Castle Rock Water
Securing our future drop by drop

UTILITIES DEPARTMENT

Water - Water Resources - Wastewater - Stormwater

May 2015

Castle North Valve Repair Project Phase 3

By: Matt Hayes, P.E., Project Manager

The Castle North Valve Repair Project was initiated in 2013 to repair valve components that were failing due to corrosion, reducing operational readiness and with the potential to cause significant property damage. The water main valves in the Castle North Area had shown a high rate of failure upon operation. Much of the water pipe in the area was installed without protective polywrap around the pipe or the valves. The concern among staff was that with aging water mains in the area, during a water main break or fire emergency, the valves would fail when they were needed for isolation. Typically, operations and maintenance staff witness valve failure in two categories: failure due to high pressure and failure during operations. In either event, pipe and/or valve failure creates an unscheduled water shut down for repair, resulting in inconvenience to Castle Rock water customers.

Leaking valve that was replaced during the project

Cutting valve out of system to install new valve

In August of 2013, the first phase of the Castle North Valve Project repaired 29 critical main line valves in the neighborhood. Another 36 main line system valves in the area were repaired during Phase 2 in August of 2014. The previous repair projects have proved to be timely - a water main break on Oakwood Drive in early 2015 was more easily managed due to the repairs completed over the previous two summers. Phase 3 of the project was completed at the end of April 2015, ahead of the Public Works pavement maintenance project. Phase 3 of the valve repair project completed the repair of the remaining fire hydrant guard valves in the area. This project also replaced six valves that had failed recently due to their age. The total cost for this phase 3 of the project was $172,000 and the total cost for all three phases of the project was $392,000.

OUR VISION

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

OUR MISSION

We provide our community with exceptional service that protects public health and balances social, environmental and fiscal responsibilities in a sustainable manner.

May Levels of Service

Drinking Water Compliance
The Utilities Department 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.*

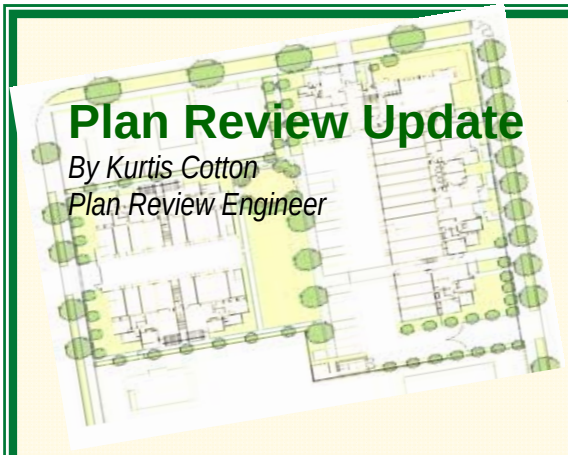
Pressure Adequacy
< 1% of our customers will experience less than 43 pounds per square inch (psi) of pressure at the meter during normal operations. *There were no pressure issues.*

Drinking Water Supply Outages
<5% of our customers will experience water outages for one or more event totaling more than 30 hours/ year. *There were no outages this month.*

Sewer System Effectiveness
<1% of our customers will experience a sewer backup caused by the utility's sewer system per year.
No sewer backups reported.

Hydrant Meter Permits
Twenty-two (22) open meter permits.

Backflow Prevention Devices
Mailed approximately 650 backflow test letters for devices due in May.



Plan Review Update

By Kurtis Cotton
Plan Review Engineer

Utilities reviewed 52 applications this month which compares to 42 during the same time period in 2014. The average assigned due date by Development Services was 2 weeks, and Utilities completed the reviews in 1.8 weeks. Utilities completed two one week early and all others on time as scheduled. These applications included:

- 3 Agreements
- 1 County Referral
- 2 Change of Zoning
- 1 Lot Line Adjustment
- 1 Miscellaneous
- 3 Planned Development Plans
- 4 Plats
- 13 Construction Drawings
- 4 Site Development Plans
- 4 Technical Criteria Variances
- 8 Field Change Orders
- 8 Grading, Erosion and Sediment Control (GESC) Plans

The applications reviewed consisted of:

- 28 1st Submittals
- 14 2nd Submittals
- 10 Special reviews

In addition to completing the above listed applications on-time, Utilities completed 100 single family utility reviews and associated system development fees.

Wooden Pipe… A Look Into History

Any historian will tell you – the best way to move forward is to know where you came from. That's some of the motivation behind Castle Rock Water's new historic display. The 1917 wooden water pipeline gives a look into history and shows the community where the Town's water system started.

The wooden stave pipeline was buried about 4 feet below ground along the north bank of a drainage area known as Douglas Run. The pipeline was part of a nearly 4 mile-long municipal waterline that helped supply drinking water to the approximately 500 residents of Castle Rock at the time. It was abandoned due to deterioration, seepage and increased water demands in the early 1940s, when a new pipeline was constructed.

Castle Rock Water salvaged about 8 feet of the wooden pipeline in June 2014 which will be permanently displayed at the Plum Creek Water Purification Facility. A smaller section of the wooden pipeline, approximately 18 inches, will travel around Town for residents and visitors to enjoy. It is currently on display in the lobby at Town Hall, and will visit the Philip S. Miller Library (July), the Douglas County administration building (August), and the Castle Rock Museum (September).

The picture above was part of a feature story in the Denver Post on May 26. The complete story can be found at http://www.denverpost.com/news/ci_28187688/wooden-stave-water-pipe-slaked-castle-rocks-thirst

Safety Stand Down featured in CIRSA's Annual Report

"Castle Rock's new Utilities Director wanted to make safety a main priority for the department. So his team came up with a plan: Safety Stand Down meetings.

