

# CASTLE ROCK WATER

## NOV 2024 MONTHLY REPORT

WATER DEMAND TOTAL **157.5** MILLION

GALLONS

**27,493** CUSTOMER ACCOUNTS

**7%** RENEWABLE WATER SUPPLIES

WATER SUPPLY INDEX **4.6**



**1,001** UTILITY LOCATES

CUSTOMERS WITH  
ONLINE ACCOUNT **60%**

WATER QUALITY SAMPLING **0** issues

SYSTEM INTEGRITY **0 leaks**

[View report online](#)

Made with

infogram

# WHAT WE ARE UP TO

## Young American Sanitary Sewer Rehabilitation

Project Manager: Erin Evans

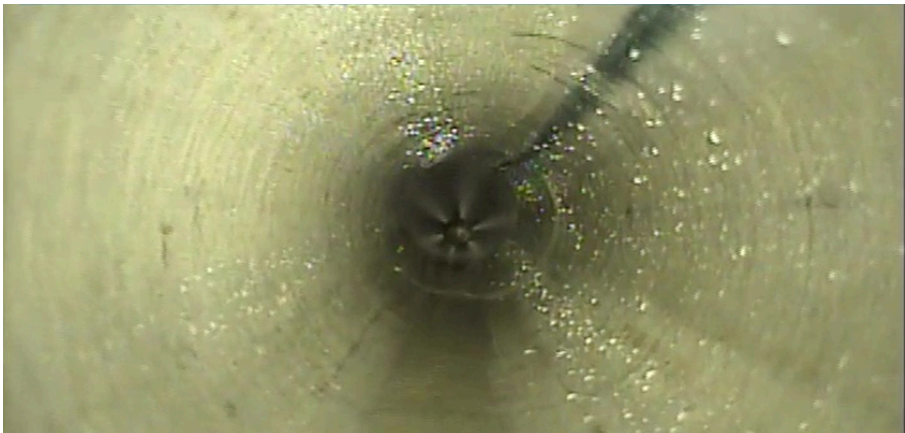
The Young American neighborhood water and sewer infrastructure was constructed in the mid-1970s and the infrastructure that has not already been replaced or rehabilitated has a history of root intrusion, increased annual maintenance, and pipe defects. Some of the sewer mains have been lined in recent years to extend the life of the pipes. Approximately 4,500 feet of clay sewer pipe was identified for rehabilitation through a thorough condition assessment and recommended rehabilitation plan. Minor manhole repairs are also included in this project. Most of the CIPP lining work for this project is located on South Street between Gilbert Street and Valley Drive and is the last area in the neighborhood that requires sewer main rehabilitation.



*Contractor setting up confined space entry PPE on the downstream manhole so the crew member can climb into the manhole with the liner.*

The cured-in-place-pipe (CIPP) lining process allows the pipelines to be rehabilitated while eliminating the requirement for excavation in the Right-of-Way.

The project was awarded to Inliner Solutions at a contract price of \$322,837 and will be complete ahead of schedule and within budget.



*Footage of the cured (hardened) liner inside the sanitary sewer.*

Castle Rock Town Council has updated its Town Code to require the use of the IAPMO Water Demand Calculator for sizing water service lines. The first city in Colorado to adopt this tool, Castle Rock is leading the way in optimizing water pipe sizing for single- and multifamily homes. The calculator accurately forecasts peak water demand, reducing carbon footprints and saving money on water and energy bills while preventing bacterial growth in the system. This innovation is the result of years of development, addressing water safety, and reducing wasted water and energy caused by oversized pipes.

The number that  
 water body gets  
 water from is  
 called a pH

The water in the  
 water body gets  
 good and bad  
 water

Temperature  
 usually for  
 100 degrees

Water body  
 water quality has  
 been tested

Water body  
 water quality has  
 been tested

Have you heard  
 some of these MYTHS  
 about the Town's  
 water supply?  
 Find the  
 TRUTH inside.

