



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

Demonstration garden design underway

With nearly half of all the water used in Town going to landscape irrigation, a major goal of Castle Rock Water is to reduce per capita use to 100 gallons per capita per day by 2050. We believe this can be accomplished by increased irrigation efficiency and limitation of new non-functional turfgrass areas, while still maintaining the natural beauty and character of the community. Since many residents have the perception that xeric means no plants, Castle Rock Water utilizes the term, *ColoradoScape*, to emphasize the color and vibrancy xeric landscape can have while utilizing plant material that thrive within our State. The proposed Castle Rock Water ColoradoScape Demonstration Garden, located near the Ray Waterman Water Treatment Facility, will be a primarily educational venue to encourage residents to increase efficiency and reduce water usage in their landscape and help reach the Town's conservation goal. With additional needs for water due to growth, the potential impacts of climate variability, and the conscientious use of a precious resource, changing the landscape to a more regionally appropriate one will help Castle Rock manage water usage more efficiently and continue creating a strong water future.

While working with the Parks Department, it was determined to build the garden on a zoned future park site in Terrain neighborhood at the corner of Autumn Sage and Aloha Street. Original plans were to have the garden at the Castle Rock Water/Town-owned property adjacent to Ray Waterman Regional Water Treatment Center. The new site, simply across the street, has better visibility, parking access, and utility clearance. It will also tie in nicely with the park when it gets built. There are no other plans for the park at this time. This easily accessible location is ideal as it is within a newer, growing subdivision and is surrounded by housing, a high-traffic roundabout, and the future Town park. The total area available for the garden is almost one acre.



Castle Rock Water issued a Request for Proposals for this work May 2023 and received two responses, both of which were beyond the design budget. Subsequently, Castle Rock Water staff reached out to the Colorado State Douglas County Extension office regarding alternate community partnerships and was referred to the Colorado State University, Department of Horticulture and Landscape Architecture. As part of the curriculum, this school regularly provides similar community-based landscape architecture projects though they have previously been for residential properties. Their bid was one-third of the other lowest proposal submitted. This will be their first commercial project.

A team of five Landscape Design and Contracting (LDC) students, both at the undergraduate and graduate level, shall perform the work in an independent study environment. The work will be performed under the supervision of two program professors, both licensed as Landscape Architects in the State of Colorado. Irrigation design work shall be produced in a similar manner under the supervision of a Town of Castle Rock Qualified Water Efficient Landscaper (QWEL) certified CSU professor.

Mid-January, the CSU team presented three design concepts to Town staff. The Castle Rock Water and Parks team chose the one that seemed to fit the project's objectives of good flow, inspirational areas and educational components. The CSU team will provide designs at 60% and 90% with design completion scheduled for May 2024. The plan is to build the parking lot and pavilion, along with some paths and irrigation in late 2024 with plantings in spring 2025. Bids will be requested for landscape construction.

The garden will include several 'homescapes' which provide direct examples of ColoradoScape design for residential yards including a Rocky Mountain, High Desert, Colorado Classic and Manicured themes. Various areas will give examples on what HOAs and commercial properties could include in their non-functional area. A variety of materials for paths, edging, mulch and other landscape products will be presented to inspire creativity in design. An irrigation demonstration area with several turf varieties, a sensory garden, fire-wise plantings and more are planned. Parking for about 20 vehicles and a pavilion with space for 30 will be included.



Colorado Springs Utility Demonstration Garden

As this is an educational space, and to bring more people to the garden, Castle Rock Water and the CSU Douglas County Extension office will hold hands-on courses at the site. To further the partnership, and assist with community educational goals, the site will be utilized for classes for their recently secured contract to restructure the National Botanical Association trainings. Additionally, the garden has been designated as a volunteer approved site for the Extension's Master Gardeners program. The Master Gardeners will provide education opportunities and expert guidance on maintenance.

Currently, there is a resident survey available to garner input from our customers. As of Jan. 31, 2024, 59 responses have been received with 100% positive support of the project. An open house is tentatively scheduled for March 20, 4 to 6 p.m. at the Terrain Clubhouse for additional outreach.



