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

Prairie Hawk PRV Upgrade Project

The Prairie Hawk Pressure Reducing Valve (PRV) Project is located on the East side of Prairie Hawk Drive near the intersection with Switchgrass Drive. This project upgraded the existing 8-inch Pressure Sustaining Valve (PSV) with a dual 12-inch system including a new vault and control panel. The existing 8-inch PSV had created a restriction in the 12-inch raw water transmission main that supplies water from wells on the south side of Town to the Plum Creek Water Purification Facility (PCWPF). Also, the high iron load in the water had frequently clogged the pilot lines of the existing 8-inch PSV. Cleaning the pilot lines had required operations to shut down the southern well field. Adding two larger PSV's will eliminate the bottleneck in the transmission main and allow one PSV to act as a bypass during maintenance on the other, which reduces the water supply impacts to PCWPF.

Traditionally, PRV's provide a pressure reducing function, however in the case of this raw water transmission main, these Pressure Sustaining Valves provide a pressure sustaining function to maintain adequate pressure for more effective operation of the water facilities south of this project location.

The project was awarded to Global Underground Corporation. The project replaced the existing 8-inch PSV and 6-foot concrete manhole with two 12-inch PSV's and a 12' x 20' concrete vault.

The awarded project cost was $538,921 and will be completed within the approved budget. The project is proceeding ahead of schedule and is anticipated to be complete Summer 2024.

Good job!

WELCOME

NEW HIRES

Josh Martinez
Treatment
Water Operator 1

Grant Taylor
Treatment
Water Operator 1

Certifications

Kevin Moore
Colorado Water
Distributor 4 Operator

Jeff Lehman
Colorado Water
Distributor 3 Operator

Tristan Casner
Colorado Water
Distributor 1 Operator

Avery Worland
Colorado Water
Distributor 4 Operator

Promoted!

Ed Sheets
Plant Mechanic II

Jon Lutterman
Plant Mechanic II

Chad Francis
Stormwater Maintenance
Tech II

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.

Jessup Schield, Stormwater Inspector received the Water Star Award from Mike Wilder as he a hard worker who is very thorough in his processes. He is great to work with and a great team player. It is amazing how long he has been here!

High Five!

Kirstin Harrison
Jackson Byrnes

A contractor hit a meter pit and curb stop valve at 623 Gilbert St. and a work order was placed for the Meters Division to check on the meter for damage. They arrived on site within the hour and assisted the contractor with parts for repair and advised the contractor on installation. A GREAT JOB BY ALL!

Diane Maki

Diane has gone above and beyond to help Water Resources in several different scenarios. She has caught some items that would have had an impact on our revenue and workflow process:
1) She called Water Resources when a builder requested their meter and noticed it didn't look like they had paid for the renewable water that had been agreed upon in the Extraterritorial Agreement. 2) She understands the connection of how her reviews affect SFE data into Trakit is different due to the new 'No Turf' requirement. Diane understood that the detail of the timing of the entry might affect what was happening with the Aqua B software. I appreciate Diane for noticing issues that were beyond the scope of her duties.

Kevin Moore

Kevin came in after hours to give a tour of PCWPF for the Water Commission. He was very professional, well spoken and knowledgeable. The Commission members really enjoyed the tour and talking with Kevin.

Rob Daniels

I recently was injured on the job and couldn't complete my on-call shift for the week and Rob was kind enough to volunteer to take it at last minute. This is not the first that I've seen Rob volunteer to help people out and I really appreciate him for doing this and I think he really displays The Towns values and our mission.

Melinda Pastore

Melinda stepped in to run the administrative components of the February Water Commission meeting in the absence of the Executive Assistant who was ill at the last minute. Melinda did a great job for having not run one of these meetings in five years. She picked up the food, set up the online remote option, prepared and cleaned up the room, drafted meeting minutes and sacrificed an evening to make it all happen!! Thank you so much for supporting me on my first Commission meeting, I couldn't have done it without you!

Stormwater Compliance

As an integral part of the Town's vision of providing residents the highest quality services at the best value, the Stormwater Division manages stormwater runoff to minimize flooding hazards and to protect water quality in our watersheds.

Services the Stormwater Division provides include:

- Construction site inspections
- Spill reporting, enforcement and response
- Public education and outreach
- Pond maintenance oversight
- Floodplain management
- Design and construction of SW CIP projects

Newspaper Ad Makeover

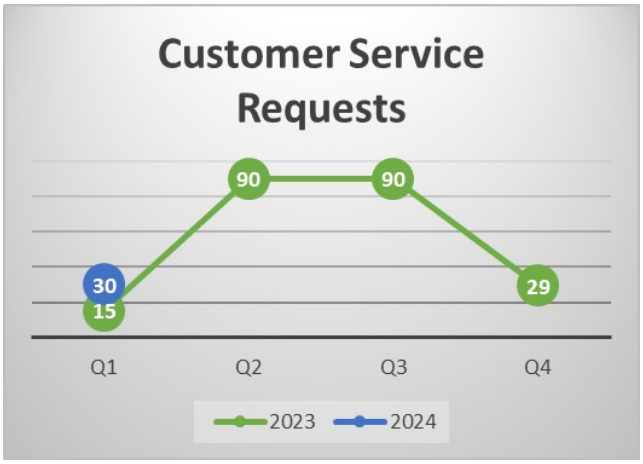
Town staff created newspaper ads for stormwater outreach and education way back in 2009. These ads have been running in local papers ever since. An update was long overdue and the Communications Division took charge of a full makeover and has produced and published three ads this year with a fresh new look and messaging. They will continue throughout 2024 until all of the old ads are replaced.