The Town of Castle Rock conducts a residential survey every other year. Though the indicators in the 2023 survey regarding Castle Rock Water were still positive, they slipped a bit from the previous survey. A mailer was designed (the survey said residents like direct mail) to address some of those issues. Topics in the mailer included how developers must bring in water rights, the goal for 100% renewable water by 2065, conservation is a water supply, and that Castle Rock Water has some of the best water quality in the nation.

[illegible]

# STAFF RECOGNITION

## CERTIFICATIONS



**Aldolfo Torrez**  
Collections I Operator



**Jon Lutterman**  
Collections I Operator



**Steven Tamariz**  
Collections 3 Operator

## PROMOTED



**Susan Salvatori**  
Billing Support Specialist



**Devin Limberg**  
Sr. SCADA Instrument Tech



**Marcus Watkins**  
SCADA Controls Tech



# STAFF RECOGNITION



**Dwight Keller** After many hours of troubleshooting the PALL Rack 3 failing integrity test at PCWPF, Dwight came to assess the issue. He identified two valves that were leaking and rebuilt them. This caused the rack to pass its integrity test and put back into service. This displays his commitment to excellence and his always humble expertise in the field.

**Matt Attiyeh**  
**Lori Bentley** Matt and Lori offered to have the GIS Division take over responsibility for updating the Engineering Library and uploading engineering reports to Laserfiche. These are processes that I have been responsible for doing for the past nine years. I would not have even considered asking them for help with this, as they've been short of staff for several months; however, they approached me and asked for training on my processes then offered to handle them going forward. This will improve efficiencies, as they are already handling related processes. I am greatly appreciative of this, as this will save me a significant amount of time so I can focus on other high priority work projects.



## WATER STAR AWARD

**Hannah Branning**, Regulatory Manager, received the Water Star Award from Devin Limberg for being an instrumental part in preparing for the sanitary survey. She made sure that we were accommodating to the visiting CDPHE officials and assisted with any questions they may have had. In doing so she demonstrated exceptional service and provided great value to Castle Rock Water as a whole. She is highly accountable and is committed to integrity.

# WATER RESOURCES

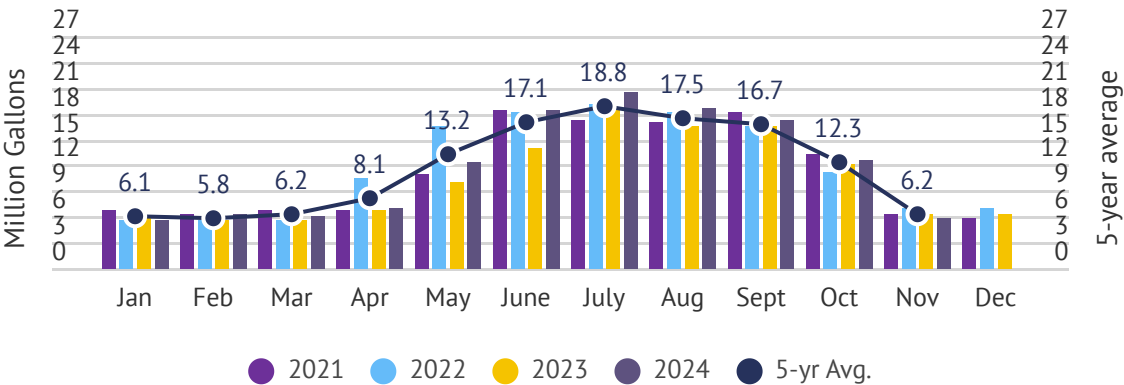
Maximum demands inform us of the size of the infrastructure necessary to provide water service over short periods of time and help us to plan future water resources needs.

## DAILY DEMAND

- 5.8 million gallons/day (MGD)
- 5-year average: 6.2 MGD
- 6% lower than the 5-year average

## MONTHLY DEMAND TOTAL

- The water demand total for November was 157.5 million gallons (MG) [483.4 acre-feet (AF)]
- 46% lower than the October 2024 total of 289.8 MG
- 1.7% decrease from the previous year's November 2023 demand of 160.3 MG.



