CASTLE ROCK WATER

OCT 2024 MONTHLY REPORT

WATER DEMAND TOTAL **290** MILLION GALLONS

27,629 CUSTOMER ACCOUNTS

29.1% RENEWABLE WATER SUPPLIES

WATER SUPPLY INDEX **2.7**

1,313 UTILITY LOCATES

CUSTOMERS WITH ONLINE ACCOUNT **60%**

WATER QUALITY SAMPLING **0** issues

SYSTEM INTEGRITY **3 leaks**

View report online

WHAT WE ARE UP TO

Stream stabilization (above) was done on an area along a trail with erosion issues (below) that had been identified by a resident.

Marsh Hawk Circle Bank Stabilization

Project Manager: Erik Dam

In early May 2024, Parks and Recreation Trails Planner Rick Havel reached out to Castle Rock Water for assistance with a stream bank erosion problem along Red Hawk Trail. A subsequent site visit by staff from both Parks and Castle Rock Water revealed a significant safety hazard near the trail, where erosion along an unnamed tributary had created a 15-foot vertical drop just 3 feet from the pavement's edge. To address the issue, Castle Rock Water's Stormwater Engineering team developed a conceptual plan and bid schedule, as there was insufficient time to hire a consultant for formal design plans. Drawing on past experience with stream stabilization work on Hangman's Gulch Tributary B, the chosen solution involved shifting the channel away from the trail and implementing soil lifts and riprap bank protection along approximately 75 linear feet of the stream's centerline.

Town staff subsequently met with 53 Corporation, LLC on site to discuss the project scope of work and their availability. 53 Corporation provided a competitive quote to construct the project improvements, and a sole source contract was drafted and approved. Construction was completed within a three-week period in September under the direction of Wade Reeves, Senior Construction Inspector.

Contractor: 53 Corporation, LLC
Cost (Projected): $110,750 (under budget)
Schedule: Completed Sept. 2024 (ahead of schedule)

A Leader in the Water Industry

Operations Manager John Chrestensen and Field Services Superintendent Thomas Hecker accepted the Utility of the Future Today award at the WEFTEC conference Oct. 8, 2024.

Castle Rock Water is making waves with our progressive projects for a sustainable water supply. Here are a couple of events where we got to toot our own horn:

1. Castle Rock Water won national recognition with the Utility of the Future award from the Water Environment Foundation regarding the planning and implementation of reuse water as a drinking water supply.
2. CIP Project Manager Scott Tait, recently presented at the Ulteig Online Client Expert Panel on Resiliency regarding the impacts of extreme weather events and how technology, partnerships and interdependencies can be utilized.
3. Customer Relations Program Manager Sandra Sandman presented two topics at the Rocky Mountain Water Environment Association conference. The first, on coordination with Parker and Centennial water agencies on lead pipe regulations outreach and secondly on the impact of the ColoradoScape front yard give-away social media contest.

STAFF RECOGNITION

Certifications

Italo Maddaloni
CDL License

Mark Morgan
Water Operator Treatment D
PROMOTED!

Cameron Hasenkamp
Water Operator Distribution I
PROMOTED!

David Madsen
Water Operator Treatment C
PROMOTED!

WELCOME

Austin Hawksworth
Distribution Seasonal
Maintenance Tech

PROMOTED!

Julie Wells
Senior Office Assistant

WATER STAR AWARD

Devin Limberg, SCADA Instrument Tech II, was given the Water Star award from Mitch Horner as Devin consistently steps up to the challenge. He is truly someone who can be relied upon with creativity, vision and a bunch of safety thrown in. He is adaptable to change and welcomes those curve balls!

STAFF RECOGNITION

High Five

Kaitlin MacPherson

Kaitlin did an amazing job working through the due date issue we had on the billing files for October Billing. I appreciate all her initiative; trouble shooting, testing and following through to resolve this issue. It was tedious process, and Kaitlin did a fabulous job. Thank you, Kaitlin!

