

# MONTHLY REPORT

April 2024



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

## Anderson Pump Station Dedication

On April 4, 2023 the Castle Rock Water Department lost a long-time employee, co-worker and friend, Monty Anderson. In honor of his dedication to the Town, the Blue Zone Pump Station was renamed the Anderson Pump Station.

Monty Anderson was hired by the Town of Castle Rock in 1996 and continued to work for the Town for 27 years, ending his career as a Plant Mechanic II for Castle Rock Water.

Throughout his career, Monty was a shining example of the Town's values, an active member of the Douglas County community, and was widely acknowledged

as Castle Rock Water's resident expert on all matters mechanical and electrical. One of many examples of Monty's great work occurred when the Meadows Water Treatment Plant main power disconnect failed. Monty worked through the night to diagnose the issue and came up with a way to bypass the failure, bringing the plant temporarily back online and preventing an emergency restriction on water use. Another great example of Monty's contribution was when a tear in the liner of Castle Rock Reservoir No. 1 was discovered to be

causing erosion to the reservoir wall. Monty investigated the problem and found a way to repair the tear, preventing further damage to the wall and averting a significant reduction in the reservoir's capacity. One of Monty's final projects was the

replacement of the pump motor starter equipment for the variable frequency drives at the Blue Zone Pump Station. Monty's efforts in rehabilitating and updating the equipment proved invaluable in improving the operation and efficiency of the Station.

The Town's facility naming policy

provides that the criteria for selecting names shall include fostering a sense of community and calling attention to people that have shaped the Town. Monty Anderson was one of those individuals who made the Town of Castle Rock an amazing place to live and work. Town Council approved the declaration of the Blue Zone Pump Station located at 1760 Meadows Boulevard to be renamed as the "Anderson Pump Station."

The sign unveiling and dedication ceremony was held April 4, 2024.









# Good job!



## Green Leaf Award

Mike Wilder was nominated and won the Town's Project Green Award!

Over the past two years, Mike has replaced or converted over 100 light fixtures into LED units. These LED units use up to 75% less energy than incandescent and fluorescent bulbs and last 25 times longer, which has a widespread impact on energy savings. These lights are also brighter, creating a safe work environment for facility operations. Mike was also instrumental in updating the CRW campus southside fencing to a black PVC-coated chain link. This provided improved visibility for staff and guests when entering and exiting the yard through Gate C. The chain link also harnessed the power of the sun to melt ice and snow in the parking areas north of the fence, improving staff safety and preventing slips and falls. Mike has improved sustainability at CRW by installing sustainable lighting and improving staff safety.

## Certifications



**Josh Vaughn**  
Colorado Water  
Treatment D Operator



**Mitch Horner**  
Colorado Water  
Treatment A Operator

## Promoted!



**Devin Limberg**  
SCADA Instrument Tech II



**Avery Worland**  
Distribution Operator IV



**Markus Watkins**  
Sr. SCADA Instrument Tech



**Mitch Horner**  
Water Operator IV

# Good job!

## 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.*



**Phil Jolly**, Wastewater Collections Supervisor, was awarded the Water Star from Jessup for his proactiveness in his communication with the snowplow shift. "He let us know everything he was informed on. He was even letting us know in the middle of the night when he wasn't getting any info as he knew we were all up anyway waiting for the call."



## High Five!

**Jill Skelton**  
**Susan Salvatori**

Recently Jill and Susan have completed some clean-up projects within the Northstar billing system. They reviewed all of the subdivision designations we were using and updated them and then cleaned up all of the associated accounts in Northstar to make sure everything reflected the correct subdivision, which makes planning for service orders and responding to customer calls much easier. A second project that they completed was to update all of the meter pit flags in Northstar. They made sure all accounts that had a meter located in a pit (instead of inside the home) were flagged. This will allow us to run reports with a list of all accounts with meter pits which will aid us in the upcoming lead service line testing project. Both of these projects were completed quickly and efficiently and will provide valuable information.

**Jill Skelton**  
**Susan Salvatori**

Once again these amazing ladies stepped up to help me. I printed 791 letters for backflow tests due in May. Because of a glitch in the software, the letters had to be hand sorted, and then folded and stuffed in envelopes. This process took 3 1/2 hours for the 3 of us, and they kept saying they were "happy to help." I sure appreciate all that you do, let alone all that you do for me. Thank you so much!

