



Our Vision: We will be a national leader among water utilities, focused on customer satisfaction and delivering outstanding

Administration & Customer Service Building Contract Awarded

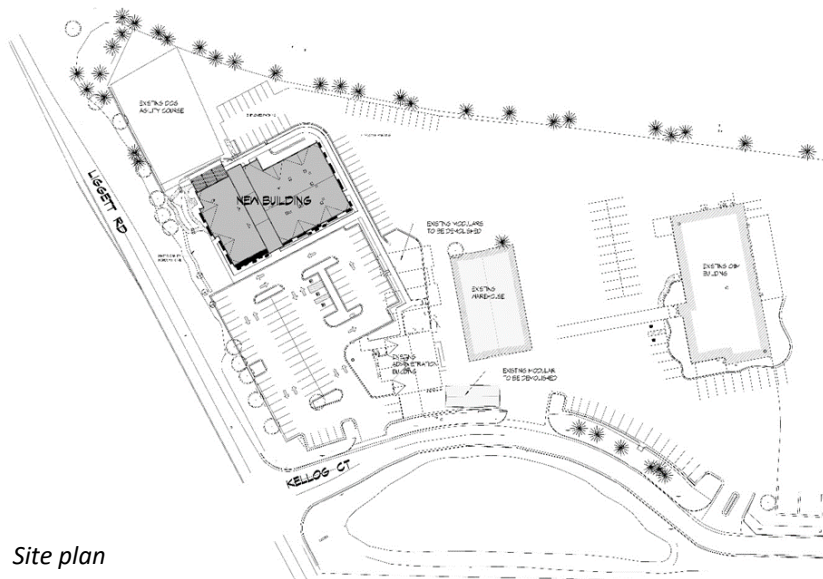
By Tim Friday

Construction of the new Administration & Customer Service Building for Castle Rock Water will begin in March 2021. The construction contract was awarded on October 21, 2020 for \$3,944,200 to Golden Triangle Construction, LLC based out of Longmont, Colorado. This project was originally awarded in March 2020, but once the pandemic was declared, the Town decided it would be best to cancel the contract. Once things settled down in the community and it was clear that Castle Rock Water could proceed with the project, it was rebid in September. Thirteen bids were received and GTC submitted the lowest bid. The 3 lowest bidders were interviewed and GTC clearly rose to the top - in price, team qualifications and project understanding. A preconstruction meeting is scheduled for November 12, 2020 and then GTC will



Artist's rendering

begin procuring materials and organizing for a March 1, 2021 groundbreaking. The work includes relocating the Engineering and Water Resources trailers in that first week of March. Construction of the new building will take approximately 6 months to get to substantial completion, with final completion expected by mid-September. Once the Administration and Customer Service teams move into the new building, the renovation of the existing building will begin by late September. Renovations will take approximately 6 weeks to complete and with expected move-in by mid-November. The final step will be to remove all of the trailers from the site. Walt Schwarz is managing this project for CR Water and any questions about the project can be directed to him at WSchwarz@crgov.com.



Site plan

The Lenz's ColoradoScape Design



With a Cat in the Hat themed video, the Lenz's garnered almost 1,000 social media votes to win a new front yard makeover.

Their yard now uses less water, but has more plants, more color and more curb appeal. The Lenz's enjoy a welcoming meandering flagstone path, along with gorgeous black granite boulders for the kids to play on. Pink flowers and creamy yuccas were a specific request as was a vibrant and colorful tree. A bit of turf

under the enormous tree remains but with upgraded and properly adjusted irrigation.

Design was done by Julie Kirkpatrick. Sponsors included Hunter Irrigation and Lighting, JSC Landscaping and Arbor Valley Wholesale Nursery.



Employee Recognition

Water Star Award

The Water Star Award recognizes a coworker within Castle Rock Water for doing an excellent job in fulfilling the Department's Vision and Mission.

Safety

Demonstrated outstanding safety conscious behavior in performing a job or task.

Exceptional Service

Provided exceptional service to either an internal or an external customer

Quality

Delivered excellent quality service or product

Value

Provided remarkable value for our customers

Environmental:

Demonstrated extraordinary environmental responsibility

Fiscal

Demonstrated superb fiscal responsibility



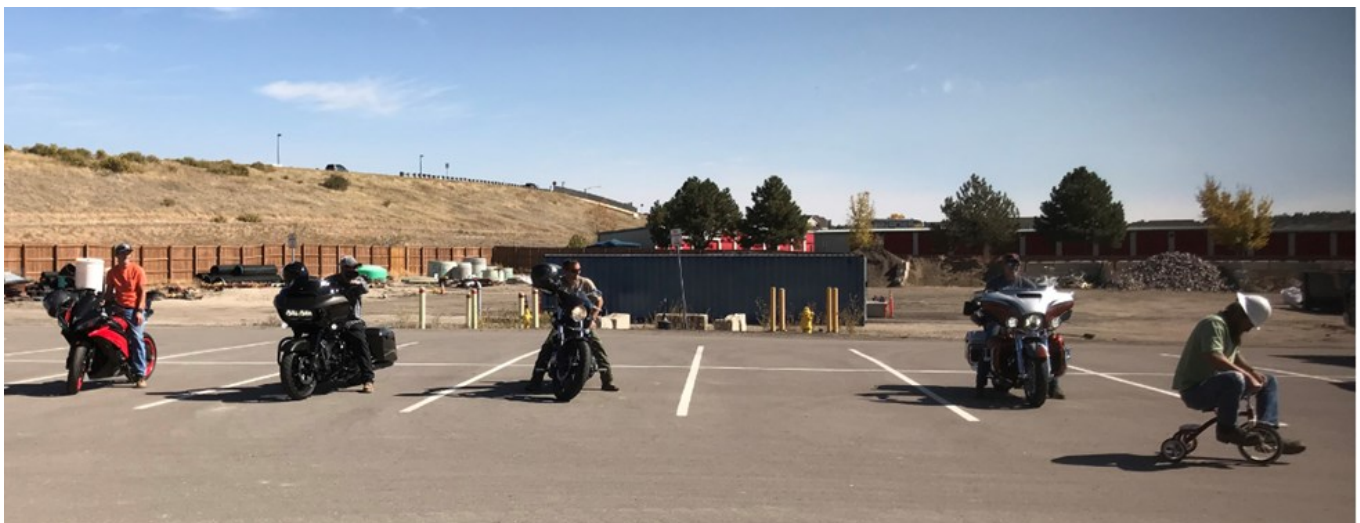
MaryJo Woodrick

was awarded the Water Star from the Billing Solutions Team as she is someone who truly upholds the Town Values and has really stepped up to help the team in SO many ways. She is adaptable and open to

change which has been exemplified through her organization during the pandemic. She works toward common goals with a spirit of cooperation, and always with a smile and great attitude. She provides exceptional public service to both internal and external customers making everyone feel so welcome. Additionally, she juggles many schedules, keeping all of us on time and knowing which way is up.

Go-Tober Operations Style

The Go-Tober Challenge is an annual, month-long competition in the Denver region that encourages employees to try different ways of getting to and from work to help decrease traffic congestion and improve our air quality.



Welcome!

Chaz Busse
*joined the Distribution team
as an Operator II*



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.



Kevin Lopez
*Collections 4 Operator
Certification*



Avery Worland
*Collections 2 Operator
Certification*



Rob Daniels
*Distribution 1 Operator
Certification*

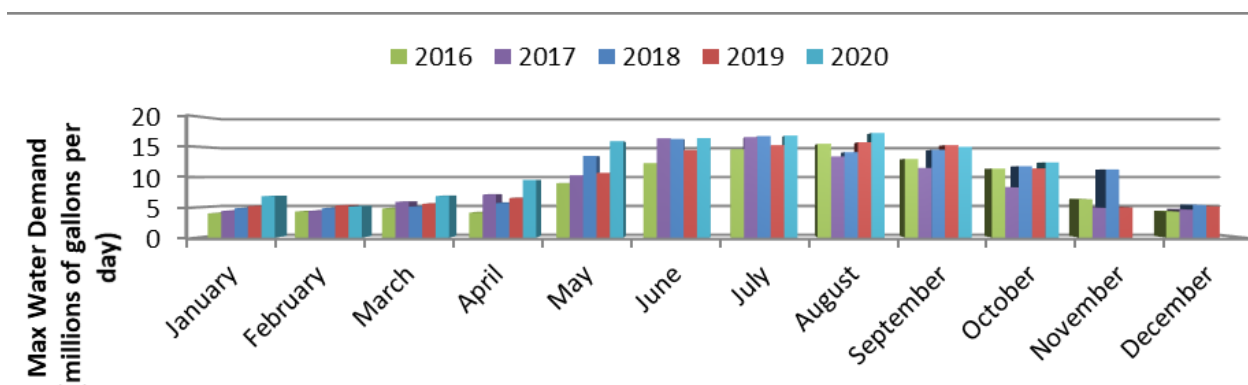


Brent Pickrell
*Water Treatment A Operator
Certification*



Phillip Jolly
*Distribution 2 Operator
Certification*

Water Demand



Max daily water demand

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.