Thank you, Kaitlin for covering the on-call during disconnect week for your supervisor! I appreciate your continued support and dedication to the billing team and supporting processes.

Tyler Ray

This is a long overdue. Thank you to Tyler! Thank you for all you hard work and support on the 2023 NSF Reconciliation for Finance. As we learned this process together - I appreciate all the research, problem resolution and clean-up you performed on the 2023 Reconciliation and Audit Process.

Susan Salvatori

Susan - Thank you for taking the initiative to support your team lead and the billing team by covering the transfer my service processes during out of office events. I appreciate your willingness to tackle new processes and provide cross functional support to the billing team. All your hard work is appreciated!

Wade Reeves

A spoken and sincere thanks from Erik Dam for Wade's kindness while Erik was going through health challenges.

Anthony Pastorello
Brent Pickerell
Carrie Mahan Groce
Carson Croom
Courtney Convy
David Van Dellen
Dawn Tiffany
Dwight Keller
Ed Sheets
Grant Garvin
Grant Taylor
Greg Swaney
Hannah Branning
Jack Berry
Jackson Byrnes
Jill Skelton
Joe Compton
John Chrestensen
Joshua Martinez
Joshua Vaughn
Julia Wells
Kevin Moore
Kristen Burakou
Lyle Cable
Mark Marlowe
Mark Morgan
Mike Wilder
Mitch Horner
Nichol Bussey
Rick Schultz
Shawn Griffith
Tim Dagg
Tim Lambert
Tristen Casner

I want to take a moment to recognize the incredible teamwork that made the PCWPF Open House such a success. A heartfelt thank you to the 34 individuals who stepped up and took the bull by the horns. Each of you understood your responsibilities and executed them with thoughtfulness and purpose. The event was conducted with swiftness and poise, and it truly showcased our collective strength. And with 400 in attendance, I am sure our customers appreciated the professionalism and service. I couldn't have done it without you! Thank you all for your hard work and dedication!

WATER RESOURCES

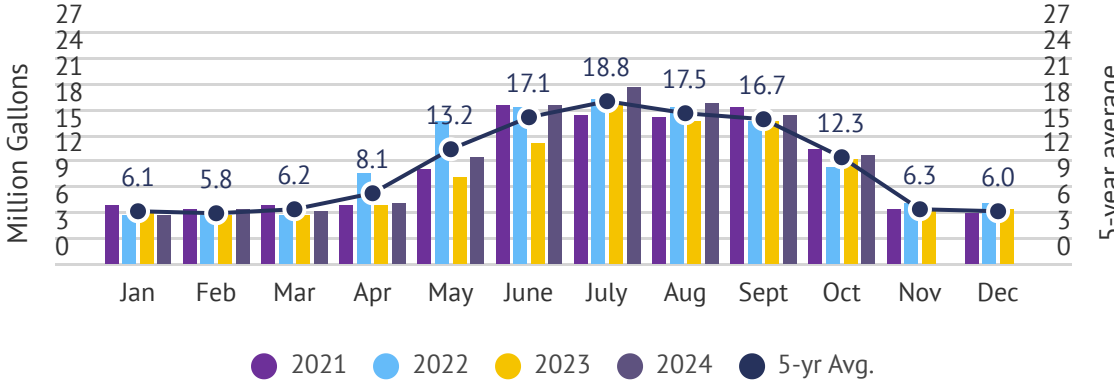
DAILY DEMAND

- 12.56 million gallons/day (MGD)
- 5-year average: 12.3 MGD
- 2% higher than the 5-year average

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.

