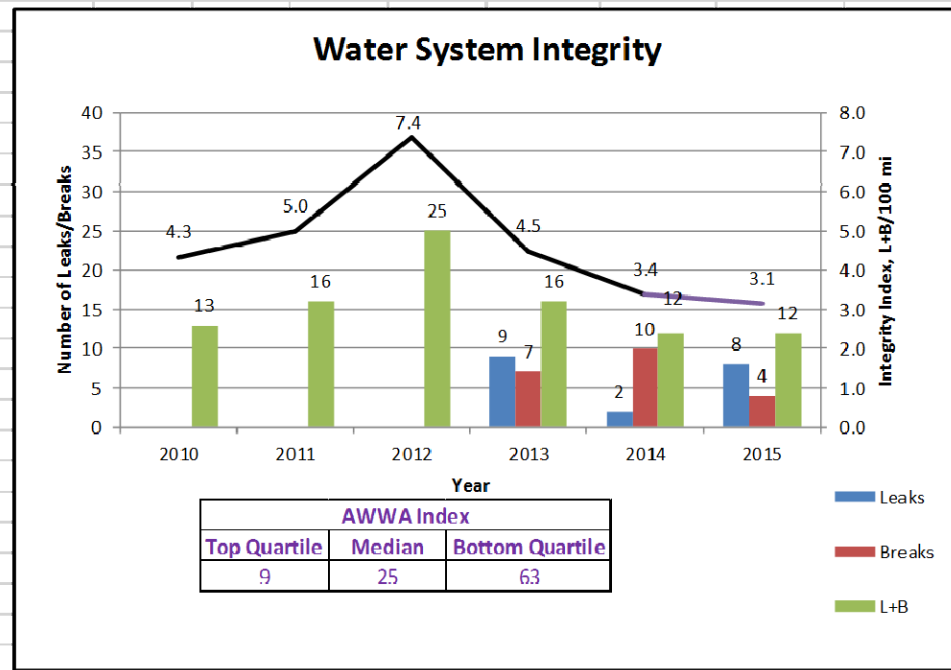


# Household Chemical Roundup

A record 845 vehicles passed through the Household Chemical Roundup in September. Once final tallies on the amount of waste collected are available, we will provide a more comprehensive report.