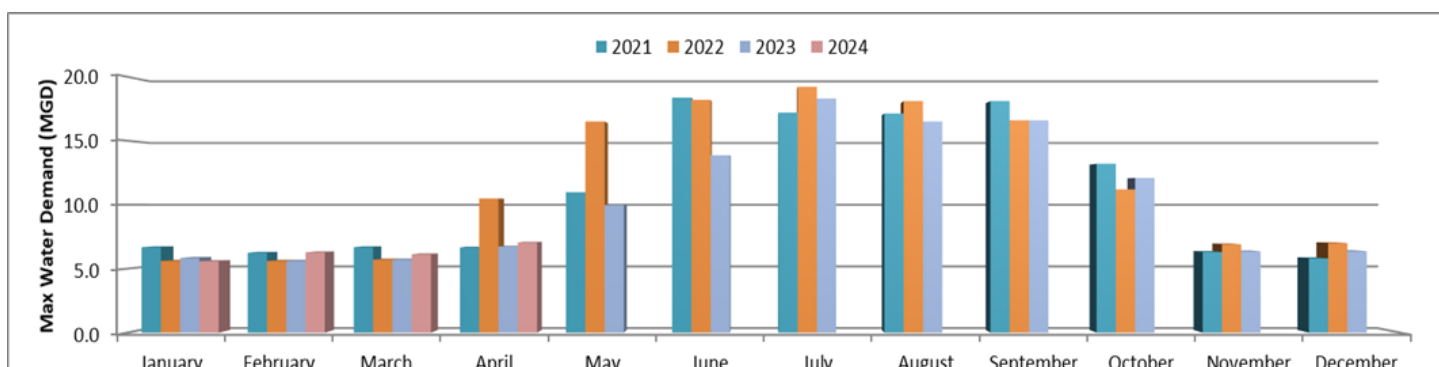
**Josh Hansen**

On 4.16.24, the CRR1 reservoir liner was damaged due to high winds. Josh investigated this issue and put a plan together for a temporary fix. Josh assisted Field Services staff with filling sandbags, carrying them down the steep hill and strategically placing them on the liner. His communication throughout this project has been amazing and he always goes out of his way to say thank you for any and all help we provide him. A high five is well deserved as well as recognition for all of his hard work/perseverance with all the many obstacles he has had to overcome. Great job, Josh!

# Water Resources

## 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.



### Max Daily Demand this month:

- 7.0 million gallons/day (MGD)
- 5-year average: 8.1 MGD
- 13% lower than the 5-year average

### Water Demand Total:

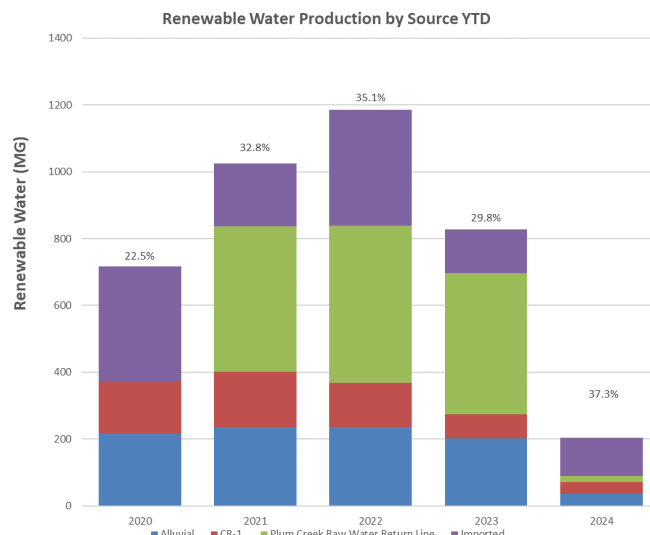
- The water demand total for April was 174.3 million gallons (MG) or 535 acre-feet (AF)
- 13% higher than the March 2024 total of 153.8 MG
- 5% increase from the previous year's April 2023 demand of 166 MG

## Renewable supplies

In total, renewable supplies accounted for 51.4% of the total water supply for the month (83.3 MG of 162 MG) and 37.3% of the annual water supply (223.8 MG of 599 MG)

- The CR-1 diversion produced an average of 0.74 MGD
- The PC diversion produced an average of 0.00 MGD\*
- The 14 alluvial wells produced an average of 0.61 MGD
- The renewable water production average was 2.78 MGD