MONTHLY DEMAND TOTAL

- The water demand total for October was 289.81 million gallons (MG) [889.4 acre-feet (AF)]
- 34% lower than the September 2024 total of 441.92 MG
- 14.4% increase from the previous year's October 2023 demand of 253.3 MG



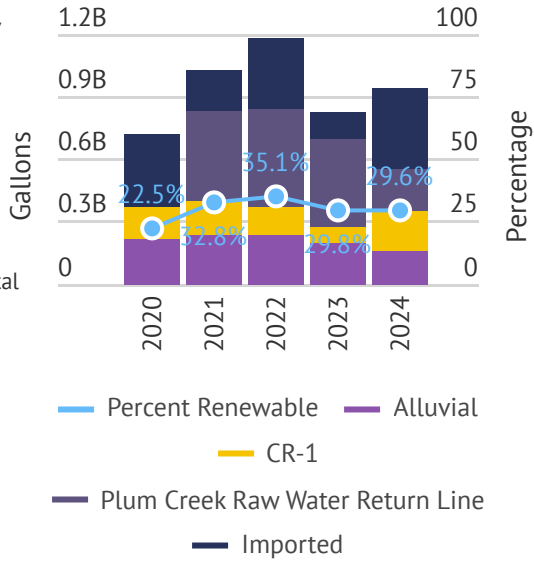
29.6%
OCT.

RENEWABLE WATER SUPPLY

Renewable supplies are those water sources that are replenished by precipitation.

In total, renewable supplies accounted for 33.8% of the total water supply for the month (107.6 MG of 318.5 MG) and 29.6% of the annual water supply (935.9 MG of 3,161 MG)

- The CR-1 diversion produced an average of 0.58 MGD
- The PC diversion produced an average of 1.76 MGD
- The 14 alluvial wells produced an average of 0.52 MGD
- The renewable water production average was 3.47 MGD



WATER RESOURCES

STORAGE

- Chatfield Reservoir: 811 AF
- Rueter-Hess Reservoir: 497.89 AF
- Castle Rock Reservoir No. 1 (CRR1): 166.87 AF

REUSABLE SUPPLIES

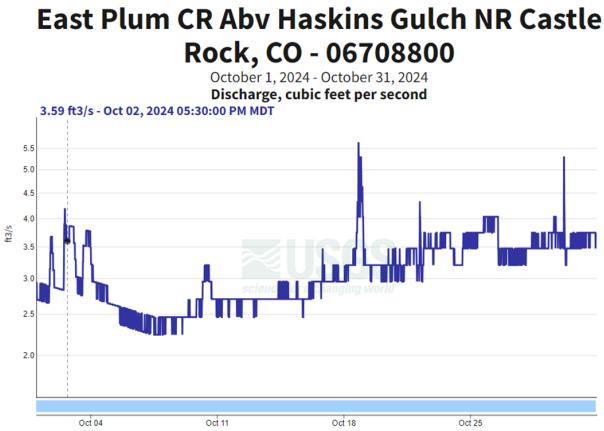
27.6 %
Oct. 2024

Reusable supplies are waters that are either from the non-tributary Denver Basin (deep wells) or imported supplies (such as WISE) that can be used over and over, to extinction.

EAST PLUM CREEK FLOWS

The hydrograph indicates the estimated flow in East Plum Creek basin. *(This text will indicate the peak and low points as the data is only an image.)*