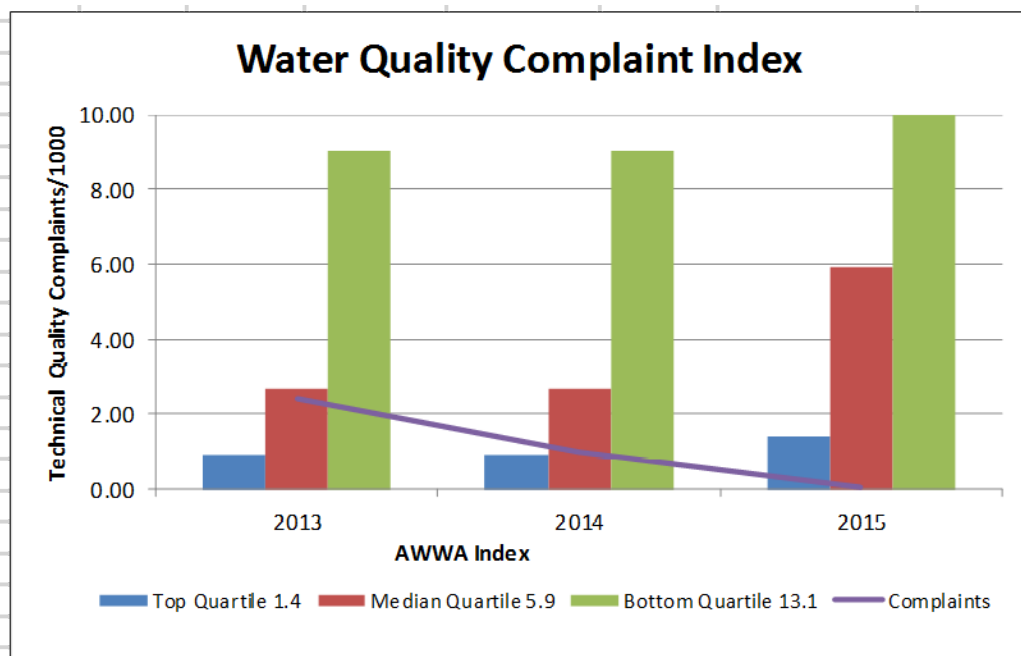
# Water System Integrity



There was one service line break, and there were zero main line breaks this month. An overall rating of 3.12 breaks per 100 miles kept us in the top quartile as compared to national standards for 2014. We are on-track to be in the top quartile again in 2015 based on performance year-to-date.

# Water Quality Complaints

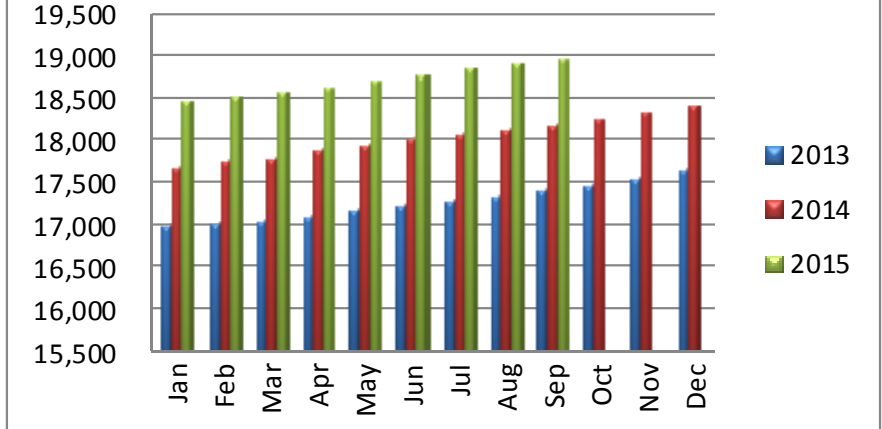
There were no water quality complaints in September 2015. Castle Rock Water compared favorably to industry standards falling just outside the top quartile (best of the best) for this metric in 2014. Year-to-date we are on-track to be in the top quartile again this year. For more information, view the current water quality report at [CRgov.com/waterquality](http://CRgov.com/waterquality).



## Meters



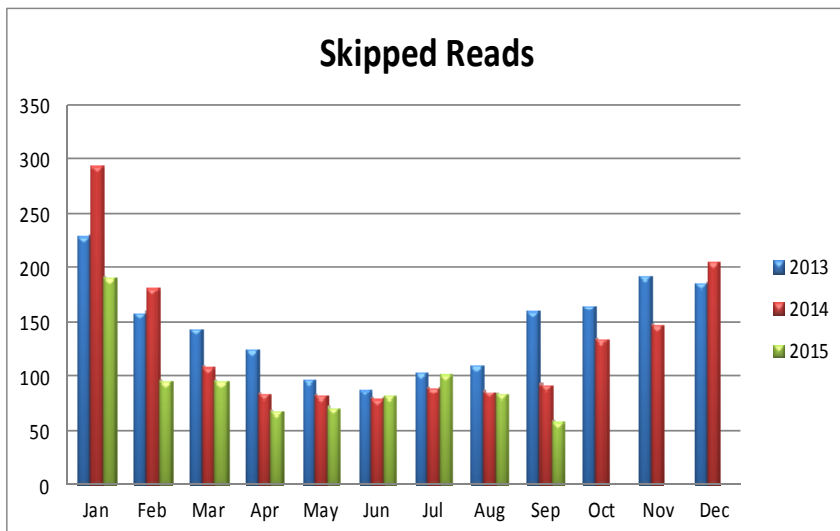
## Meters Read



The meters read continues to increase month-to-month due to new residential and commercial accounts, with a significant increase from August 2014.