Oct. 2020 **12.4 million gallons/day**
 Oct. 5 yr. avg 11.1 million gallons/day
12% higher than average

Max daily water demand in 2020
 17.3 MGD in August (record breaking)

Water demand total

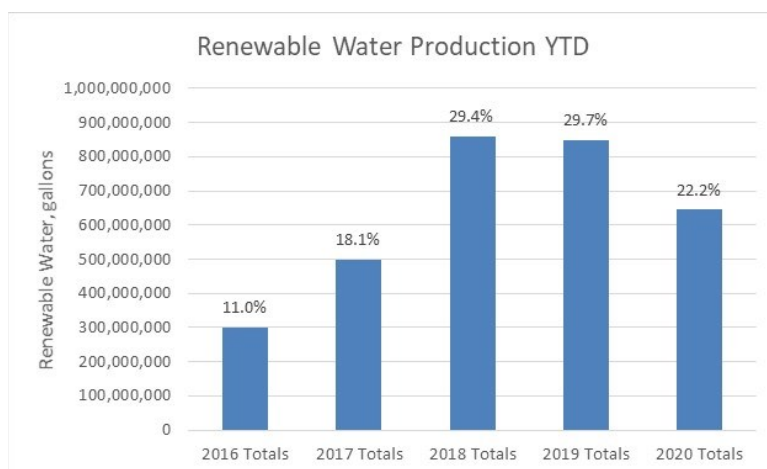
Water demand total is how much water was used over the entire month. Population and weather changes can significantly affect usage.

Oct. 2020 **264.2 million gallons**
 Oct. 2019 200.4 million gallons
31.8% increase from last year

Water demand total for 2019
 2,838.5 MG

Renewable water supply

- The CR-1 diversion produced an average of 0.16 MGD for the month of October.
- The Town's thirteen alluvial wells and CR-1 produced a total of 18.8 MG of renewable water (and an average of 0.61 MGD).
- Imported (WISE and RHR) water supplied an additional 25.5 MG of renewable water.
- In total, renewable supplies accounted for 17.3% of the total water supply for the month and 22.2% of the annual water supply (2,906 MG or 8,919 AF) to date.
- PCWPF was shut down from October 19 to the end of the month for upgrades which is why renewable water is lower than normal.



Our goal is to reach 75% renewable water by 2050.

Water Demand

Renewable supplies are those water sources that are replenished by precipitation (think of our alluvial wells, CR-1, and WISE), whereas reusable supplies are those waters that are either from the Denver Basin (deep wells) or imported supplies (such as WISE and RHR) that can be used over and over, to extinction. The average reusable supplies used by Castle Rock for 2020 through October is 32.7% with 47.4% of available reusable supplies used in the month of October.

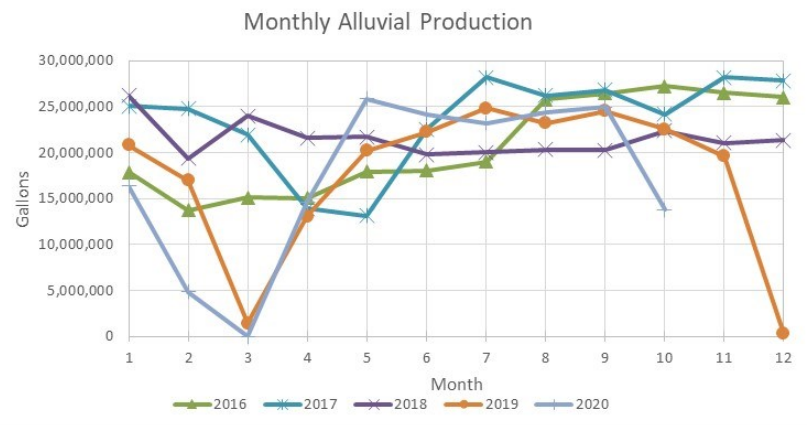
Alluvial supply

Oct. 2020 production: 13.8 MG

The graph shows the monthly production of the Town's alluvial well system, which helps to supply PCWPF.

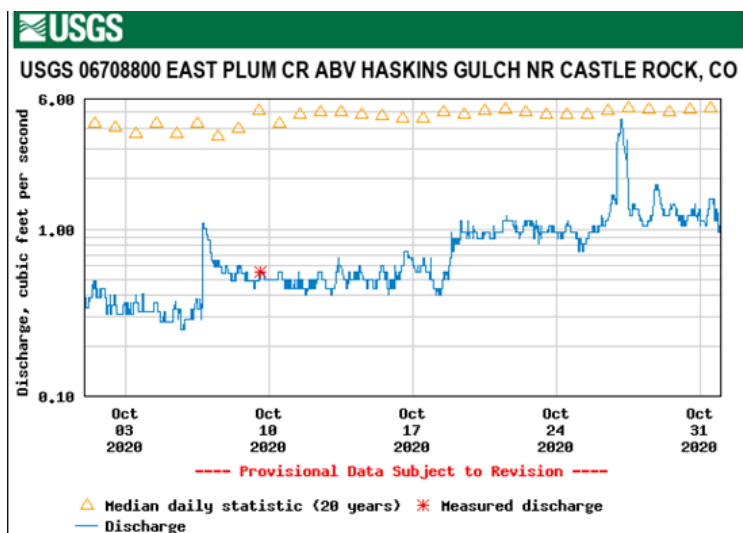
We completed nine well rehabilitation projects this year.