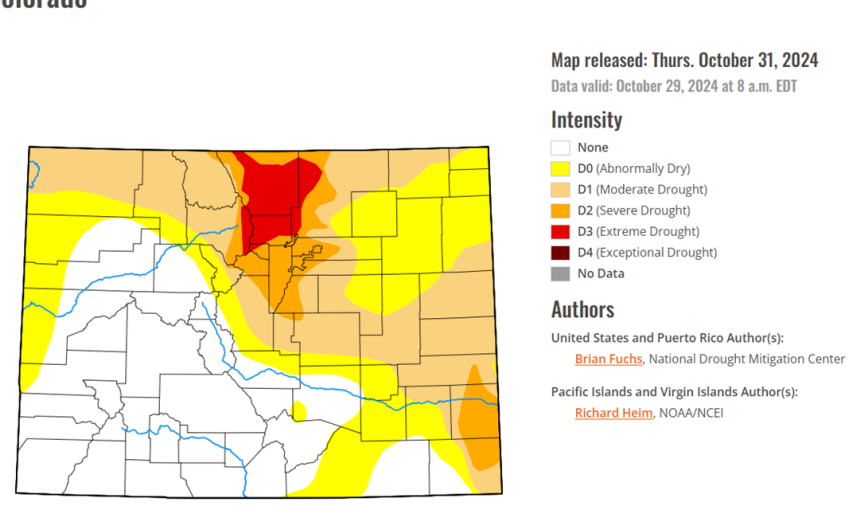
- Flows ranged from 2.24 to 5.62 cubic feet per second (cfs)
- The monthly average streamflow was 3.09 cfs
- The 25-year mean is 5.8 cfs



DROUGHT

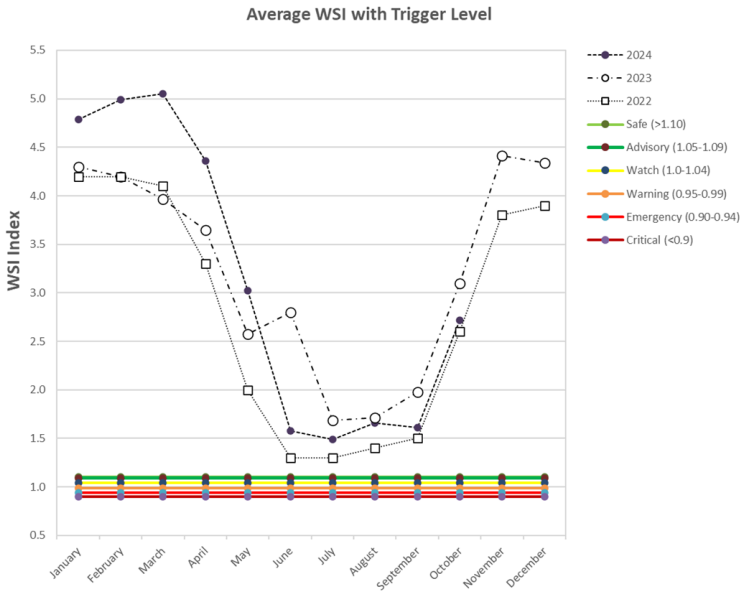
According to the most recent U.S. Drought Monitor maintained by the United States Department of Agriculture (USDA), Douglas County is experiencing moderate to severe drought conditions.

This map of Colorado shows Extreme Drought for the top center of the state and Severe to Moderate Drought for the upper and western areas with Abnormally Dry areas surrounding those areas. The Western and Southwern sections of the state are not seeing drought as of Oct. 29, 2024.