COLOCAPES GARDEN PARK
CASTLE ROCK WATER
AUTUMN BASS STREET
CASTLE ROCK, CO 80014
CONCEPT PLAN
L-02



COLOCAPES GARDEN PARK
CASTLE ROCK WATER
AUTUMN BASS STREET
CASTLE ROCK, CO 80014
CONCEPT PLAN
L-03

Good job!

WELCOME



Devin Limberg
SCADA
Instrument Tech 1

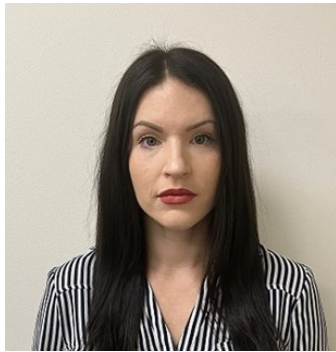


Peter Gaudio
Water Treatment
Operations



Joe Compton
Water Treatment
Operations

Certified!



Kristen Burakou
Colorado Water
Treatment D Operator



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.

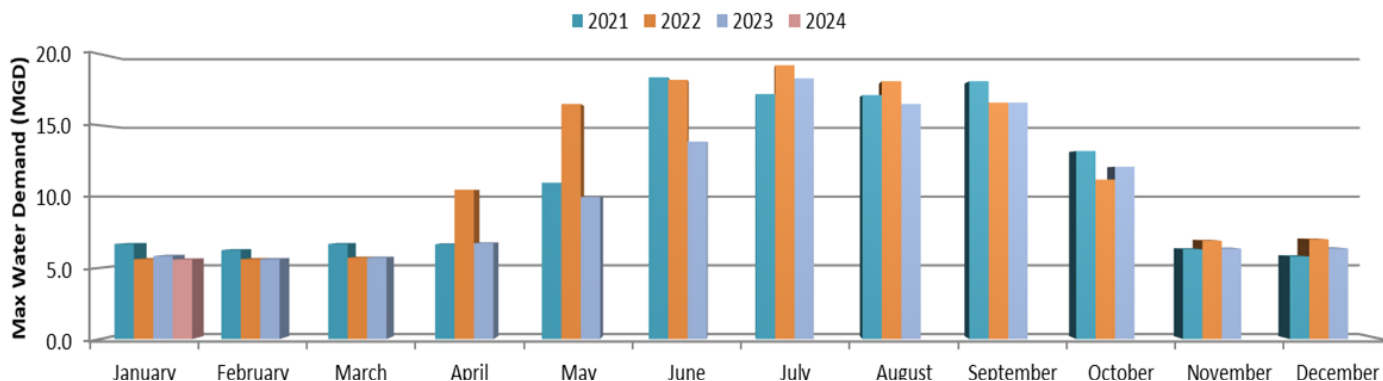


Jackson Byrnes, Meter Services Technician, was awarded the Water Star award from Tim Dagg due to his ever positive attitude. He should be commended on his great customer service approach. He is always eager, willing and extremely knowledgeable about how to help out in the field. He also knows how to politely and efficiently work with customers!

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:

- 5.6 million gallons/day (MGD)
- 5-year average: 6.1 MGD
- 9% lower than the 5-year average

Water Demand Total:

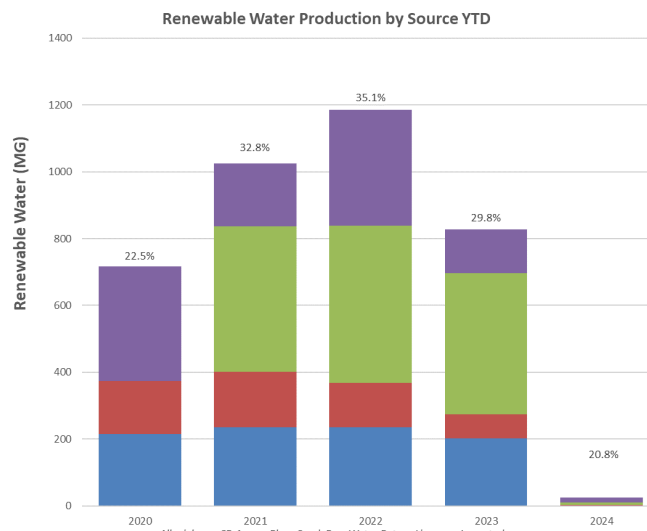
- The water demand total for January was 160.2 million gallons (MG) [491.6 acre-feet (AF)]
- 1% higher than the December 2023 total of 159.4 MG
- 4.5% increase from the previous year's January 2023 demand of 153.3 MG.

Renewable supplies

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

In total, renewable supplies accounted for 20.8% of the total water supply for the month (28.9 MG of 139 MG) and 20.8% of the annual water supply (28.9 MG of 139 MG)

- The CR-1 diversion produced an average of 0.06 MGD.
- The PC diversion produced an average of 0.36 MGD.
- The 14 alluvial wells produced an average of 0.20 MGD.
- The renewable water production average was 0.93 MGD.



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

Note: Due to the Plum Creek Water Purification Facility annual maintenance shut down during most of January 2024, the ability to treat renewable water was reduced.

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 January 2024 was 5%.

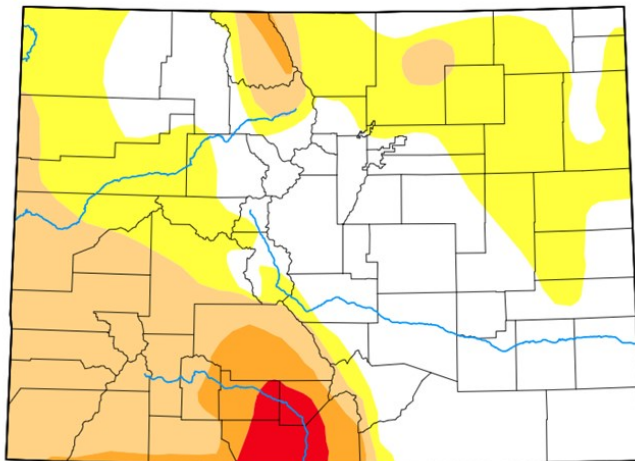
Storage

Current reservoir storage

- Chatfield Reservoir: 1,991 AF
- Rueter-Hess Reservoir: approximately 104 AF
- Castle Rock Reservoir No. 1 (CRR1): 106.85 AF

Drought

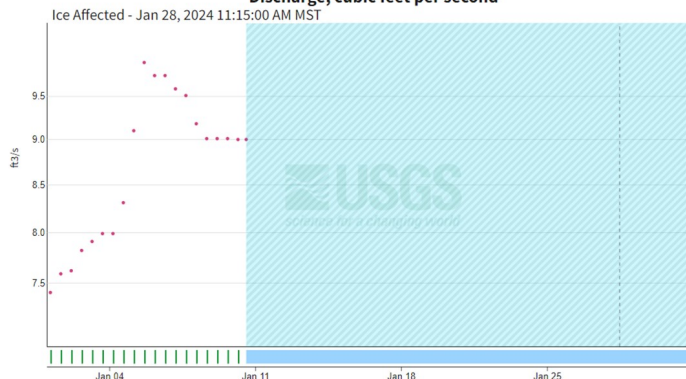
According to the most recent U.S. Drought Monitor maintained by the United States Department of Agriculture (USDA), Douglas County is not experiencing any drought conditions.



Local Plum Creek supplies

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

January 1, 2024 - January 31, 2024
Discharge, cubic feet per second



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

- Flows ranged from 7.41 to 9.91 cubic feet per second (cfs).
- The monthly average streamflow was 7.9 cfs.
- The 24-year mean is 5.6 cfs.

Note: Data not available after January 10, 2024 due to ice.