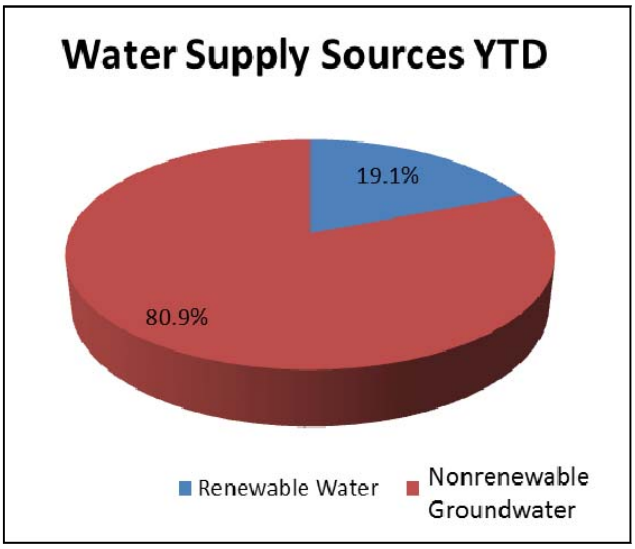
Department staff meets quarterly to discuss relevant safety topics. They break into groups based on their area of responsibility within the department or sometimes they create cross departmental groups. In either format, they talk about risks to the team and personal safety. They end each meeting by identifying issues or action items they'd like to see addressed before the next meeting. This keeps people accountable, and helps make change happen.

How is it working?
The meetings have brought about real safety changes for the community and town staff.

A few examples of actions from the meetings include a special mirror that was installed at a dangerous road entrance to improve poor visibility when turning; repairs made to the gutters on the town's water resources trailer to eliminate ice buildup on the trailer's stairs; and new ice and snow clearing plans which helped reduce the number of slips and falls that were a problem on the department's administration campus in the past."

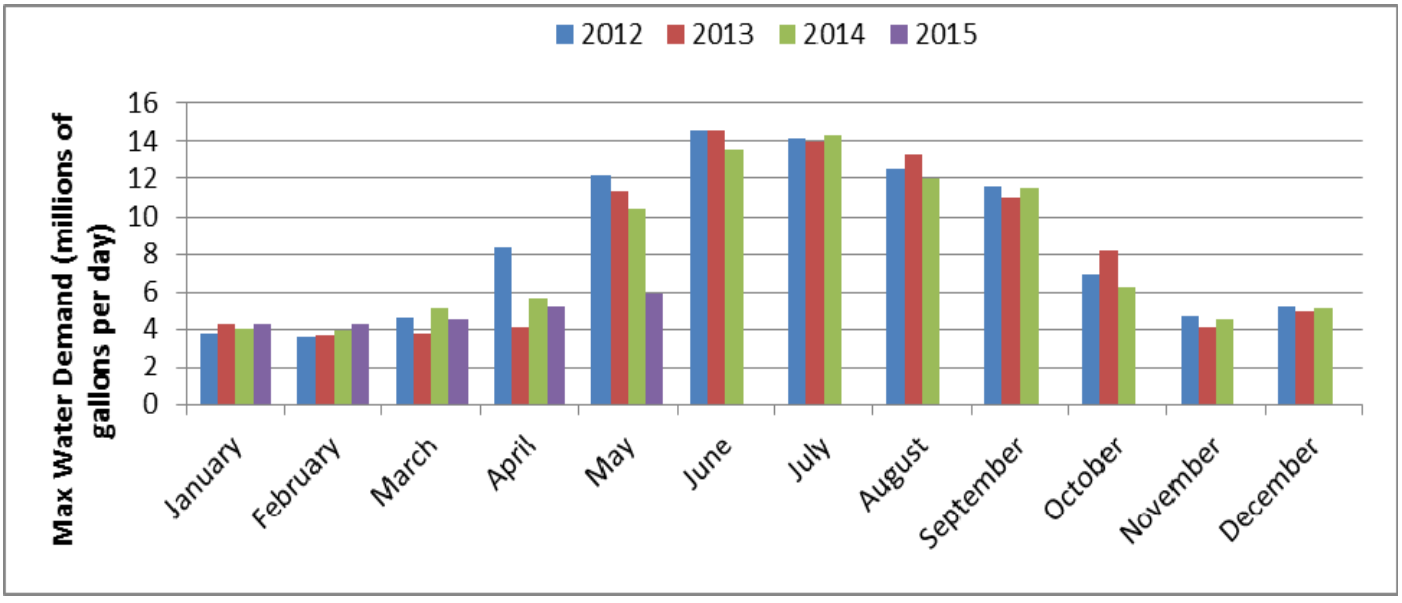
2015 Water Demands

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 5.9 million gallons per day (MGD) for May is 12% higher than the April maximum of 5.2 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 May was 137.9 million gallons (MG), which was a 6% increase from the April 2015 total of 129.5 MG, and a significant decrease (37%) from May 2014 demand of 220.1 MG due to a wet and cold month.

The Town's nine alluvial wells produced a total of 21.8 MG of renewable water during May, which represents 15.3% of the total water supply for the month and 19.1% (117 MG or 359 acre-feet) of the water supply year to date. The total renewable water produced since the opening of the PCWPF has surpassed 590 MG, which represents 12.4% of the Town's total water supply since the alluvial wells began pumping in May of 2013. Ideally, when flow in Plum Creek increases and water levels rise in the wells, we should take advantage of this and increase the rate of production to divert the additional water that is available. 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, over most of the month of May, experienced stream flows between 50 to 200 cubic feet per second (cfs) with some days at or above 300 cfs. Castle Rock's new stream gage on West Plum Creek at Sedalia was installed in March and started operating April 1. Due to the numerous storms in May, the USGS was able to rate the stream

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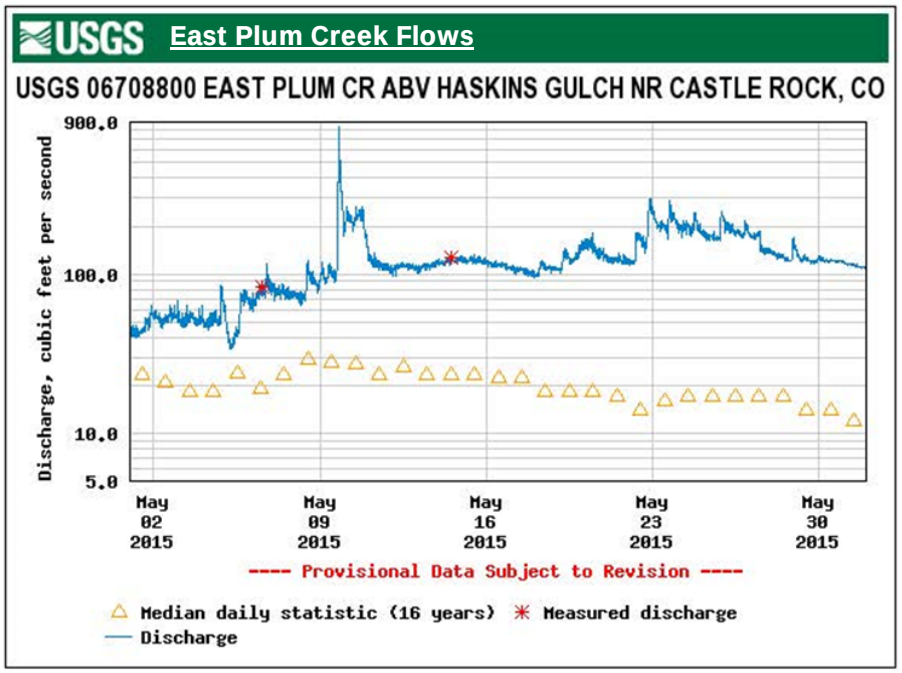
2015 Water Demands, *continued from previous page*