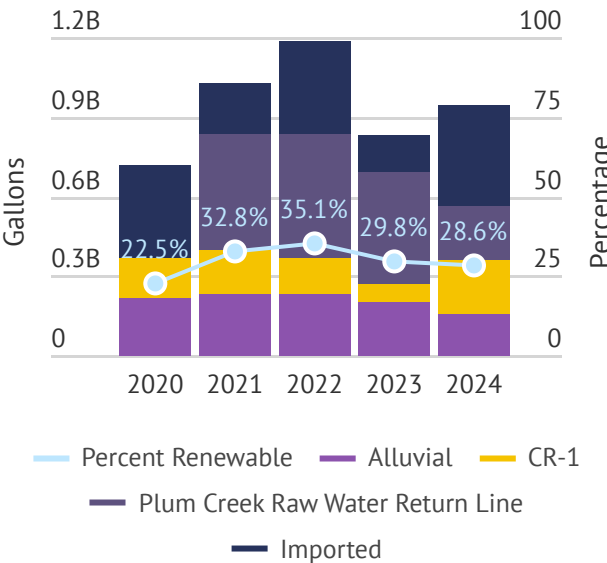
7%\*  
NOV.

## RENEWABLE WATER SUPPLY

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

- In total, renewable supplies accounted for 7% of the total water supply for the month\* (10.3 MG of 148.1 MG) and 28.6% of the annual water supply (946.2 MG of 3,309 MG)
- CR-1 diversion produced an average of 0.0 MGD
  - PC diversion produced an average of 0.2 MGD
  - The 14 alluvial wells produced an average of 0.14 MGD
  - Renewable water average was 0.34 MGD

\*Plum Creek Water Purification Facility was shut down November 7 for the expansion project, greatly reducing renewable water production. PCWPF will remain shut down through December 31, 2024.



# WATER RESOURCES

## REUSABLE SUPPLIES

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.

6.2%

Nov. 2024

## EAST PLUM CREEK FLOWS

The hydrograph indicates the estimated flow in East Plum Creek basin.

- Flows ranged from 4.02 to 21.2 cubic feet per second (cfs)
- The monthly average streamflow was 9.71 cfs
- The 25-year mean is 5.9 cfs

### East Plum CR Abv Haskins Gulch NR Castle Rock, CO - 06708800

November 1, 2024 - November 30, 2024

Discharge, cubic feet per second

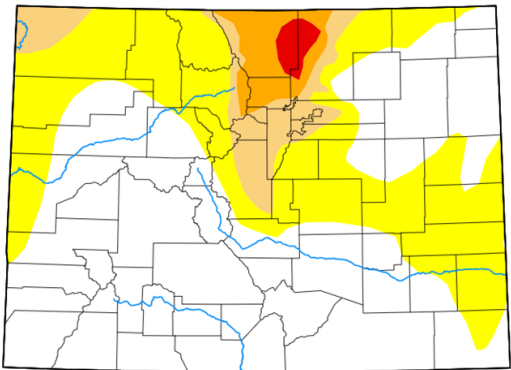


## STORAGE

- Chatfield Reservoir: 1,159 AF
- Rueter-Hess Reservoir: 497.89 AF
- Castle Rock Reservoir No. 1 (CRR1): 165.03 AF

**DROUGHT** According to the most recent U.S. Drought Monitor maintained by the United States Department of Agriculture (USDA), Douglas County is experiencing is experiencing abnormally dry conditions.