Map released: Thurs. February 1, 2024

Data valid: January 30, 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):

[Brian Fuchs](#), National Drought Mitigation Center

Pacific Islands and Virgin Islands Author(s):

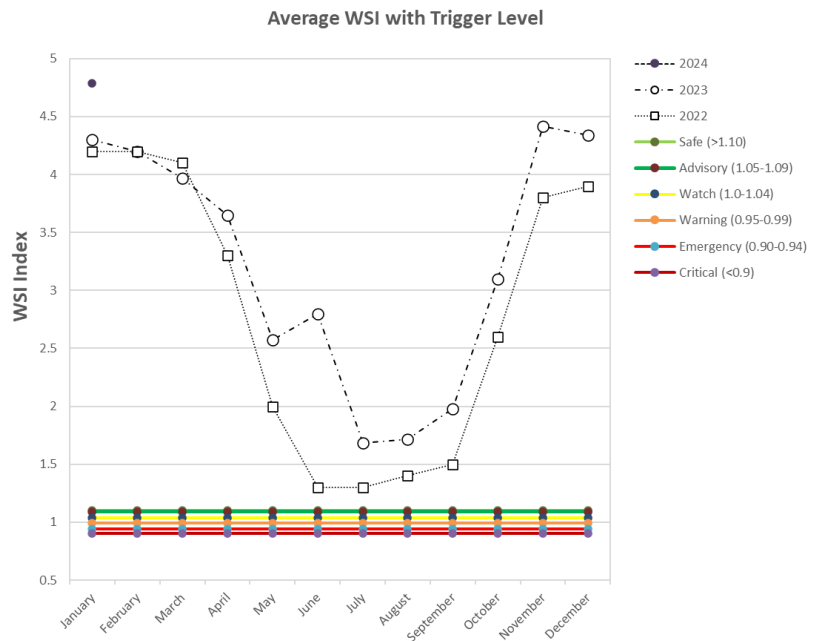
[Curtis Riganti](#), National Drought Mitigation Center

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.

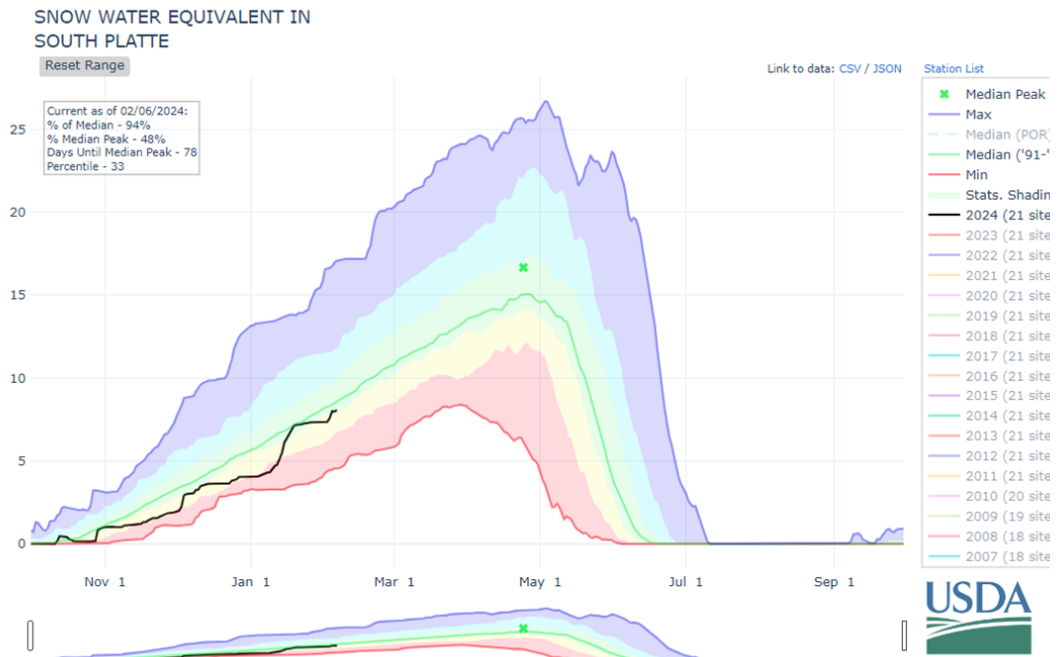
- The average WSI for January 2024 was 4.8.