much quicker than the originally estimated 3 months. Therefore, the gage on West Plum Creek at Sedalia now has volumetric discharge readings (in cubic feet per second). The precipitation for May was above average with cooler temperatures. There were no active calls on the main stem of the South Platte River that called out the Town's water rights. This means that the South Platte river along our stem was considered to be free-river. Free-river status means that those with senior water rights were not diverting the river/surface/tributary water and allowing it to be available to those with junior water rights and any water users who could put the water to beneficial use (including storage). 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. The NRCS Colorado SNOTEL Snowpack Update Reports for June 4 states that the South Platte River Basin index is at 355% of median snowpack.

Land Use Leadership Alliance

The Land Use Law Center - Pace University School of Law, White Plains, NY leads the nation in educating local land use leaders through training programs in land use law and community decision-making. Over 2,000 leaders have graduated from this four-day intensive Land Use Leadership Alliance (LULA). LULA was founded in 1995 to address general land use matters in the suburban and rural communities of New York. Since then, it has expanded to train leaders in New Jersey, Connecticut, Pennsylvania, Colorado and Utah and its curriculum has grown to include issues faced in urban communities. Each four-day program is designed to meet the needs of its participant and their communities by focusing on both foundational and cutting-edge information related to their priority land use issues. One of the recent graduates was our own, Rick Schultz, Water Conservation Specialist with Castle Rock Water.

This year, Rick was a member of a panel of experts from the landscape industry to discuss options for the addressing the "who, what, when, where, how" of outdoor water use, including landscaper training programs and the panelist's opinion on what programs/regulations actually work on the ground. The goal of the discussion was to relate landscaping, irrigation and conservation to land use decisions. Other panelists included representatives from the Irrigation Association, ValleyCrest Landscape Maintenance and the Associated Landscape Contractors of Colorado.

12th Annual Spring-Up the Creek

By: Kim Guite, Stormwater Specialist

Another successful Spring-Up the Creek Event was held on Saturday, May 2nd. Spring-Up is a community event to preserve our waterways by removing garbage that collects along the stream banks. The theme for this year's event was "Leave Only Footprints" and was featured on over 200 t-shirts that were distributed to participants. We are pleased to have seen a turnout of **173 volunteers**.

In only two hours, **112 bags** of trash, **65 bags** of recyclable materials and various pieces of debris, including four tires and a shopping cart, were removed from East Plum Creek, Sellars Gulch and tributary streams in The Meadows.

Volunteers gathered at Festival Park on Second and Perry Streets where they were treated to breakfast burritos from the B&B Café and coffee from Lost Coffee. Participants were shuttled to seven locations throughout town where they enjoyed exercise on the trails while collecting garbage along the banks of the stream.

After the event, volunteers were invited to unwind at the park where they were offered educational opportunities and fun family activities. Booths were hosted by Castle Rock Water on water treatment and the Parks and Recreation Department on nature and wildlife. The children enjoyed balloon art, making crafts, jumping on the bouncy house and face painting.

The Town of Castle Rock hosted this event in partnership with Douglas County, Castle Pines Metro District, Chatfield Watershed Authority, and Plum Creek Water Reclamation Authority.
A special thanks to our event sponsors including Bates Engineering, Burns & McDonnell Eng. Co., Inc., Castle Pines North Metro District, CH2MHill, Data West Corporation, Enginuity, Lyons, Gaddis, Kahn & Hall, P.C., Muller, South Metro Water Supply Authority, W. W. Wheeler & Assoc., Inc. and Western States Land Services. Total contributions were $3,850 which entirely covered the cost of the event. Through these donations, the partners were able to offer t-shirts, breakfast, face painting, balloon art and the kids craft to volunteers free of charge.

We also want to thank Allstate for providing water, Truth FWB Church for hosting the bouncy house, Scoop and Scrub, Helms Chiropractic, Castle Rock Rotary, South Metro Water Supply Authority (SMWSA) and RESPEC for their booths) and the Home Depot for organizing a kid's craft. All were pivotal in making this event a success.

The following staff are recognized for their involvement with this event:

Adan Rivas, Jessup Schield, Denise Lannan, Sheri Scott, Tim Friday, Matt Benak, BrianLaschanzky, Erik Dam, Jaime McCracken, Shawn Griffith, Barbara Horton, Andrew Dieter, Cassie Grotheer, John

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Spring-Up, continued

Ferguson and Tim Lambert from Utilities; KerriAnne Mukhopadhyay and Karen Carter from Community Relations; Barbara Spagnuolo from Parks; Eric Lee from Public Works; Chief Morales from Fire Department; and Amy Graziano from the Utilities Commission.

We are very appreciative of the tremendous team effort set forth from several different departments in the Town and all the partners involved including the Utilities Department, Community Relations, Public Works, Parks and Recreation and Douglas County.

A special thanks to Krystle Reale and Nick Keating (Douglas County) for supporting the Stormwater Division by devoting many hours over the last five months to plan, coordinate and facilitate the event. Through their creativity, forward planning and organizational abilities this event was a huge success!

Remember: One thing is clear: our creeks, rivers and lakes depend on you!

New O&M Building Construction

By: Josh Hansen P.E., Project Manager

The new operations and maintenance (O&M) building is an important project for Utilities, which will provide much needed space for staff, shop areas for maintenance activities and meter testing, as well as a more secure and advanced space for our Supervisory Control and Data Acquisition Systems (SCADA). In spite of the monsoon-like weather that occurred throughout May, the contractor continued to make progress on construction of the O&M Building. The existing onsite surfaces and soils drain fast which allows construction activities to resume relatively quickly after storms.