Skipped reads of **59** sets a new record for the lowest number in one month.

## Skipped Reads



Skipped reads in September 2015 sets a new record for the lowest number of skipped reads recorded. This is a result of continued maintenance and repair efforts on our meter infrastructure. The American Water Works Association (AWWA) standard is 2 percent, so at 0.31 percent, we still continue to stay well below the industry average.

## *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.

# 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:



**Dominic Roybal - CDL**



**Dwight Keller - CDL**



**Colton Maloney - CDL**

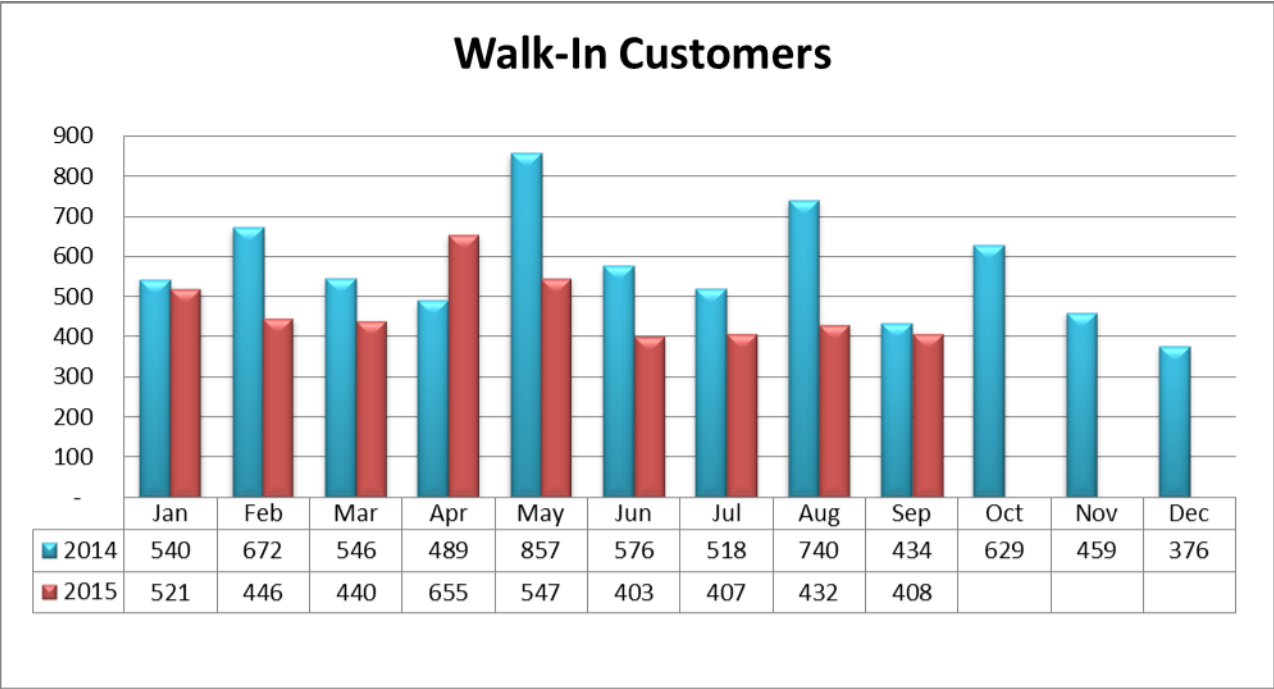


## Presentation at Regional Conference

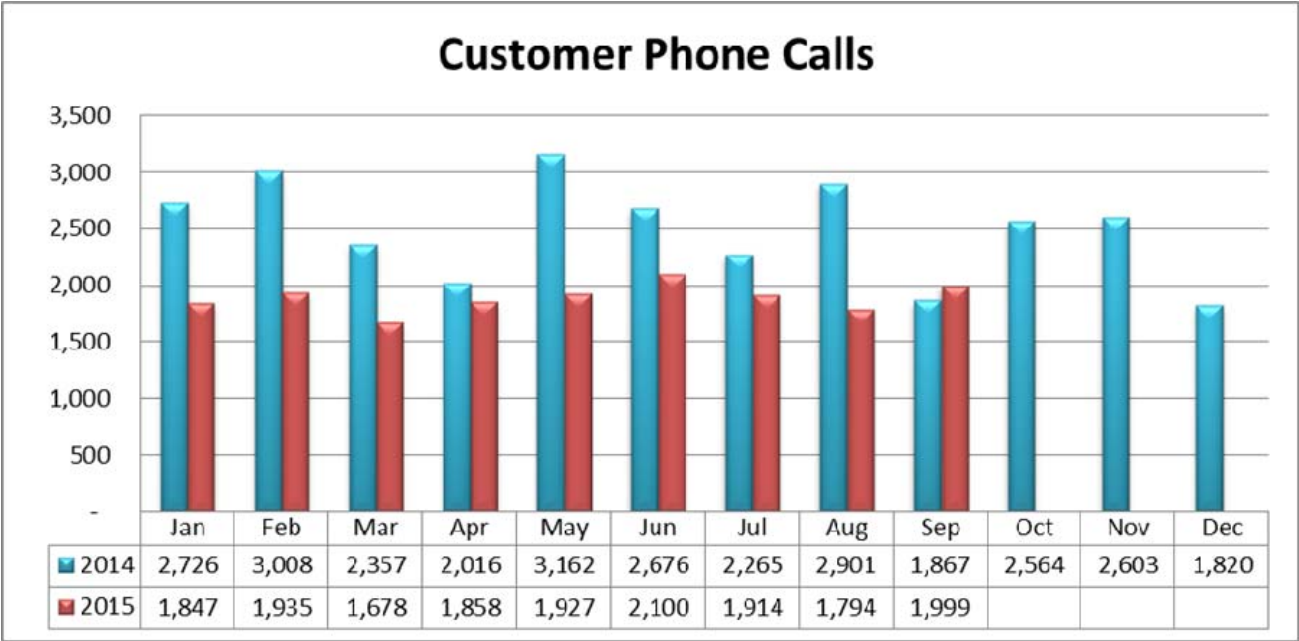
Matt Daniels, GIS Mapping Specialist, presented at the AWWA Regional Conference “*How Asset Management Can Improve Your Life in 3 Easy Steps.*” For Castle Rock Water, a formal asset management program is a key component of a modern water utility and our Strategic Plan. The presentation focused on examining the implementation of an asset management system.

The presentation covered stake holder involvement, vendor and program selection, planning, implementation and work flow analysis. Additionally, the discussion included topics on return on investment, inspections, and preventive maintenance planning and capital improvement projects. An asset management system can provide a central repository containing the current condition of all assets and historical information to plan for and prioritize asset replacement.

Asset management is also a tool to monitor usage, costs and human/capital resources so a utility can optimize an asset’s lifespan and accurately capture the costs associated with an asset from cradle to grave. When properly implemented, an asset management system can yield system wide operational efficiencies.