WATER SUPPLY INDEX

WATER SUPPLY INDEX
2.72
Oct. average

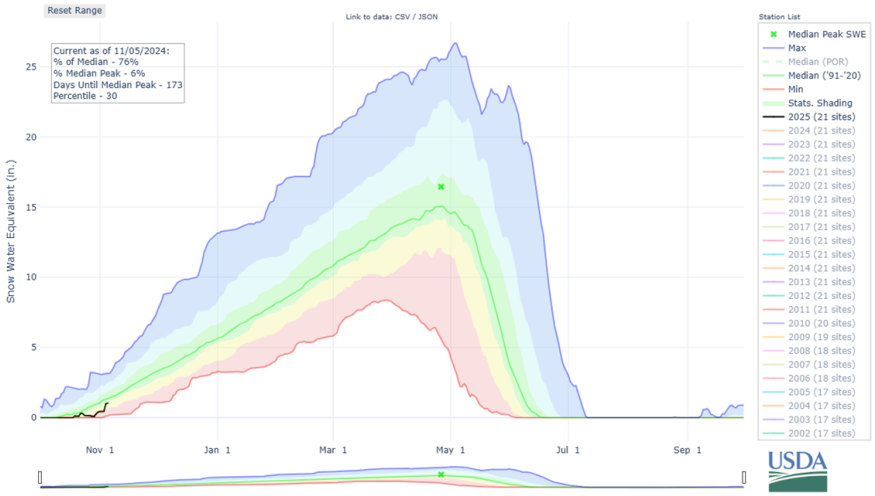


The Town of Castle Rock's Drought Management Plan uses a Water Supply Index (WSI) for the Town that accounts for local conditions relative to the Town's capability to address our water resources and daily water demands. Anything below 1.1 will trigger a drought stage relative to its severity.

This graph shows historical WSI data for 2022 to 2024 along with a peak WSI of 5 in March 2024, low of 1.5 WSI in July, and October's WSI of 2.72.

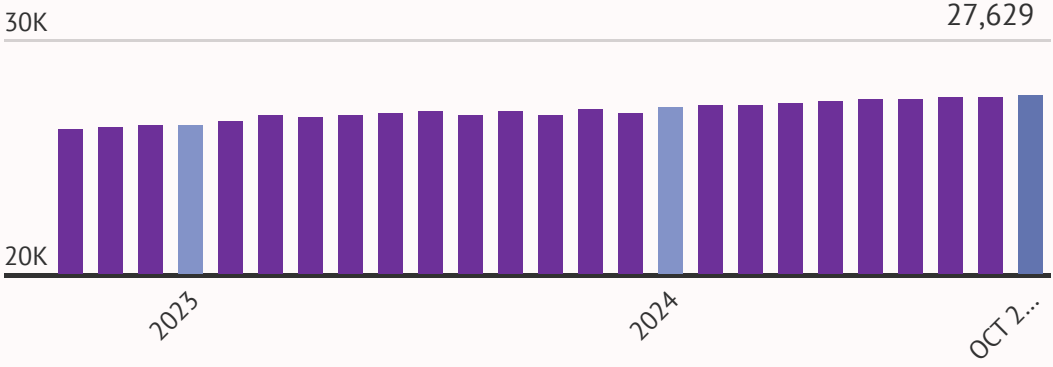
SOUTH PLATTE RIVER BASIN SNOW PACK

- Year-to-date precipitation at 64% of median
- Snow Water Equivalent (SWE) at 78% of median



BUSINESS SOLUTIONS

NUMBER OF CUSTOMER ACCOUNTS



CUSTOMER SERVICE

OCTOBER	2022	2023	2024
Phone calls	1696	1704	1263
Walk-ins	169	103	101
Transfer of service	374	204	272
Email inquiries	447	356	700

CUSTOMER OUTREACH

Facebook	6 posts	11.2K reached out	109 engagement	1 shares
Instagram	1 posts	723 reach	38 engagement	
LinkedIn	5 posts	2,575 impressions	98 reactions	
Email	12,092 reach	57% open rate		