*\*Due to construction operations at the Castle Rock reservoirs, water was not able to be diverted and stored in CRR1 during the month of April.*



*Our goal is to reach 75% renewable water by 2050 and 100% by 2065.*

# 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. This number changes every month.

- The average reusable supplies used by Castle Rock for April 2024 was 8%

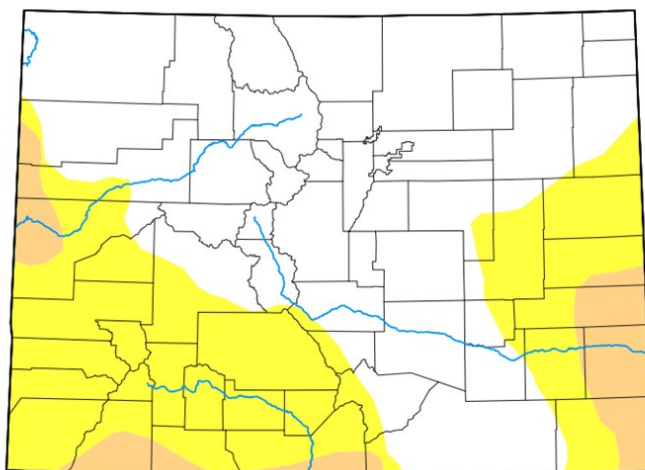
## Storage

### Current reservoir storage

- Chatfield Reservoir: 1,996 AF
- Rueter-Hess Reservoir: approximately 140 AF
- Castle Rock Reservoir No. 1 (CRR1): 130.70 AF

## Drought

According to the most recent U.S. Drought Monitor maintained by the United States Department of Agriculture (USDA), Douglas County is not experiencing any drought conditions.



## Local Plum Creek supplies

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



The hydrograph shows the estimated flows in East Plum Creek basin.

- Flows ranged from 10.5 to 26.9 cubic feet per second (cfs).
- The monthly average streamflow was 15.12 cfs.
- The 24-year mean is 48 cfs.

*Note: No data is available after April 15, 2024 due to streamgauge relocation and additional data needed for rating curve at new location.*

Map released: Thurs. May 2, 2024

Data valid: April 30, 2024 at 8 a.m. EDT

### 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):

[Curtis Riganti](#), National Drought Mitigation Ce

Pacific Islands and Virgin Islands Author(s):

[Lindsay Johnson](#), National Drought Mitigation

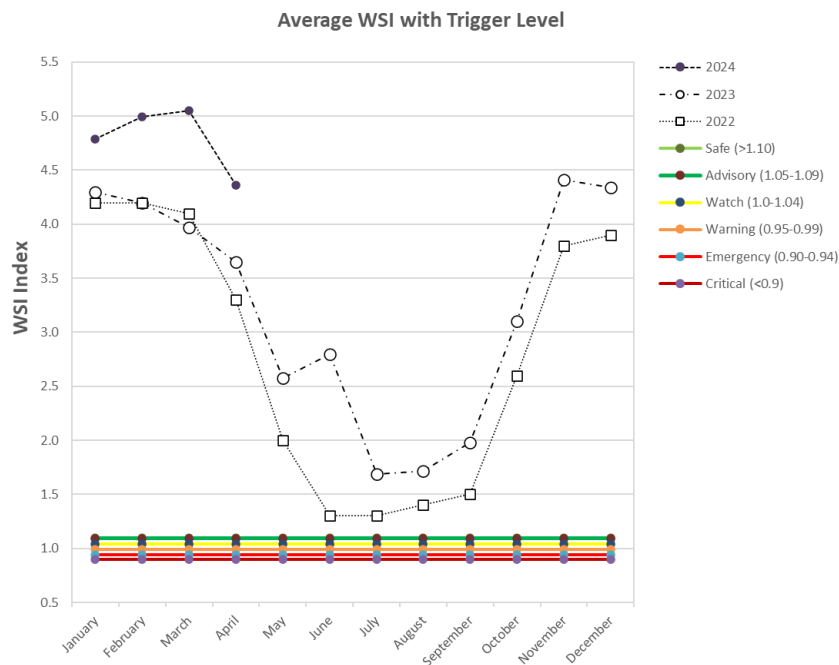


# Water Resources

## Water supply index

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 a 1.1 will trigger a drought stage relative to its severity.