PCWPF was shut down from October 19 to the end of the month for upgrades which is why renewable water is lower than normal.



East Plum Creek Flows

The flow hydrograph represents stream flows in East Plum Creek (EPC) taken from the stream gauge located above Haskins Gulch. The hydrograph shows that estimated flows in the East Plum Creek basin ranged between 0.25 and 4.52 cubic feet per second (cfs) during the month of **October, with an average streamflow of 0.78 cfs**. This month's average streamflow of 0.78 cfs is below the 20-year median of 4.8 cfs.



There were active calls on the South Platte River in October. Some of the active calls have had a more senior water right than some of the Town's water rights. This means that those diversions are out-of-priority, so the stream depletions will be replenished by non-tributary return flows. This also means that the Town will have slightly less reusable water going down Plum Creek during an active call. 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. As a participant in the Chatfield Storage Reallocation Project, the Town is able to store up to 2,000 AF of water in Chatfield Reservoir. This means that our reusable water that flows down Plum Creek and past CRR1 can be captured and stored at Chatfield for later use. First storage started on May 15th and to date we have 324 AF of water stored in Chatfield.

Water Demand

Drought Monitor

The average WSI for October was 2.616, above the 1.1 trigger level, which is considered “good.”

According to the U.S. Drought Monitor maintained by the United States Department of Agriculture (USDA), approximately 100% of Colorado is experiencing Moderate Drought (D1) to Exceptional Drought (D4) conditions. The Town of Castle Rock Drought Management Plan uses a Water Supply Index (WSI) for the Town that is similar to the U.S. Drought Monitor in that it provides us an indicator to drought level; however, the WSI accounts for local conditions relative to the Town’s capability to address our water resources and daily water demands. The WSI is calculated by taking the sum of our supply (deep groundwater, alluvial wells, surface water, and WISE) and dividing that by our maximum daily demand. We generally want to see a WSI above 1.1, which means that we have enough resources to meet our demands. Anything below a 1.1 will trigger a drought stage relative to its severity.

The NRCS Colorado Precipitation Report

Oct. 27, 2020

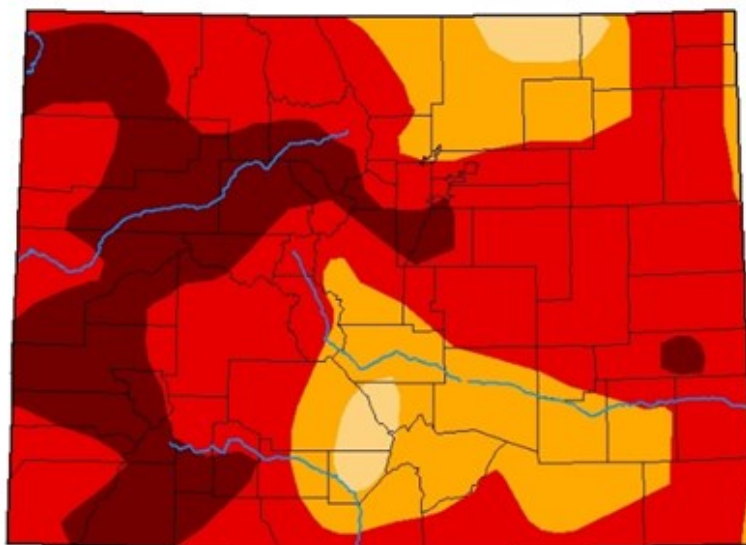
YTD precipitation for the
South Platte River Basin is at
58% of average.

U.S. Drought Monitor Colorado

October 27, 2020

(Released Thursday, Oct. 29, 2020)

Valid 8 a.m. EDT



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

David Miskus
NOAA/NWS/NCEP/CPC



droughtmonitor.unl.edu

Water Demand

Conservation

Conservation is “Water Wiser”

Since 2003, the Castle Rock water conservation team has presented Water Wiser workshops to our residents, at no cost, to provide them the information needed to maintain their irrigation system, while keeping a visually appealing landscape that uses less water. There are additional benefits to participating, such as eligibility for program rebates, and an exemption from the every-third day watering schedule.

Though 2020 gave us many challenges, we arranged these interactive workshops as webinars, accommodating 405 new Water Wiser participants. These online webinars will likely continue to be an



option in the future. Since technology changes and sometimes a refresher course can be helpful, we require households to renew their Water Wiser participation every five years. New this year, we began offering a Water Wiser online renewal course for returning participants. This renewal course takes less than an hour to complete and can be done at the participant’s leisure. To date, 254 households renewed this year and we currently have 3,325 Water Wiser participants.