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In early May, grading of the building pad as well as excavation for some of the exterior foundation footings was completed. The first concrete poured on the project was the pit foundation for the two-stop elevator that will be installed in the building. The contractor also completed formwork, steel reinforcement, and concrete placement for footings and stemwalls on the east and south sides of the building. Later in the month, installation began on plumbing rough-ins that will be underneath the concrete slab on grade.

Elsewhere on the site, the contractor installed service utility lines including sanitary sewer, storm sewer, domestic water, fire line, and the fire department connection. Installation of the sanitary service line involved removal of concrete slab south of the Utilities Warehouse and working around the numerous existing utility lines through this area. Some existing electrical and lighting facilities within the construction area were also salvaged or demolished this month.

Construction of the project is within budget and continuing on schedule for substantial completion in December 2015.

Installation of concrete foundation footings and stemwalls

Installation of new sanitary sewer service line to the building

Static Water Level Observations from Castle Rock Denver Basin Wells

By: Heather Justus, Water Resources Program Analyst

The Denver Basin Aquifer system is a critical water source for the Town of Castle Rock (Town) currently and in the future. In the Water Resources Strategic Master Plan, the Town has planned to use existing Denver Basin groundwater to meet 25% of the demand in 2050 -projected build out. It is vital to protect this resource to meet the Town's current and future water demands and to maintain this resource for drought protection.

Monitoring of water levels is one effective method in determining changes in aquifer characteristics over time. Water level measurements can be used to determine aquifer decline rates, the current confining pressure (or artesian head), and localized depletion rates of each aquifer. By using this data, the Town can optimize groundwater withdrawal rates and future well locations to maximize ultimate water recovery from the aquifers, while minimizing the associated water production costs, and the depletion of the aquifers.

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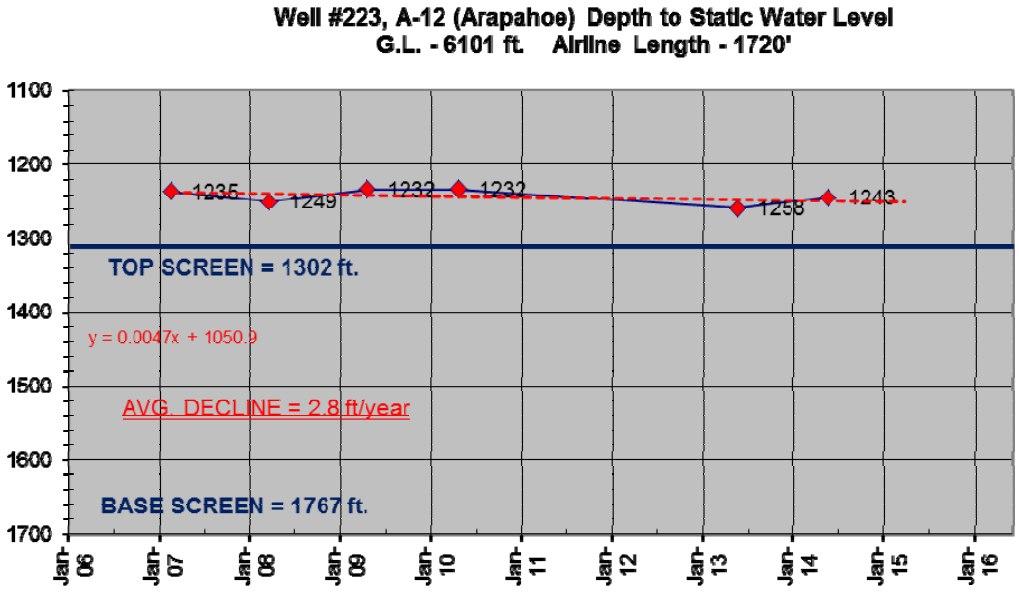
Static Water, continued

In the past, the Town staff had observed 30 to 40 feet of yearly decline in Denver Basin groundwater levels. However, current data suggests that the regional water level decline rate has slowed to 3 to 5 feet. We believe this reduction is due to the water levels in the wells going from a confined condition to an unconfined condition as well as our increased focus on renewable water. The graph below shows the observed water levels for Well A-12, which has experienced an average decline of 2.8 feet/ year. In addition, staff estimated the five-year average of the regional decline for each of the aquifers. Both the Dawson and Denver aquifers five-year average is estimated to be between 0 to 3 feet of regional decline while the five-year average for the Arapahoe aquifer is 5 feet of regional decline. The Town is also pursuing the feasibility of Aquifer Storage and Recovery (ASR) through a pilot program. Two wells have been converted for use in ASR. Testing will be completed in the Fall/Winter 2015-2016. The potential benefits of ASR include use as storage for renewable water with a is reduction in evaporation and an increase in hydrostatic pressure for the aquifers.



On the Director's Front

By: Mark Marlowe, Utilities Director

In May of 2015, the Utilities Department provided Town Council with the annual update to the Utilities Department's Five-Year Strategic Plan (2014-2018). Town Council approved the update. If you would like to receive a copy of the Plan, please email us at water@crgov.com

As the Department shared with Council in May, progress on implementation of key tactics from the strategic plan has been outstanding. Of the sixteen key tactics for implementation identified to Council in the Strategic Plan in 2014, all have either been completed or are well under way. Key outcomes of the tactics Utilities implemented include:

- Developed and implemented of an Energy Management Plan that resulted in reduced energy costs of $550,000 over 2013 energy costs after correcting for differences in water production.
- Revised the Water Dedication Code to incentivize Water Efficiency Plans that could reduce the water use in future developments relative to existing equivalent developments by an estimated 26% to 47%, which has the potential to save millions of dollars in future renewable water costs.
- Tracked non-revenue water (leaks and metering inaccuracies among

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other things) and moved forward with strategies to reduce it which could provide hundreds of thousands of dollars in additional annual revenues as well as reduce the amount of renewable water we need to develop for the future saving millions in capital costs.