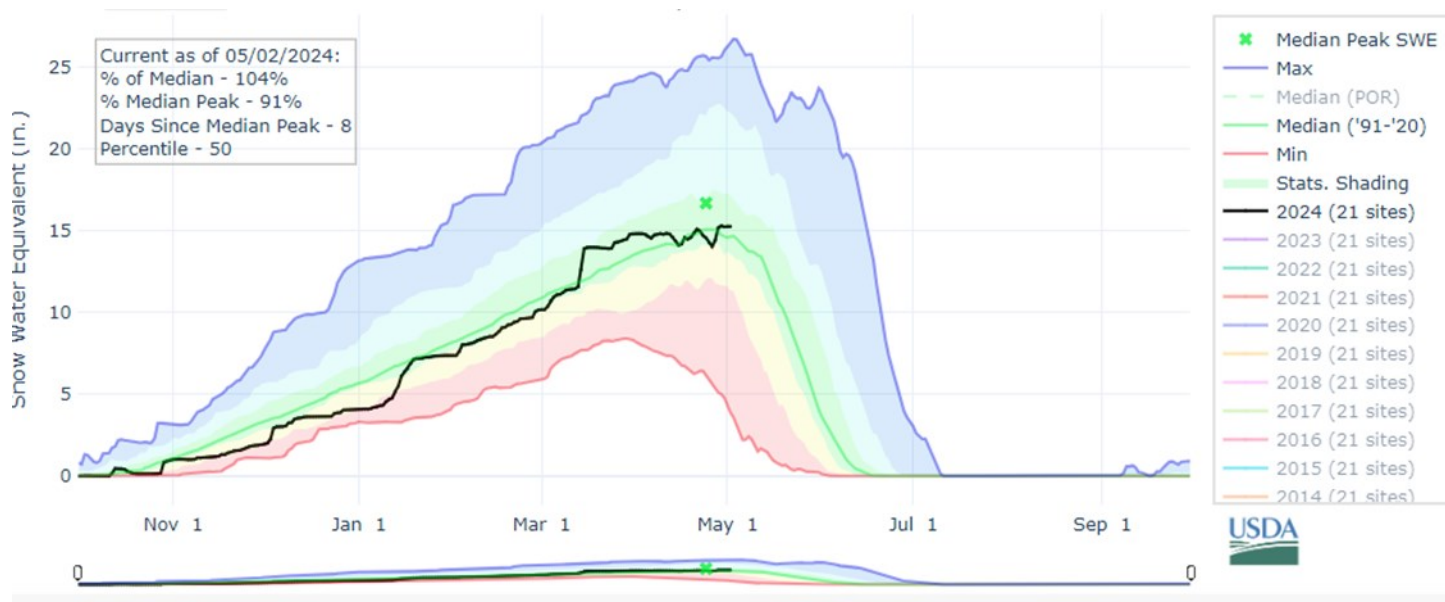
- The average WSI for April 2024 was 4.4



## Snow Pack

### South Platte River Basin Snow Pack

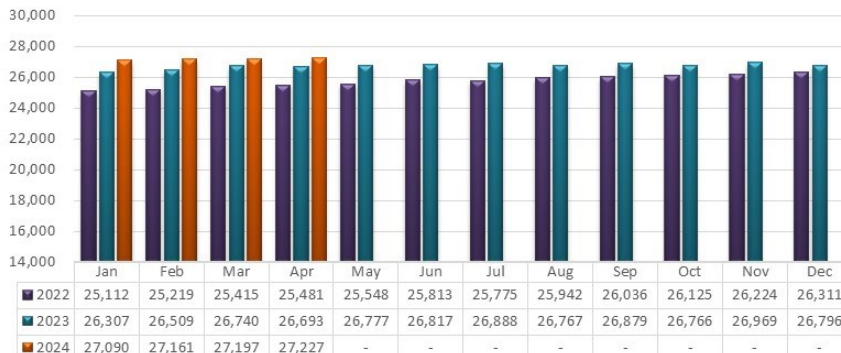
- Year-to-date precipitation at 102% of median
- Snow Water Equivalent (SWE) at 104% of median