Every year, the presentation is revised based on customer feedback so we’ll be hard at work this winter revising the presentation to include more indoor water saving information.

Conserving more than water



For the third year in a row, Castle Rock Water has attained gold level of the Environmental Leadership Program! Awarded by the Colorado Department of Public Health and Environment, this program recognizes organizations that go beyond compliance with environmental regulations and commit to advancing sustainability.

Instead of an awards ceremony this year, we commemorated with a chalk stencil in front of our Operations and Maintenance Building. This energy-efficient building is one of the many reasons Castle Rock Water got the gold. Learn about Castle Rock Water’s environmental stewardship at <http://crgov.com/2961/Environmental-Stewardship>.



Plan Review

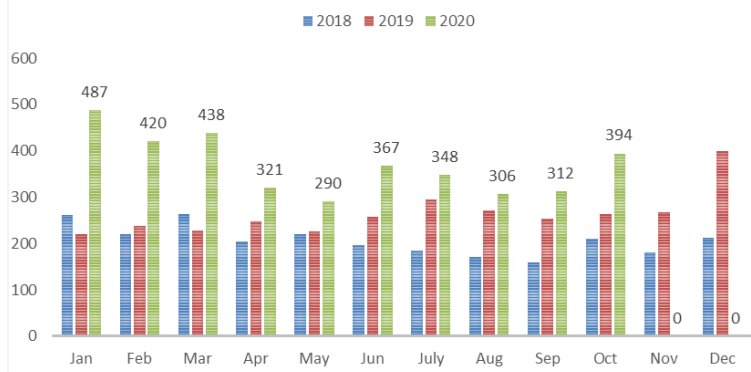
For each commercial and residential project submitted for development review, Castle Rock Water provides plan review, as appropriate, for:

- Water
- Sanitary sewer
- Stormwater
- Landscape/irrigation
- Temporary erosion and sedimentary control

Castle Rock Water reviews site plans, construction drawings and technical reports for each project to ensure the public infrastructure built by the developer is following the criteria set by the Town.



TOTAL # OF CASTLE ROCK WATER PLAN REVIEWS FOR DEVELOPMENT SERVICES AND BUILDING



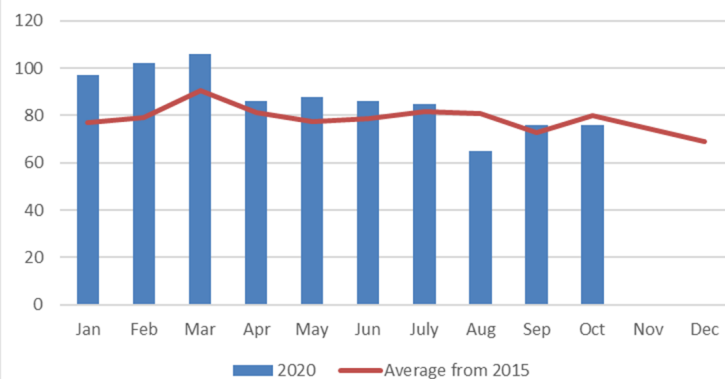
Reviews

208 development services PROJECT plan reviews
186 building PERMIT reviews for
76 separate projects

- Number of Distinct Projects increased by 1% from October 2019.
- The TOTAL number of development project reviews Increased by 17% from October 2019.
- The team completed 146 first reviews of projects in October 2020, compared to 79 first reviews of projects October 2019.

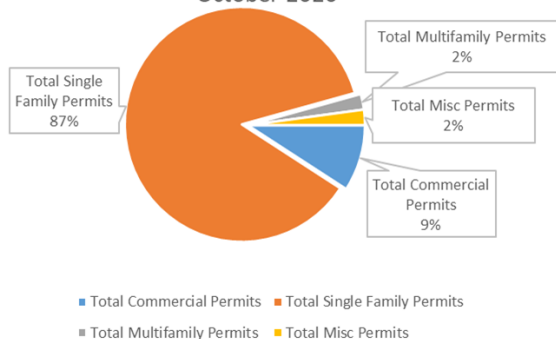
Building permits are reviewed to calculate the system development fees for each lot, as determined by the number of fixtures, irrigated area, meter size, etc. This is necessary for proper billing.

Monthly Projects Reviewed 2020 Average monthly reviews since 2015



The TOTAL number of permit reviews increased by 114% from Oct. 2019.