- Maximized renewable water production from our alluvial wells resulting in an increase month by month over 2014 production levels with approximately an 8% increase in first quarter 2015 over 2014, with us treating 545 million gallons of renewable water since the new Plum Creek Water Purification Facility came online in 2013.
- Continued to encourage the use of the online billing solution and paperless statement by our customers with great success and continued increases in adoption by our customers of online billing (7,415 customers to date) and of the paperless bill (total adoption to date is 3,781) with estimated savings of $50,000.
- Moved the study of Advanced Metering Infrastructure forward with the long term estimated cost being identified at up to $8M and based on that cost Utilities will defer the project and re-evaluate in 2017.
- Continued ongoing.
- Participated in the annual American Water Works Association benchmarking study with great results that will help drive our goal of continuous improvement.
- Developed Key Performance Indicators (KPIs) that will be used by the Utility to also drive continuous improvement.

Priority tactics were added to the updated plan taking into consideration last year's accomplishments, updated master planning, the changing needs of our community and national trends in business and utility best practices among other considerations. The key tactics added for this coming year as well as those that have been maintained from last year are identified in the following tables.

Tactic #	Tactic Summary	KPIs	Success	Timing / Roadmap	2014 Priority	Champion
1-1-11	Track and reduce non-revenue water	Percent water loss	Above median	Annual	High	Engineering Manager
1-1-12	Maximize/track use of renewable water	Percent renewable water	Fully utilize available renewable sources and water rights	Annual	High	Water Resources Manager
1-1-13	Evaluate additional raw water supply options for Rueter-Hess Reservoir	N/A	Identify cost effective way to get water to RHR	Year End 2015	High	Water Resources Manager
1-2-2	Creation of well replacement master plan and associated update to capital plan	N/A	Organized replacement plan for deep wells	Year End 2015	High	Water Resources Manager
1-4-1	Development of Drought Mitigation Plan	Schedule / Budget	Design / Construction complete on schedule / budget	Year End 2015	High	Engineering Manager
1-5-5	Review stormwater rates and fees with respect to long term capital project needs and operation, maintenance and compliance programs	N/A	Revised recommendation for 2017 Rates & Fees	Mid Year 2016	High	Stormwater Manager
3-2-7	Make decisions on implementation of advanced metering infrastructure	N/A	Decision on moving forward	Year End 2015	High	Business Solutions Division

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Director's Front, continued

Tactic #	Tactic Summary	KPIs	Success	Timing / Roadmap	2014 Priority	Champion
4-1-1	Review / update special charges	Schedule	Complete annually	Year End 2015, annual	High	Customer Relations Program Manager
4-1-8	Development of an updated Utilities-specific financial management plan that supplements the annual rates and fees study	N/A	Complete plan	Year End 2015	High	Business Solutions Manager
5-3-4	Preparation of an update to our Emergency Response Plan	N/A	Complete plan update	Year End 2015	High	Water Resources Manager
5-2-3	Asset Identification and Overall Condition Ratings	Schedule	Complete on schedule	Year End 2015	High	O&M Manager
6-1-9	Leverage AWWA benchmarking results to improve Utilities	Number of KPIs in Top Quartile	Reports on areas for improvement	Year End 2015	High	Assistant Utilities Director
6-1-10	Track key performance indicators and utilize for continuous improvement	N/A	Updated KPIs	Annual	High	Business Solutions Manager
6-3-8	Update Master Plans for water, wastewater, stormwater and water resources	N/A	Plans updated	Year End 2015	High	

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:

Ryan Cline
Backflow Prevention Assembly Tester

Thomas Hecker
Collections I

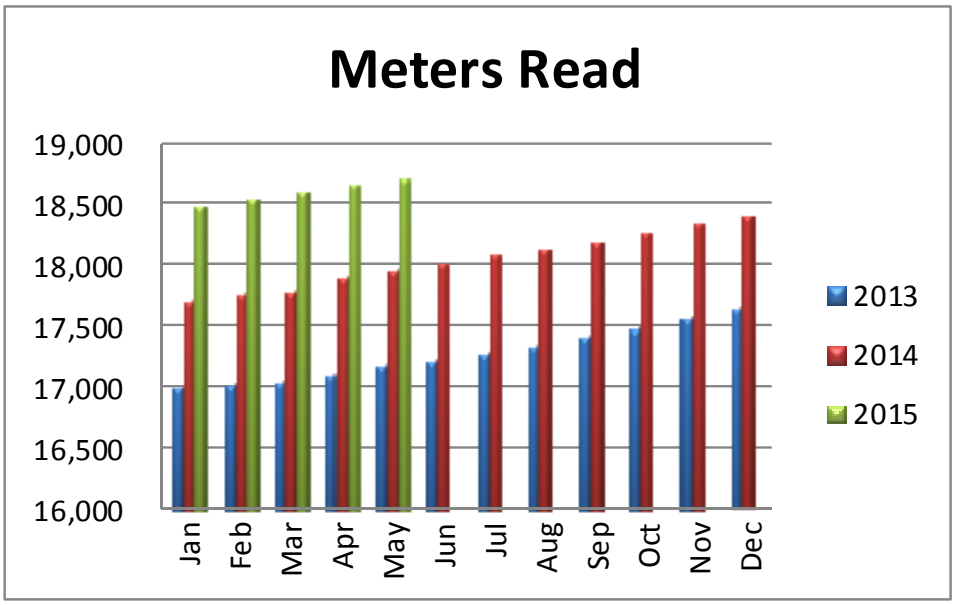
Tim Lambert
State Flow Meter Tester

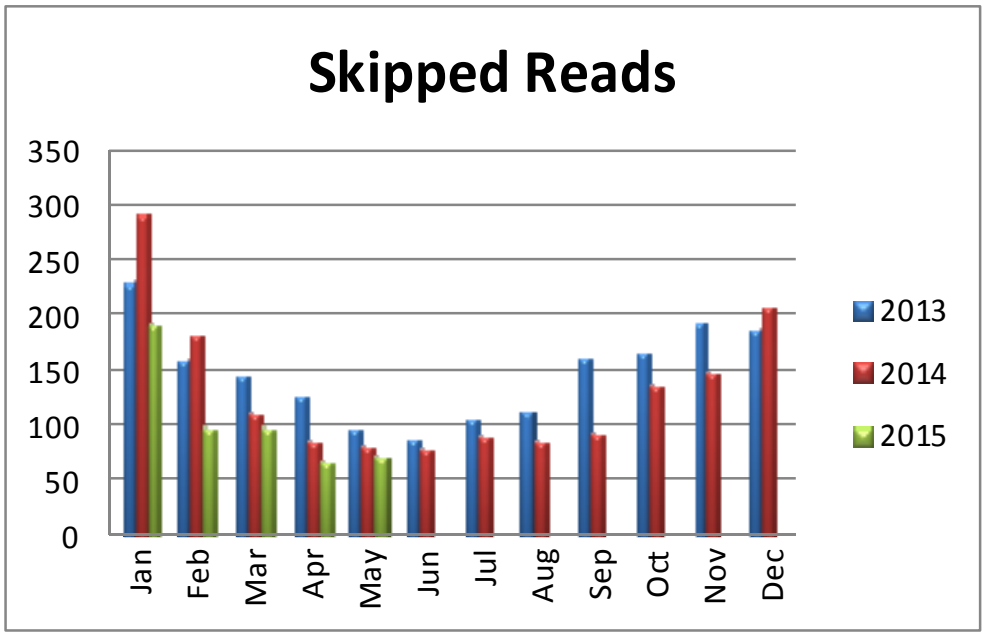
Cory Williamson
State Flow Meter Tester

Casey Devol
State Flow Meter Tester

Meters

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





Skipped reads in May 2015 are lower than in the previous two years as a result of the continued maintenance and repair efforts on meter infrastructure. The American Water Works Association (AWWA) standard is 2%, so at 0.38% 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.

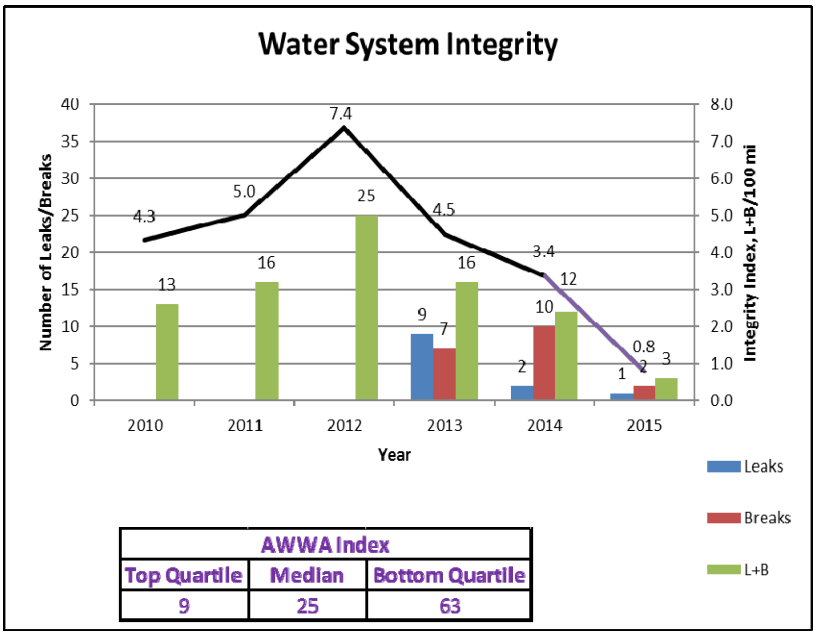
Record Set in April

Skipped reads of 68 in April sets a record for the lowest amount of skipped reads recorded.

Water System Integrity

There were no leaks reported in May 2015. An overall rating of 3.4 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.

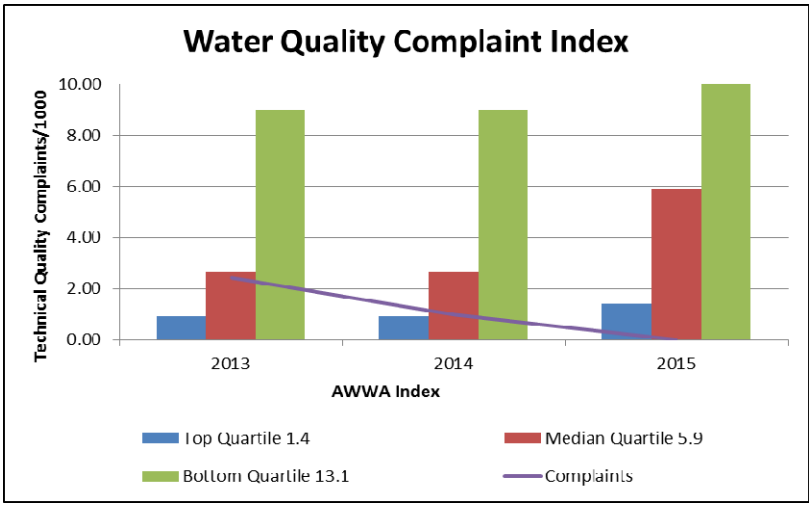
The annual leak detection survey was completed in March 2015. Five leaks were identified - four were hydrants and one was a “seep” due to snowmelt. Repairs have been made.



Water Quality Complaints

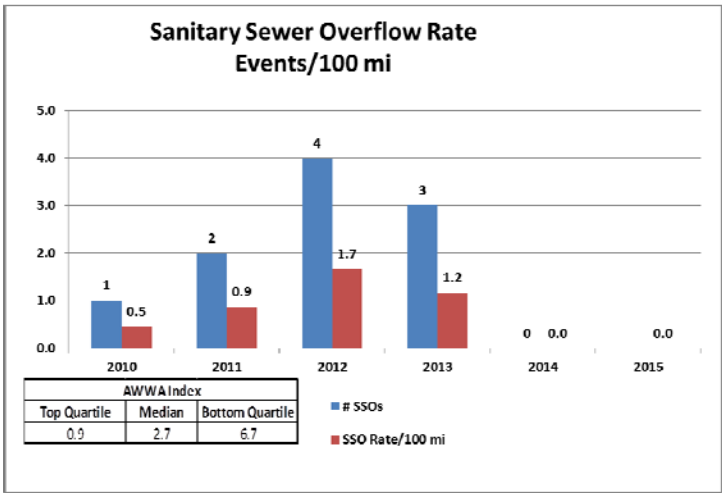
There were no water quality complaints in May 2015. Castle Rock Water compared favorably to industry standards falling just outside the top quartile (best of the best) for this metric in 2014. Year-to-date we are on-track to be in the top quartile this year.