# Business Solutions

## Customer Service & Billing

# of Accounts Billed

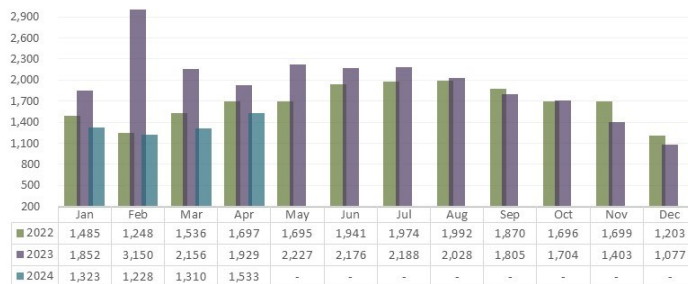


### CRgov.com/MyWaterBill

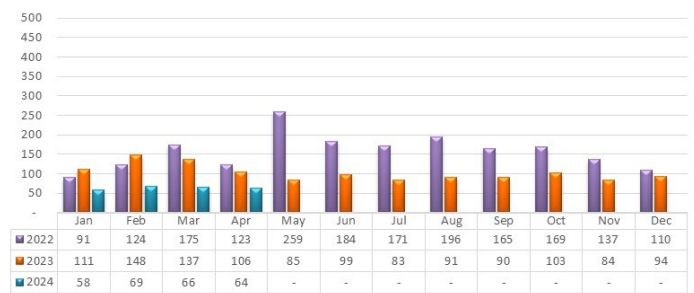
Having an online account benefits customers with 24/7 access to account information, historical statements and multiple ways to pay.



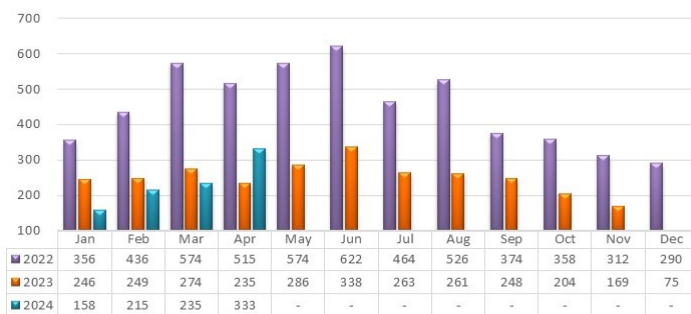
Customer Phone Calls



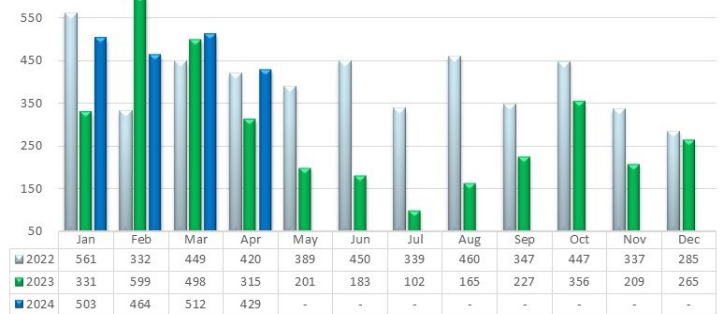
Walk-In Customers



Transfers of Water Service



Mywaterbill Email Inquiries



## Customer Outreach & Education

Facebook – 6 posts / 35.3K reach / 301 engagement / 17 shares  
 Instagram – 4posts / 1.6K reach / 112 engagement / 612 shares  
 LinkedIn – 1 posts / 157 impressions / 2 reactions  
 Email – 12,660 reach / 64% open rate  
 ColoradoScape contest email – 10,865 open / 54% open rate  
 HOA email – 117 open / 63% open rate

### Topics:

- AWMC
- Rebates
- ColoradoScape Contest
- Spring Up the Creek



As part of the celebration for Water Conservation Month, Castle Rock Water kicked off the front yard ColoradoScape give-away contest.