TOPICS
Shower Better Month
Imagine a Day without Water
WaterSense

The Town social media followers

Facebook: 28,259
Instagram: 11.2K
Nextdoor: 45,033
LinkedIn: 2,518

METER SERVICES

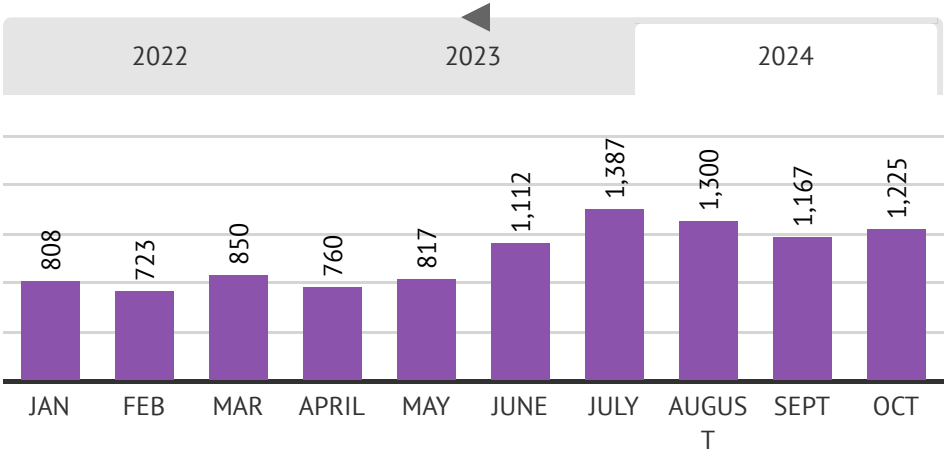
27,211
Meters read

Meters are read the first two days of every month. The number of meters read continues to increase month over month.

Skipped reads
0.69%
The AWWA standard is 2%, so we still continue to stay well below the industry average.

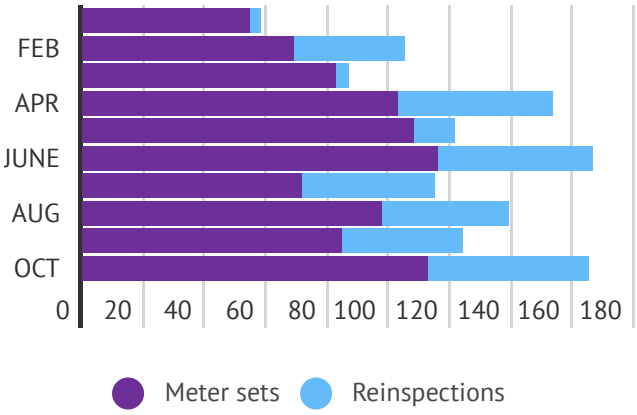
Measuring skipped reads is a strong indication of the level of preventative maintenance being done by our team. A skipped read is indicative of a problem with the metering infrastructure. Fewer skipped reads means more properly working meters, which is good for all our customers.

ALL SERVICE WORK ORDERS



METER SET INSPECTIONS

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.



OPERATIONS

0

OUTAGES

GOAL: <5 % of our customers will experience water outage for one or more events totaling more than 30 hours per year.

0

PRESSURE

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

0

OVERFLOWS

GOAL: Prevent 100% of sewer system overflows with line inspections and cleaning.

SANITARY SEWER OVERFLOWS

AWWA Index: SSO rate/100 mi

- Castle Rock Water: 0
- Top quartile: 0.4
- Median: 1.6
- Bottom quartile: 3.3

3

LINE BREAKS

GOAL: Remain in the top quartile for AWWA benchmarking for leaks and breaks through regular maintenance and rehabilitation.

WATER SYSTEM INTEGRITY

AWWA Index: Leaks and breaks/100 mi

- Castle Rock Water: 2.0
- Top quartile: 9.2
- Median: 18.7
- Bottom quartile: 30.1

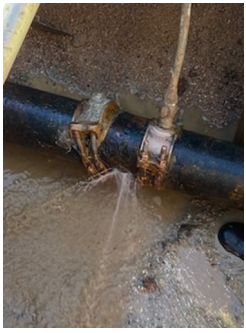
12.5 mi
LINES INSPECTED

LINES CLEANED
17.17 mi

OPS in the field

There was a series of line breaks in the Meadows.

The first was near a service line, and then the crew found a series of corrosion holes on the 6” ductile iron pipe. During the repair, 17 residents were without water for approximately 4-8 hours.



There was a packing leak in a valve in Plum Creek. Due to the age of the original valve on a dead-end line, it was replaced with a cap. Water was shut down to 28 residents for less than four hours to safely repair.

A PRV vault in Crystal Valley Ranch flooded due to a broken saddle tap on a 6” ductile iron pipe. The saddle tap was replaced with a repair clamp tap. No residents were affected by this repair.