For more information, view the current water quality report at CRgov.com/**waterquality**.



Sanitary Sewer Overflows

We ended 2014 with no sewer overflows or backups which is the best performance over the last five years. There were no sanitary sewer overflows in May 2015, and we have had none year-to-date. Our 5-year average is 0.83 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!*



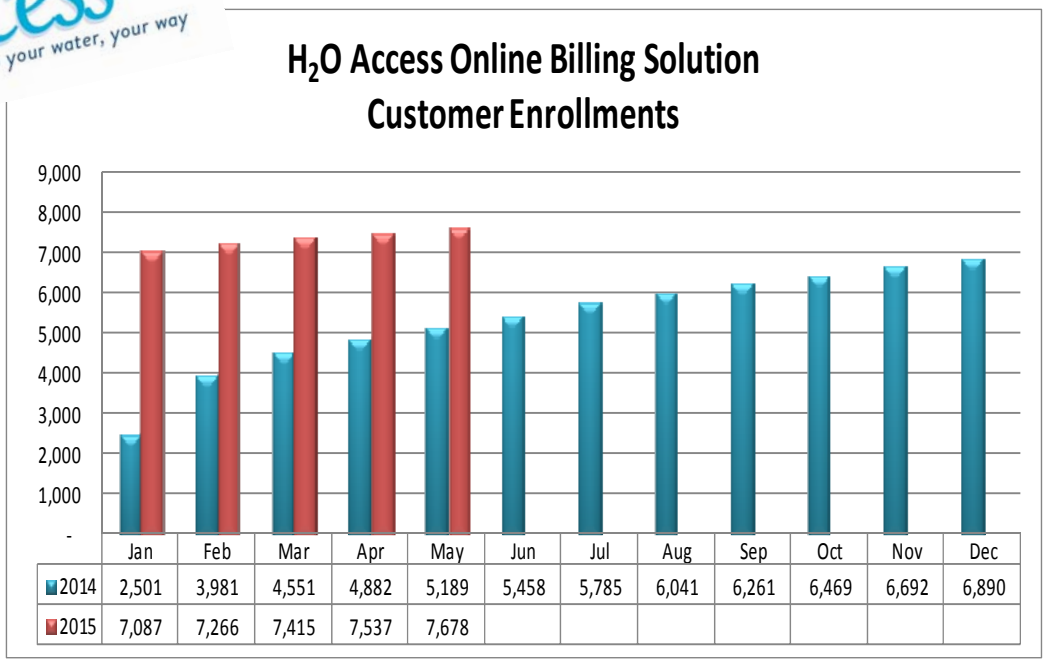
How do we avoid overflows?

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 15.2 miles of pipe, and cleaned 8.7 miles.

Customer Statistics

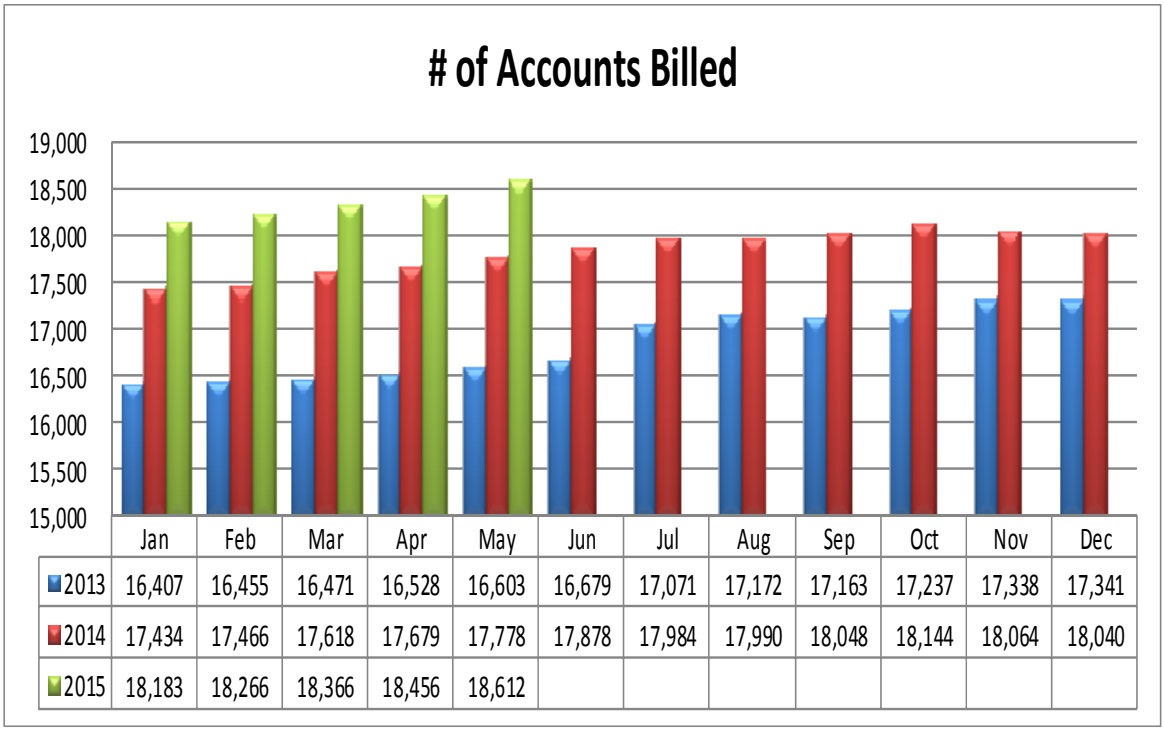
By: Anne Glassman, Business Solutions Manager

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.