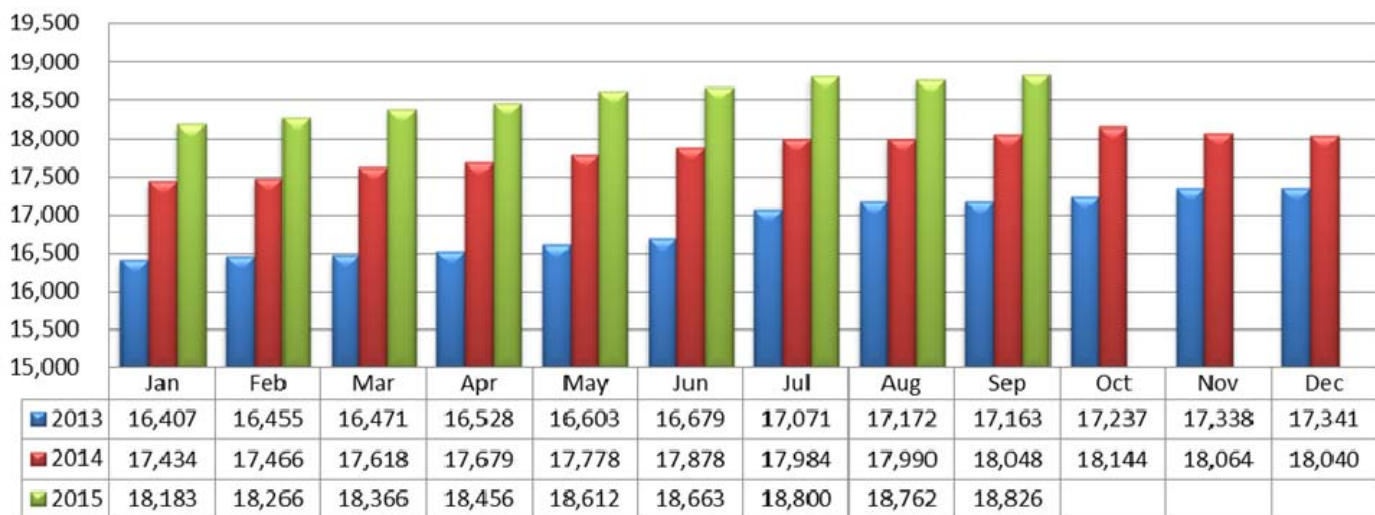
Walk-in customers have been consistent over the last four months due to the time of year.



Customer phone calls in September 2015 were slightly higher than the prior month.



## # of Accounts Billed



The number of accounts billed continues to steadily increase month-to-month mostly due to new residential growth.

## Plan Review Update

By Kurtis Cotton  
Plan Review Engineer

The applications reviewed consisted of:

- 23 1<sup>st</sup> Submittals
- 16 2<sup>nd</sup> Submittals
- 27 Special reviews

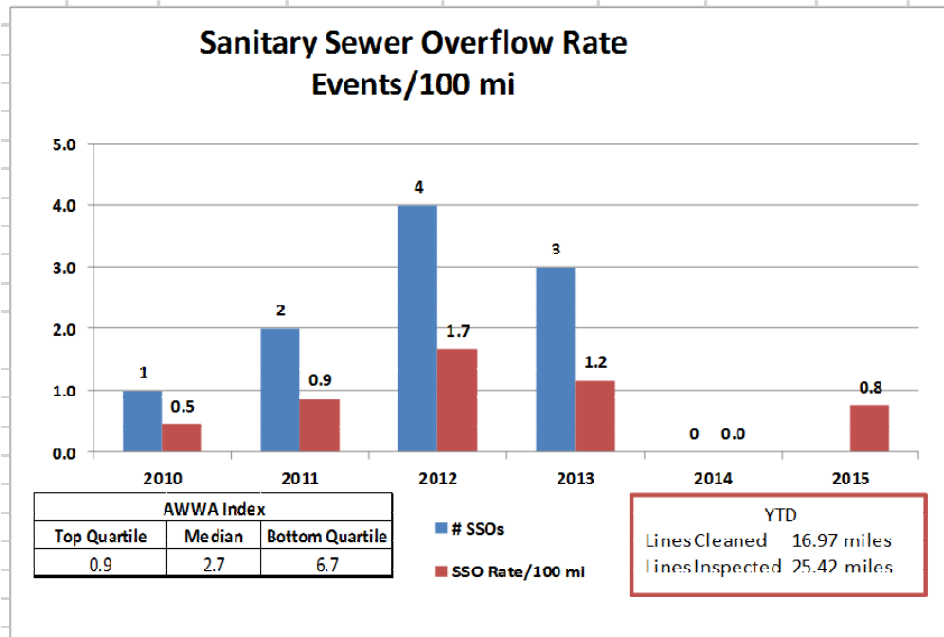
Utilities reviewed 66 applications this month which compares to 61 during the same time period in 2014. The average assigned due date by Development Services was 1.4 weeks, and Utilities completed the reviews in 1.2 weeks, which included:

- 3 Agreements
- 1 Planned Development Plan
- 3 Plats
- 6 Preliminary Project Applications
- 15 Construction Drawings
- 9 Site Development Plans
- 5 Technical Criteria Variances
- 14 Field Change Orders
- 8 Grading, Erosion and Sediment Control (GESC) Plans
- 2 Grading, Erosion and Sediment Control (GESC) Permits

In addition to completing the above listed applications on-time, Utilities completed 72 single family utility reviews and associated system development fees.

# Sanitary Sewer Overflows

We ended 2014 with no sewer over-flows or backups which is the best performance over the last five years. Our total sewer overflows to-date in 2015 is two. Our 5-year average is 0.38 events per 100 miles, which is in the Top Quartile (the best) of American Water Works Association (AWWA) entities participating in the national benchmarking. *The lower the number the better the performance!*



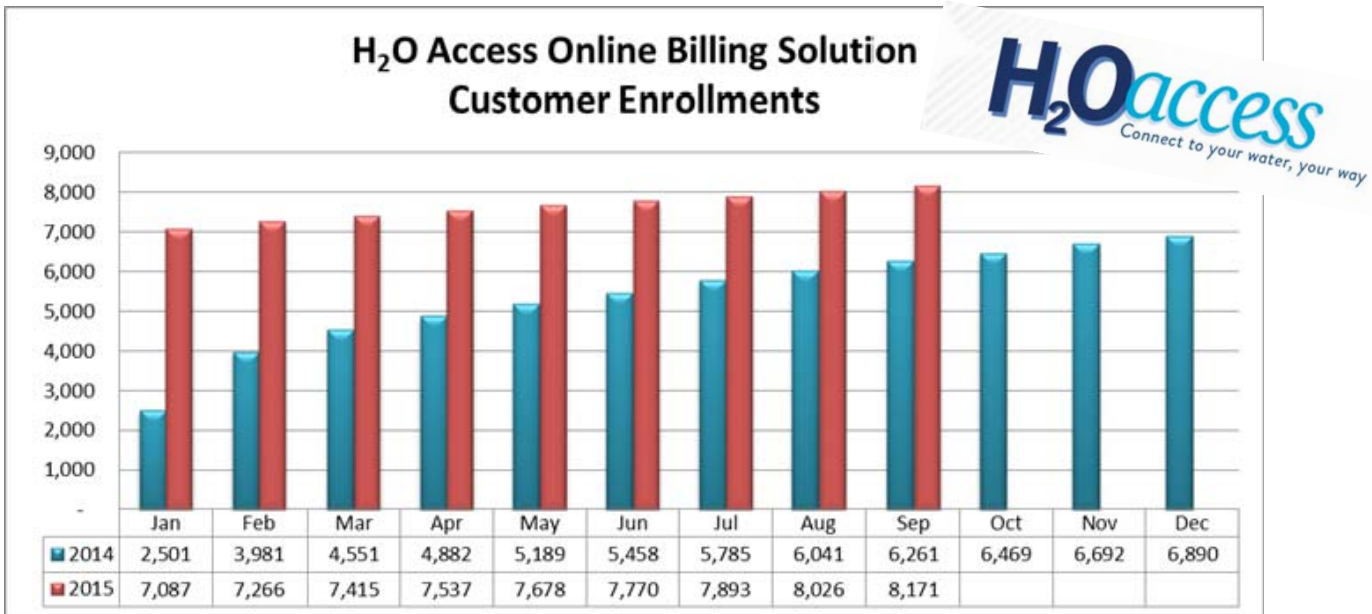
## How do we avoid overflows?

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. In 2014, the camera was run through 21.4 miles of pipe, and we cleaned 18.7 miles. So far in 2015, we have inspected 25 miles of pipe, and cleaned 17 miles.