Snow Pack

South Platte River Basin Snow Pack

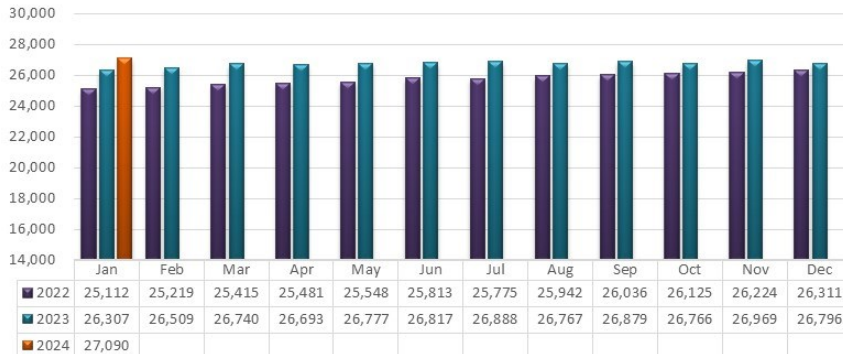
- Year-to-date precipitation at 71% of median.
- Snow Water Equivalent (SWE) at 94% of median.



Business Solutions

Customer Service & Billing

of Accounts Billed



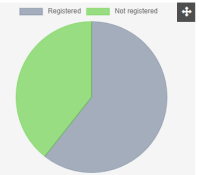
CRgov.com/MyWaterBill

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

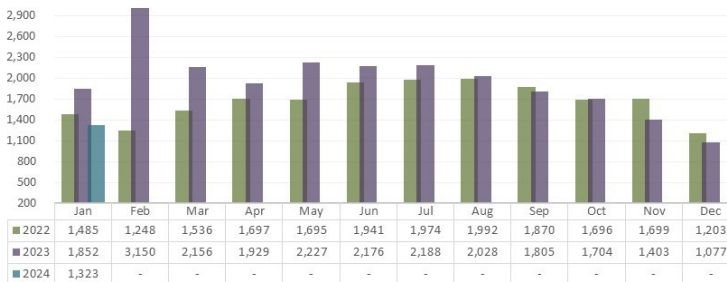
Customer Registrations

Total Customers **29711**
Percent Registered **60.63%**

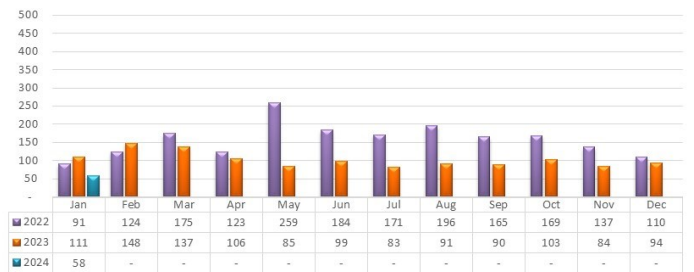
Total Registered **18014**
Percent Unregistered **39.37%**