# Meters



## Meters Read

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

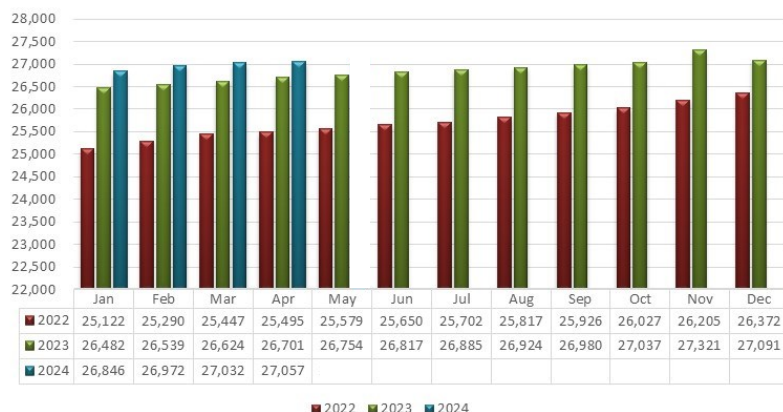
## Skipped Reads

**April: 0.91%**

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

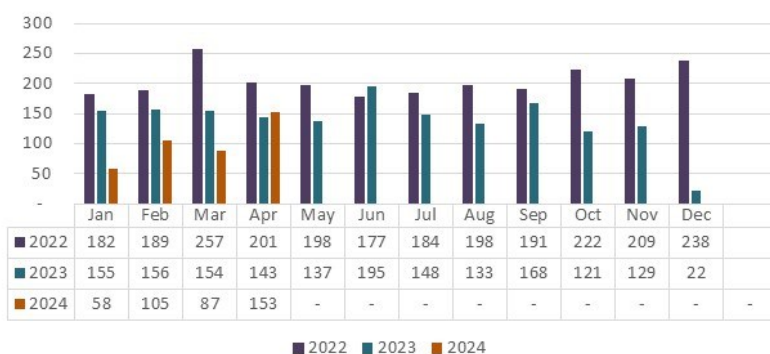


## Meter Set Inspections

**Re-inspections: 33%**

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  
(includes all re-inspections)



## Work Orders

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 transfers of service, disconnection and reconnections, meter set inspections, and more.

ALL Service Work Orders



# Operations & Maintenance

## LEVELS OF SERVICE

**April 2024**

### Drinking Water Compliance

Castle Rock Water will deliver water that meets or surpasses the requirements of both Primary Drinking Water Regulations and Secondary Maximum Contaminant Levels 100% of the time.

***One hundred routine samples were completed and no issues discovered.***

### Pressure Adequacy

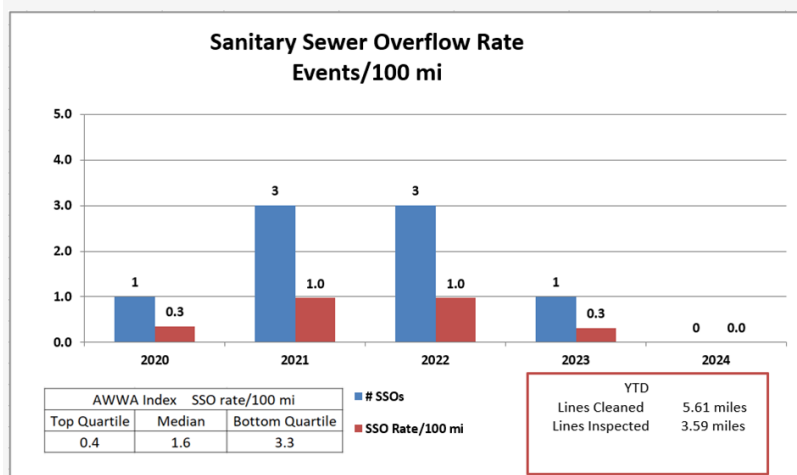
< 1% of our customers will experience less than 43 pounds per square inch (psi) of pressure at the meter during normal operations.

***There were no water pressure issues in April.***

### 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 in April.***



### Water Quality Complaints

Castle Rock Water remains in the Top Quartile for water quality complaints based on the AWWA benchmarking.

***There were no water quality complaints for April.***  
***We conducted 2 educational visits.***

## Utility locates



Know what's below.  
Call before you dig.

### Water locates conducted

April: 1,522 locate tickets

*Locating public water, wastewater and stormwater lines.*



# Operations & Maintenance

## LEVELS OF SERVICE

**Drinking Water Supply Outages** <5% of our customers will experience water outages for one or more events totaling more than 30 hours/year.

Castle Rock Water remains in the Top Quartile for water system integrity based on the American Water Works Association benchmarking.

## April 2024

**There were two water system integrity issues in April.**

There were two service line leaks in the Meadows.

The first affected only the homeowner and they had no water for less than one hour during the repair.

The second service line leak affected ten homes, who were out of water for less than one hour during the repair.