## 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.*



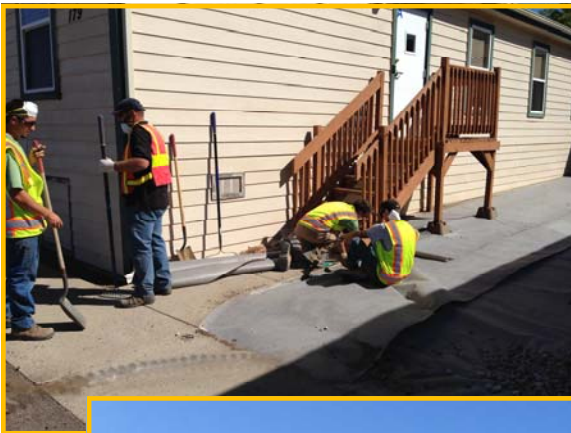
The H<sub>2</sub>OAccess online billing solution was launched in January 2014. The number of customers who have enrolled in online bill pay and have also chosen to go paperless remains steady at 52%. However, the number of customers enrolling in the service is steadily increasing month to month.



## Clean-Up Day



In less than two hours, the outdoor areas of our work site were cleaned and freshened up. Members of the team left their normal computer screens for work gloves, hard hats and vests to sweep, rake, and place new rock and mulch in the garden beds.



## Plum Creek Membrane System Featured

By: Sandi Aguilar, Customer Relations Program Manager

Several PALL Corporation representatives toured the Plum Creek Water Purification Facility to showcase their new water purification membrane system to new employees, including an executive from their new parent company, Danaher.

Plum Creek is one of the newest municipal water filtration systems they have installed and of which they are very proud. They also toured the Westminster treatment plant which has filters from 14 years ago that have reached beyond their 10 year replacement cycle. With the Plum Creek pre-filtration processes and continual maintenance, they anticipate a greater than 10 year life for ours as well.



## SEPTEMBER 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. Sixty routine samples were completed. All samples were within the parameters set forth by the 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. No pressure issues.**

### Drinking Water Supply Outages

**<5% of our customers will experience water outages for one or more event totaling more than 30 hours/year. Less than 5 percent of customers experienced a water outage this month; however, the following issue was reported:**

- One service line repair Coachhouse Loop. One customer was without water for less than four hours.

### 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 this month.**

### Hydrant Meter Permits

*Thirty-two (32) open meter permits.*

### Backflow Prevention Devices

*Mailed approximately 25 backflow test letters for devices due in September.*



# “All About Conservation”

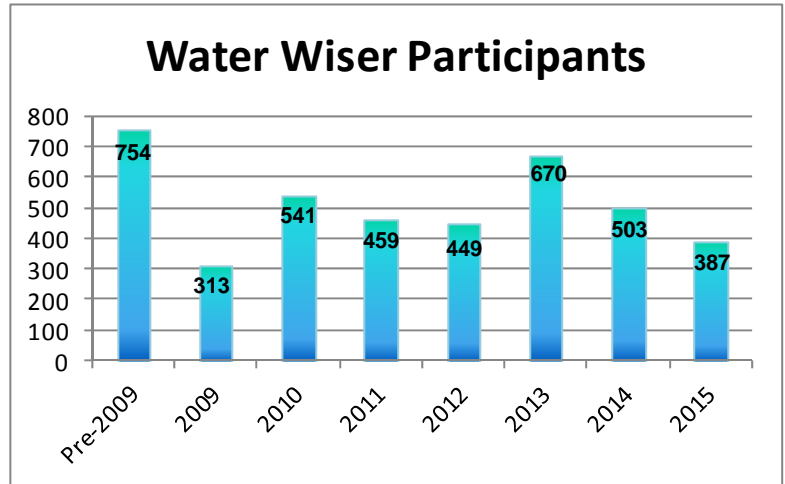
Our customers are taking advantage of our conservation programs. Find out how in this section.