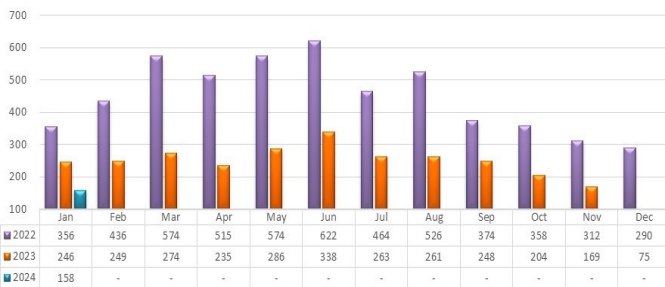
Customer Phone Calls



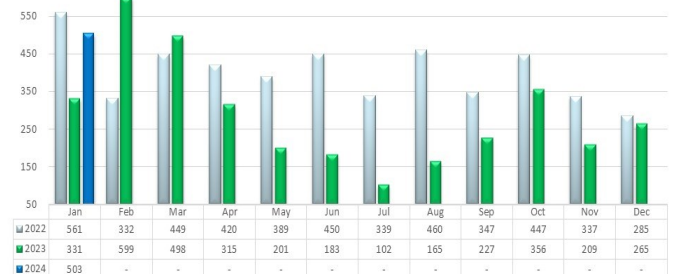
Walk-In Customers



Transfers of Water Service



Mywaterbill Email Inquiries



Customer Outreach & Education

Social media outreach

FB	WW: Save 1 gallon/day	1/3	3381
FB	WW: Annual checkup	1/10	1180
FB	WW: Pipes	1/12	133,775
FB	WW: Whose line is it	1/17	3126
FB	WW: Strategic Plan	1/24	1171
FB	WW: Workshops	1/31	3720
FB	Notice: Sewer line testing	1/19	2,373
Insta	Workshops	1/31	1,225
Linked	Strategic Plan	1/24	599
Email	Demo garden	1/18	13,250 (65% open rate)
ND	Frozen pipes	1/12	2,771

Date Impressions

1/3	3381
1/10	1180
1/12	133,775
1/17	3126
1/24	1171
1/31	3720
1/19	2,373
1/31	1,225
1/24	599
1/18	13,250 (65% open rate)
1/12	2,771

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

Jan.: 0.65%

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.

Meter Set Inspections

Re-inspections: 5%

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.

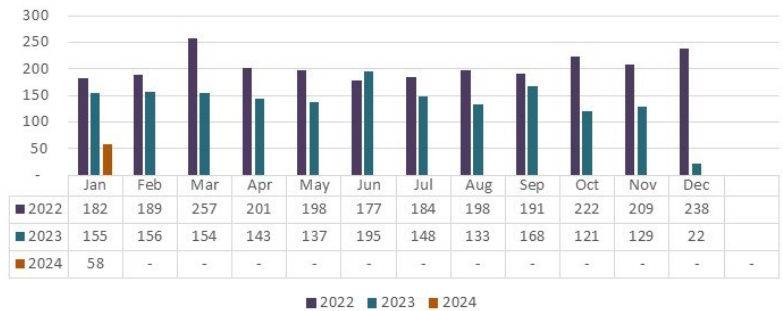
Work Orders

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.

Meters Read



All Meter Set Inspections
(includes all re-inspections)



ALL Service Work Orders



Operations & Maintenance

LEVELS OF SERVICE

January 2023

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

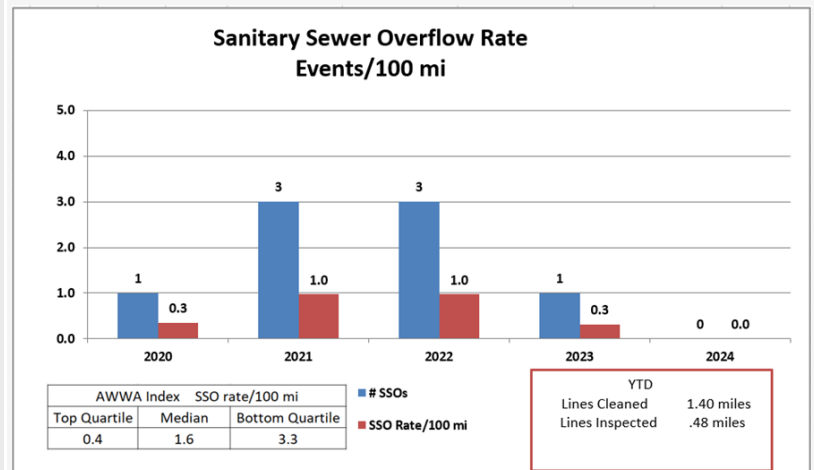
< 1% of our customers will experience less than 43 pounds per square inch (psi) of pressure at the meter during normal operations.