Castle Rock Water Building Permit Reviews October 2020



Service levels

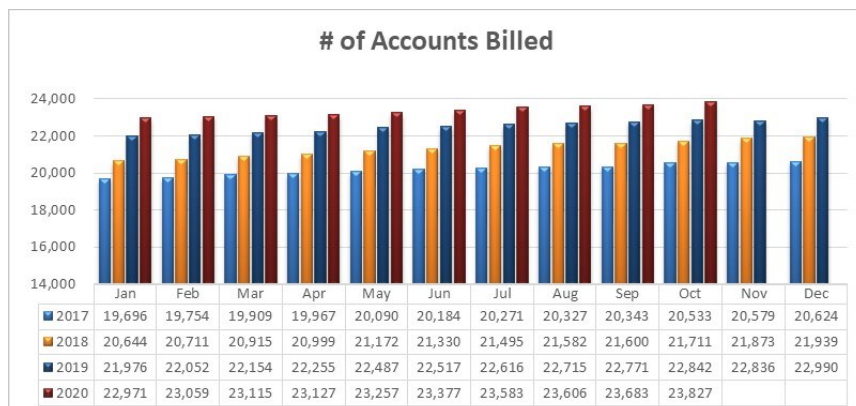
The average number of days assigned to review: 14.8 days
The average days to complete assigned reviews: 14.9 days

Plan Review: 91% of the reviews were completed on-time

*Review time for each plan is 1 to 5 weeks,
a permit is 3-5 days.*

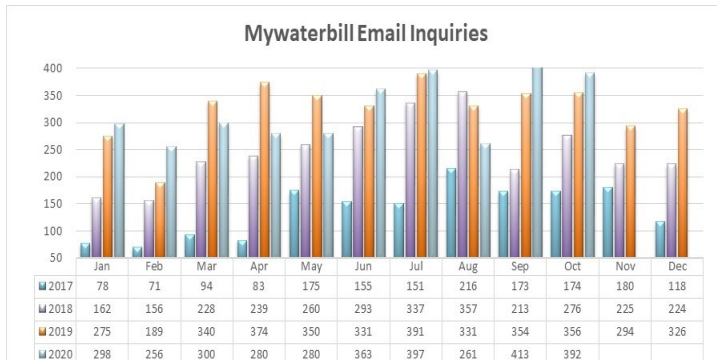
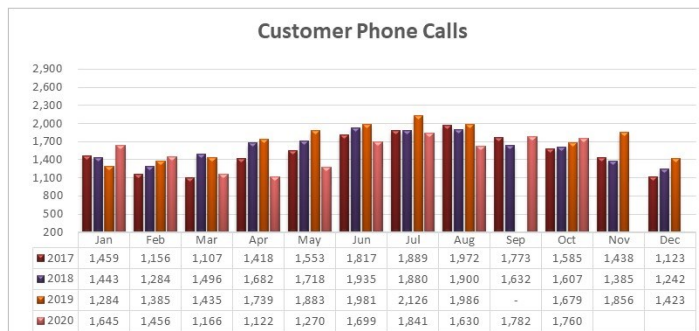
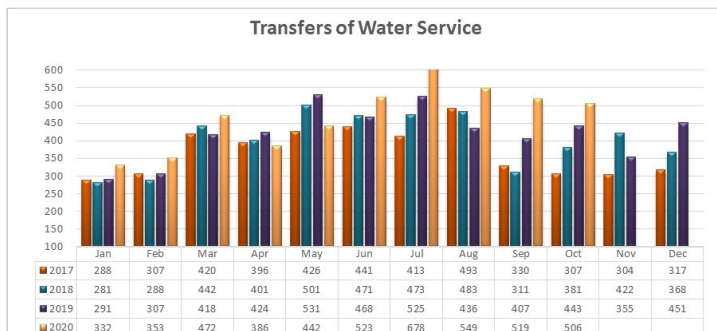
Business Solutions

Customer Service & Billing



The Billing Department is currently holding a promotion awarding 10 paperless customers

who have opted in before Nov. 30 to receive a \$50 water credit on their December bill. The promotion aims to increase the paperless enrollment from the current 63%.



Customer Outreach

Keeping customers aware of activities within the department, the benefits of conservation and the value of water is accomplished through social media, email, newsletter and billing messaging, along with periodic events and campaigns.

October is Shower Better Month reminding folks that taking shorter showers is an easy place to conserve. Imagine a Day without Water is an international campaign to bring awareness about the value of water.

Social media reach: 6 posts with 3,617 average reach

Email reach: 6,550 accounts (35% open rate)

Water Social Media Stats – October	REACH
ColoradoScape Contest Final – Oct. 7	3,815 people
Broken Backflow – posted Oct. 14	3,482 people
Imagine a Day Without Water – Oct. 21	3,329 people
Scary Water Bottle – posted Oct. 28	4,180 people
Environmental Leadership Program – posted Oct. 6	3,527 people
2020 ColoradoScape Reveal – Oct. 23	3,370 people

Meters



Meters Read

Meters are read the first three days of every month. The number of meters read continues to increase month to month and is a significant increase over last year.