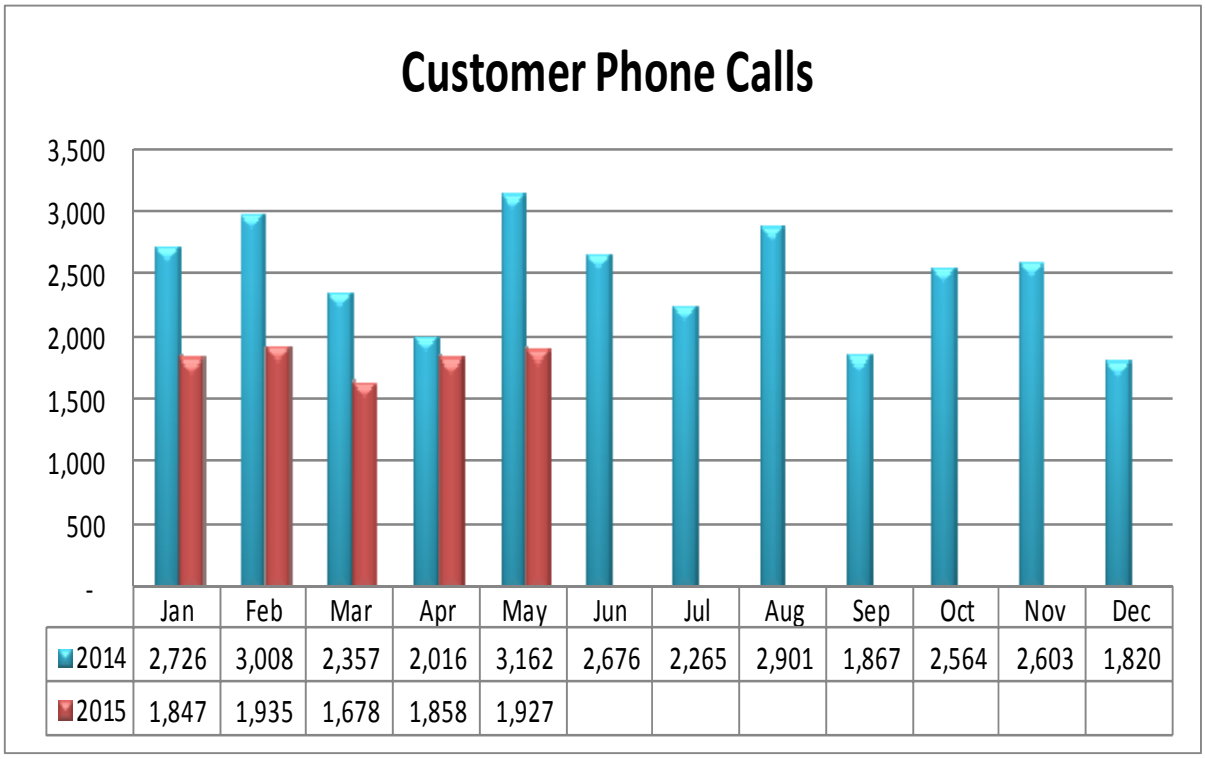
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	2,501	3,981	4,551	4,882	5,189	5,458	5,785	6,041	6,261	6,469	6,692	6,890
2015	7,087	7,266	7,415	7,537	7,678							

The H_2OAccess 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 has remained constant at 51%.



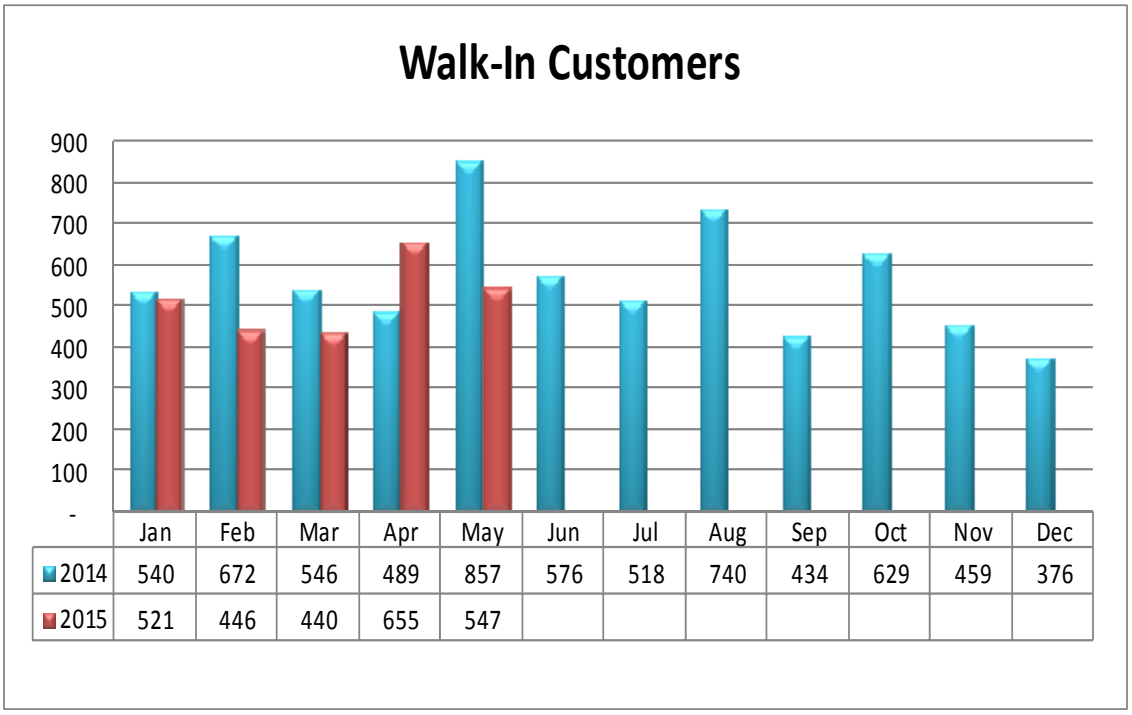
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	16,407	16,455	16,471	16,528	16,603	16,679	17,071	17,172	17,163	17,237	17,338	17,341
2014	17,434	17,466	17,618	17,679	17,778	17,878	17,984	17,990	18,048	18,144	18,064	18,040
2015	18,183	18,266	18,366	18,456	18,612							

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



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	2,726	3,008	2,357	2,016	3,162	2,676	2,265	2,901	1,867	2,564	2,603	1,820
2015	1,847	1,935	1,678	1,858	1,927							

Customer phone calls in May 2015 were consistent with the month before due mostly to the start-up of seasonal programs and the validation of the senior discount program. The first five months of 2014 were higher due to Billtrust start-up.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	540	672	546	489	857	576	518	740	434	629	459	376
2015	521	446	440	655	547							

Walk-in customers in May 2015 were consistent with the month before due mostly to the start-up of seasonal programs and the validation of the senior discount program. The fist five months of 2014 were higher due to Billtrust start-up.