## Colorado



Map released: Weds. November 27, 2024

Data valid: November 26, 2024 at 7 a.m. EST

### Intensity

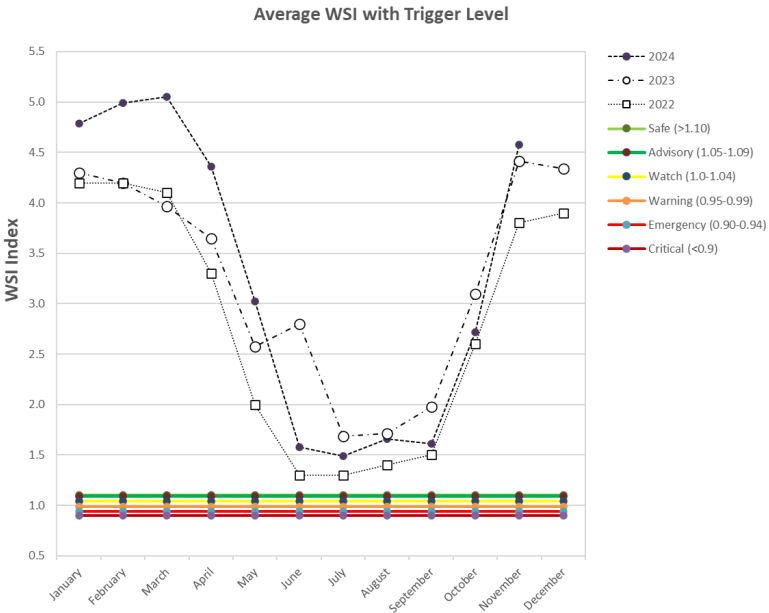
- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

### Authors

United States and Puerto Rico Author(s):  
[David Simeral](#), Western Regional Climate Center

Pacific Islands and Virgin Islands Author(s):  
[Richard Helm](#), NOAA/NCEI

# WATER SUPPLY INDEX



WATER SUPPLY INDEX

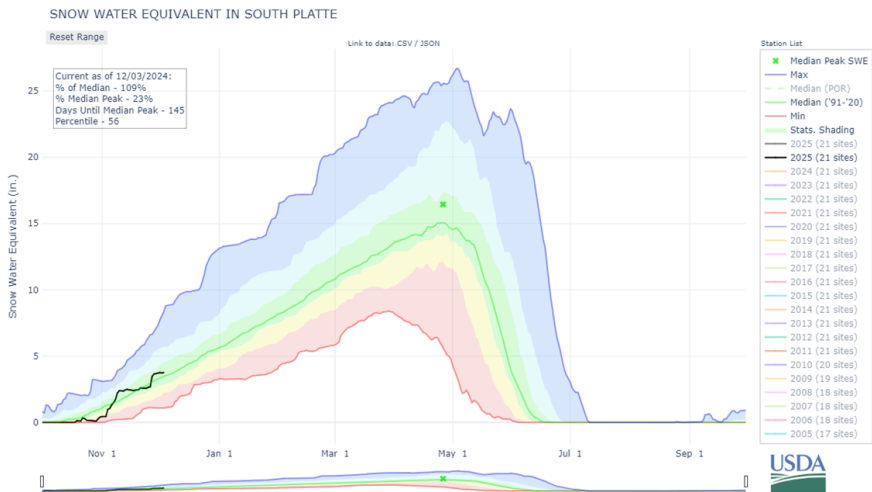
4.6

Nov. 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.

## SOUTH PLATTE RIVER BASIN SNOW PACK

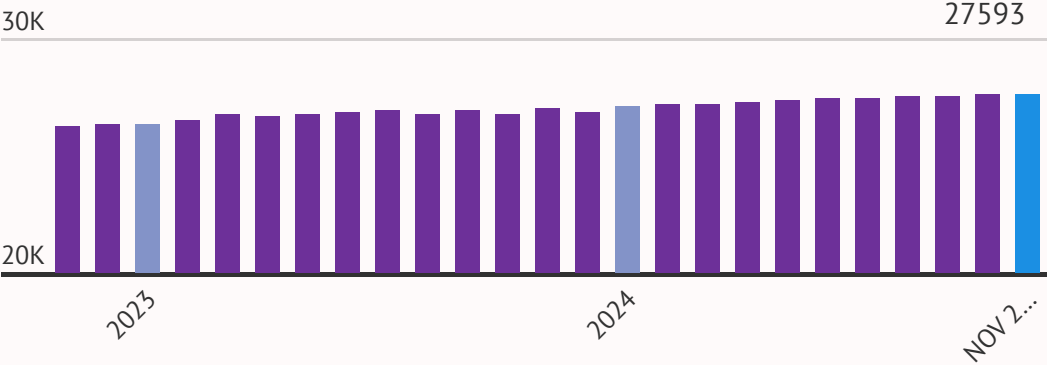
- Year-to-date precipitation at 97% of median
- Snow Water Equivalent (SWE) at 109% of median