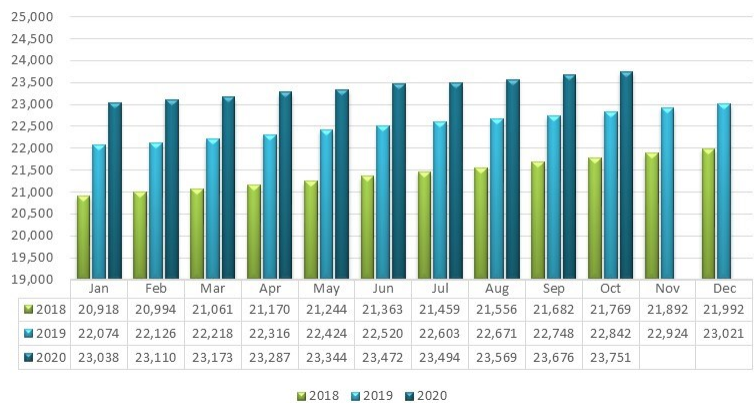
Skipped Reads

Oct. 2020: 0.42%

Measuring skipped reads 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 metering infrastructure (i.e. battery, wiring, etc.). Fewer skipped reads means more properly working meters, which is good for all our customers.

The AWWA standard is 2%, so we still continue to stay well below the industry average.

Meters Read

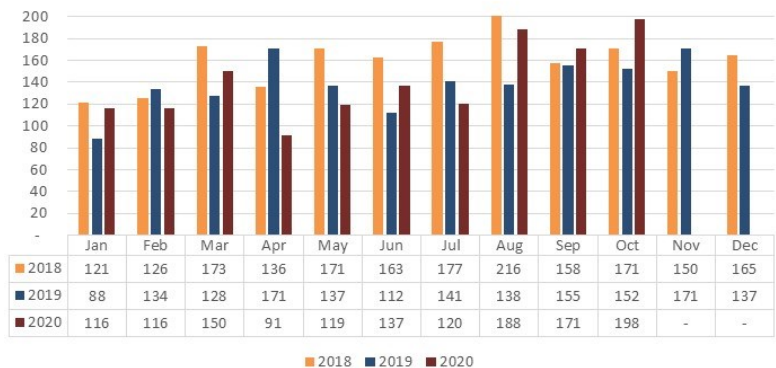


Meter Set Inspections

Re-inspections 52%

Meter set inspections are required on all new meters installed. This ensures that the meters are installed per specifications and according to Town code. At the time of the inspection, the curb stop is tested for operability and the MXU is installed which provides reading capability for our drive by technology. Re-inspections are needed to ensure installation meets code when original inspections are failed.

All Meter Set Inspections

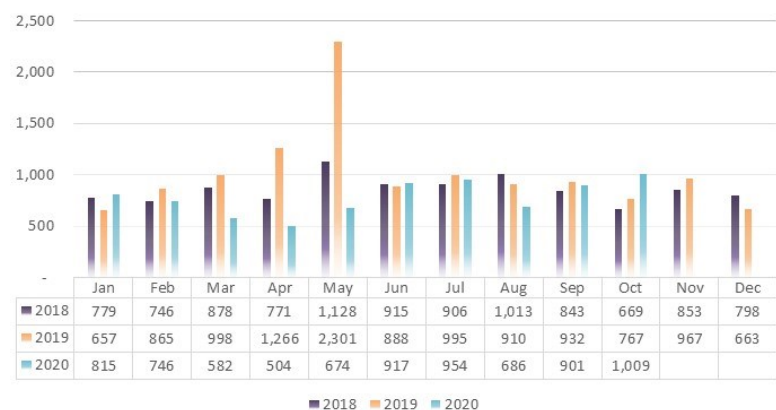


Work Orders

Oct. 2020 1009

Meter services performs a variety of service work orders every month beyond meter reading. These include curb stop maintenance, meter replacement and repair, final reads for transfer of service, disconnection and reconnections, meter set inspections, etc.