There were no water pressure issues in January.

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 January



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 January. We conducted 3 educational visits.

Utility locates



Know what's below.
Call before you dig.

Water locates conducted

Jan.: 1073 locate tickets

Locating public water, wastewater and stormwater lines.



Operations & Maintenance

LEVELS OF SERVICE

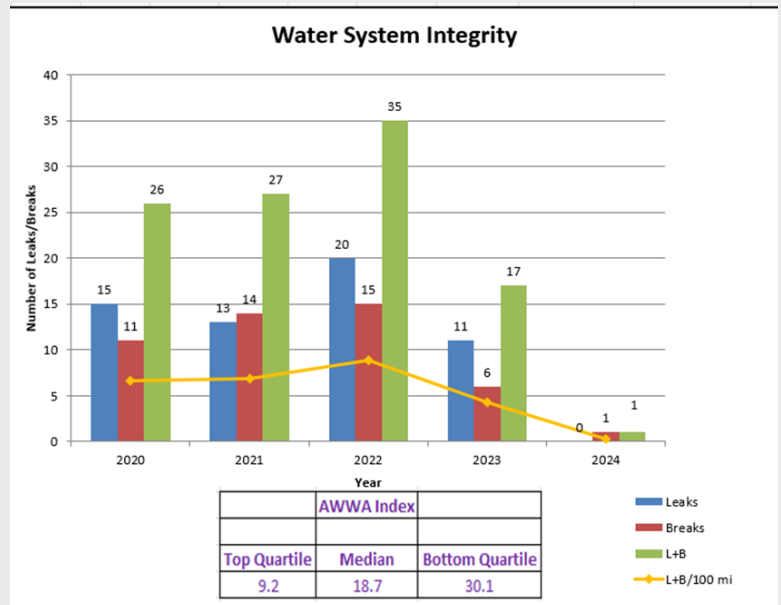
January 2023

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.

There was one water system integrity issue in January.



There was a main break in old town, staff was able to conduct the beam break repair on the 6" cast iron pipe. No residents were affected as this was conducted as a live repair.



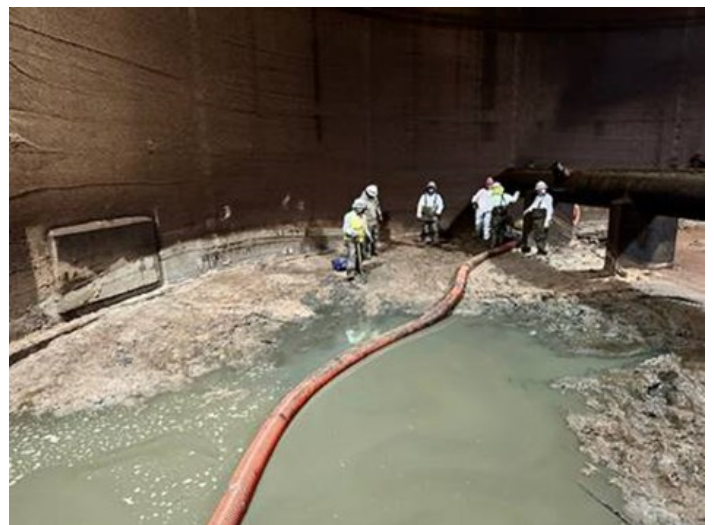
Operations & Maintenance



There was a line break at the Plum Creek Water Purification Facility, when a potholing contractor hit the 30" raw water line. Global Underground was on site and completed the repair with assistance from the Distribution team.



Garney Construction assisted the Water Treatment team in the raw water blending tank sand removal project.



Castle Rock police notified the Field Services team that there was a missing sewer manhole cover at the intersection of Fifth St. and Perry, creating a possible hazard. Staff temporarily welded the lid in place. Later the team replaced the manhole ring and cover.