## Smartscape Solutions for Your Lawn and Home

Water wiser workshops continue to be popular with our customers. These workshops focus on how to apply water by taking advantage of the “7 Steps of Xeriscape”; how to detect water waste in your yard and homes; and how your irrigation system can be improved.

An evaluation of program participants indicates that almost 60% are able to lower their water usage after attending the workshop.

We have completed all of the workshops in 2015. Check back in early 2016 for a workshop schedule.



## Update on Rebate Programs

The 2015 season saw a reduction in rebate applications submitted, with the heaviest activity in the SmartScapes. SmartScapes continue to be popular with 22 applications being submitted versus 39 in 2014. Evaluations of past customers taking part in these programs indicate a water savings of approximately 19 percent. Below information about previous year’s programs compared to 2015.

Program Category	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual
SmartScape Renovation	\$51,142	\$50,392	\$54,152	\$23,400	\$21,407	\$14,649
Rotary Nozzle Retrofit	\$3,699	\$2,309	\$794	\$1,200	\$2,461	\$1,538
Rain Sensor	\$112	\$131	\$34	\$150	\$183	\$115
Smart Irrigation Controller	\$2,876	\$1,262	\$584	\$750	\$2,995	\$4,261
Slow the Flow Irrigation Audits	\$17,502	\$9,372	\$4,318	\$4,500	\$3,500	\$1,980
<b>Total, All Programs</b>	<b>\$75,331</b>	<b>\$63,466</b>	<b>\$59,882</b>	<b>\$29,774</b>	<b>\$30,546</b>	<b>\$22,543</b>

# New Operations & Maintenance Building Construction

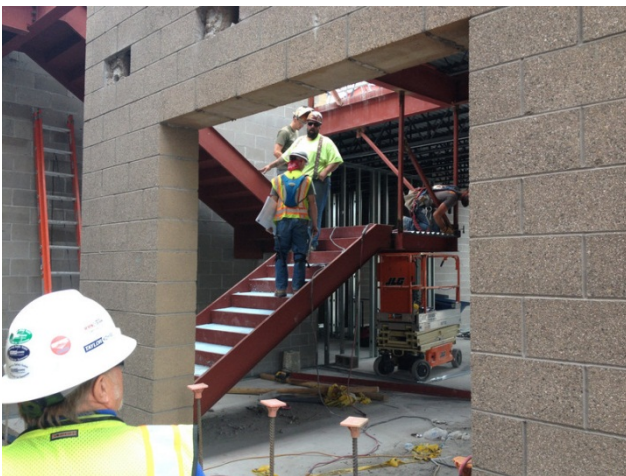
*By: Josh Hansen, Project Manager*

The O&M Building construction continued at a rapid pace in September. The majority of concrete masonry units and steel structure have been installed on the building. Roof framing and decking was completed during the month and standing seam metal roof panels are being installed now. Standing seam metal siding installation will also begin in October, so the lovely blue waterproofing should soon start to disappear. Installation of stone veneer along the lower portions of CMU wall was also completed in September.

In September, concrete slab was poured in the garage bays, mechanical room, electrical room, compressor room, north entryway, west entryway, as well as both stairways and on the mezzanine deck off the upstairs meeting room. This completed all of the interior concrete flooring in the building and floor finishes will be installed in the coming months. The last section of concrete trickle channel was also poured in the detention pond as well as installation of soil riprap emergency spillway. The contractor will be pouring exterior slabs and curb and gutter around the building in October.



*Views from the break room windows*



*Steel workers installing central stairway*

Construction within the building continued with interior framing nearing completion in a large portion of the building. Drywall installation is beginning in the north-west portion of the building. The central and south stairways were installed this month. Installation of mechanical, electrical, and plumbing equipment continued throughout the building. The majority of door and window frames have been installed now and glazing installation is anticipated to begin in October. Construction of the south curtain wall should also begin sometime this month. Construction of the building remains on track within the established budget (approximately \$4.5 million) and is on schedule for substantial completion in December 2015.