TOTAL SERVICE WORK ORDERS



Operations & Maintenance

LEVELS OF SERVICE		OCT. 2020
Drinking Water Compliance	Castle Rock Water will deliver water that meets or exceeds the requirements of both Primary Drinking Water Regulations and Secondary Maximum Contaminant Levels 100% of the time.	<i>Ninety routine samples were completed. All samples were within the parameters set forth by the Safe Drinking Water Act and Colorado Drinking Water Standards.</i>
Pressure Adequacy	< 1% of our customers will experience less than 43 pounds per square inch (psi) of pressure at the meter during normal operations.	<i>There were no water pressure issues this month.</i>
Sewer System Effectiveness	<p><1% of our customers will experience a sewer backup caused by the utility's sewer system per year.</p> <p><i>Castle Rock Water remains in the Top Quartile for least number of sewer backups based on the American Water Works Association benchmarking.</i></p>	<i>There were no sewer system issues this month.</i>
Drinking Water Supply Outages	<p><5% of our customers will experience water outages for one or more events totaling more than 30 hours/year.</p> <p><i>Castle Rock Water remains in the Top Quartile for water system integrity based on the American Water Works Association benchmarking.</i></p>	<p><i>There were two water system integrity issues in October.</i></p> <p><i>There was a Main Break in Glovers, created by soil movement on the 6" cast iron pipe. Thirty-five homes were out of water for less than four hours, during the repair.</i></p> <p><i>There was also a service line leak in Crystal Valley. Seven homes were out of water for less than four hours during the repair. The copper service line had a corrosion hole at the flare.</i></p>
Water Quality Complaints	<i>Castle Rock Water remains in the Top Quartile for water quality complaints based on the American Water Works Association benchmarking.</i>	<p><i>There were no water quality issues in October.</i></p> <p><i>There were two water quality education visits in October.</i></p>

Operations & Maintenance



Know what's below.
Call before you dig.

Locate Report

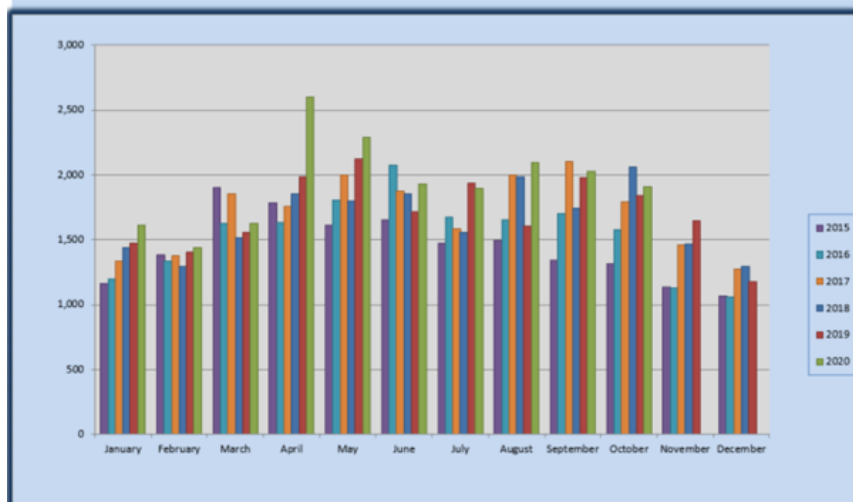
Before you start a project, call 811. Whether you are planning to do it yourself, or hiring a professional, we will help you do it safely. The local 811 Call Center will contact Castle Rock Water and will schedule a time for us to come out to locate public water, wastewater and stormwater lines in the road and in your project area.

Castle Rock Water's locate requests from 811 have continued to rise, year over year. This year to date, there have been no incidences of damage to lines, as a result of incorrect locate marks.

ANNUAL UTILITY LOCATES

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
January	577	475	617	1,190	1,389	1,162	1,199	1,334	1,442	1,472	1,612	
February	521	485	538	1,094	1,093	1,383	1,334	1,378	1,293	1,404	1,443	
March	660	552	818	1,437	1,349	1,906	1,625	1,851	1,514	1,560	1,626	
April	838	681	1,025	1,482	1,552	1,784	1,631	1,760	1,856	1,984	2,600	
May	853	863	985	1,541	1,531	1,609	1,809	2,002	1,801	2,122	2,288	
June	969	844	982	1,314	1,399	1,654	2,075	1,872	1,854	1,716	1,931	
July	680	582	859	1,350	1,392	1,477	1,675	1,582	1,556	1,937	1,894	
August	901	723	1,123	1,476	1,468	1,494	1,651	2,001	1,986	1,603	2,096	
September	880	723	1,029	1,240	1,373	1,343	1,701	2,102	1,747	1,979	2,026	
October	715	688	1,155	1,501	1,376	1,314	1,579	1,792	2,064	1,839	1,913	
November	536	518	1,041	1,072	866	1,134	1,131	1,460	1,469	1,649		
December	415	405	925	1,005	1,043	1,063	1,059	1,277	1,293	1,175		
Totals	8,545	7,539	11,097	15,702	15,731	17,323	18,469	20,411	19,875	20,440	19,429	

4 Year Locate Trend



Collections

YTD	
Lines Cleaned	65.69 miles
Lines Inspected	31.17 miles
SSO Rate	0.35 SSO/100 mi

Castle Rock Water tracks within the top quartile in the Sanitary Sewer Overflow rate, according to the American Water Works Association. 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. The goal is to clean and inspect one-fifth of the collection system or 55 miles each year.