# BUSINESS SOLUTIONS

## NUMBER OF CUSTOMER ACCOUNTS



### CUSTOMER SERVICE

NOVEMBER	2022	2023	2024
Phone calls	1699	1403	1323
Walk-ins	137	84	67
Transfer of service	312	169	175
Email inquiries	337	209	455

### CUSTOMER OUTREACH

OUTLET	POSTS	REACH		
Facebook	4 posts	42.5k reach	222 engagments	24 shares
Instagram	1 posts	1.1k reach	15 engagement	
LinkedIn	3 posts	937 impressions	16 reactions	
HOA email	112 reach	60% open rate		
Email	14,264 reach	67% open rate		

TOPICS

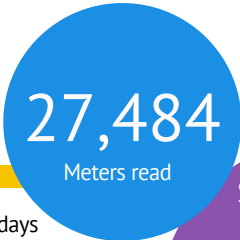
Utility of the Future

Today award

Dishwasher efficiency

Sewer line work

# METER SERVICES

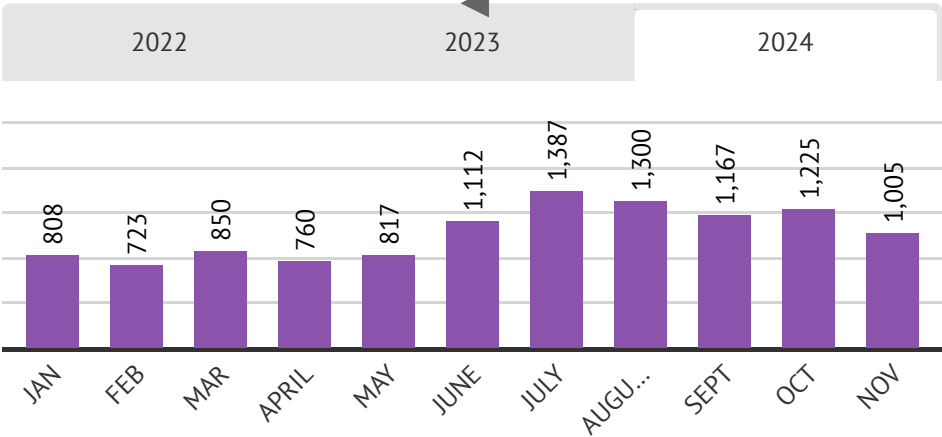


Meters are read the first two days of every month. The number of meters read continues to increase month over month.



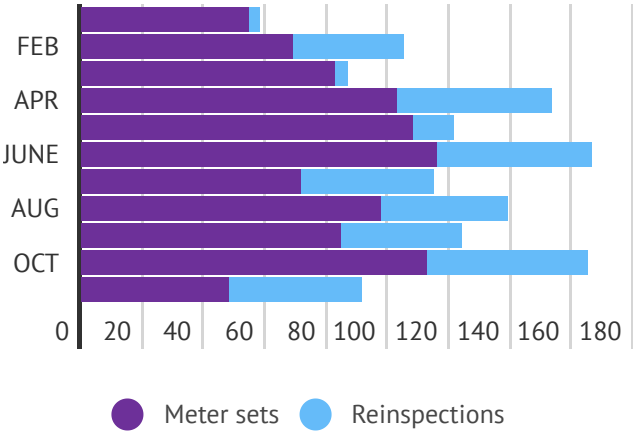
Measuring skipped reads is a strong indication of the level of preventative maintenance being done by our team. A skipped read is indicative of a problem with the metering infrastructure. Fewer skipped reads means more properly working meters, which is good for all our customers.

## 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



## OUTAGES

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



## PRESSURE

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

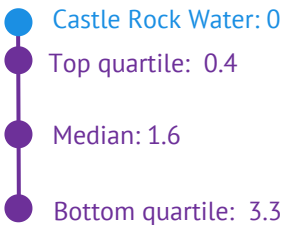


## OVERFLOWS

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

### SANITARY SEWER OVERFLOWS

AWWA Index: SSO rate/100 mi



## 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