Ad for March 2024 (right) states "Never pour household chemicals or paint down a stormdrain. Stormdrains lead directly to our local creeks and waterways where wildlife live and people play! Check with your local Health Department for chemical disposal and Paintcare.org to recycle paint.

Customer Service

The Stormwater Division receives various customer concerns, from nuisance groundwater and illicit discharges, to dust, and infrastructure maintenance. Complaints often rise and fall with weather patterns.

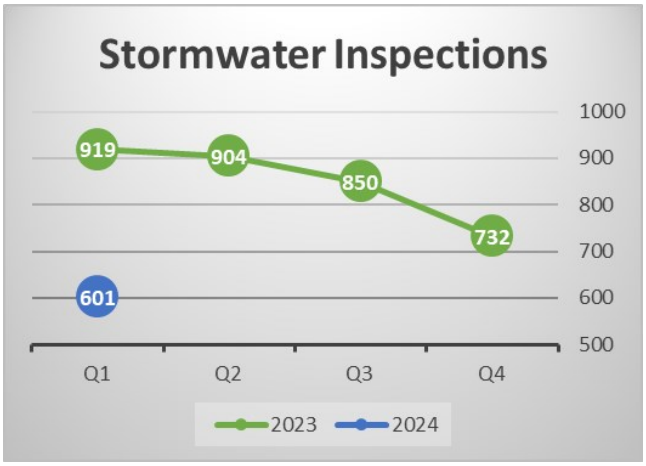
Customer concerns doubled from Q1 of 2023. Many of these were due to icing and plowing drainage issues associated with the big storm and melt/freeze conditions.



Inspections

The inspection team regulates permitted residential and commercial properties.

Total inspections tracked 35% lower than in Q1 of 2023. This is related to the overall decrease in residential tract permits throughout 2023. Residential inspections were down 50% from Q1 of 2023 accounting for the ongoing downward trend.



Plan Review

Castle Rock Water Plan Review team reviews planned development plans, site plans, construction drawings, water efficiency plans and technical reports for each project to ensure the public infrastructure built by the developer is following the criteria set by the Town, with respect to:

- Water
- Sanitary sewer
- Stormwater
- Drainage
- Flood Control
- Landscape and Irrigation
- Temporary erosion and sedimentary control

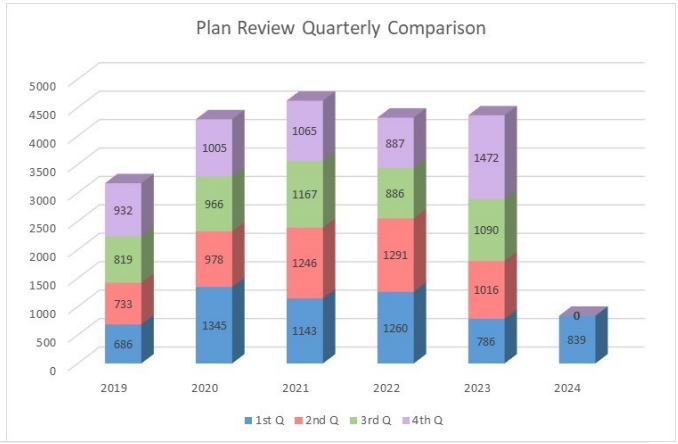
Project Reviews

A project can be as large as a master planned development area or subdivision, or as small as a commercial building or building addition.

Plan Reviews

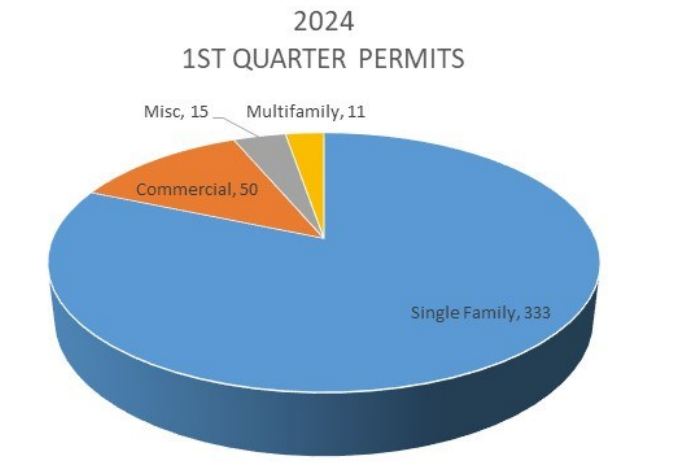
Each project may have several plans related to it. This graph identifies the total number of different plan reviews for all projects and permits.

JAN: 236
FEB: 278
MAR: 325



Plan Permits

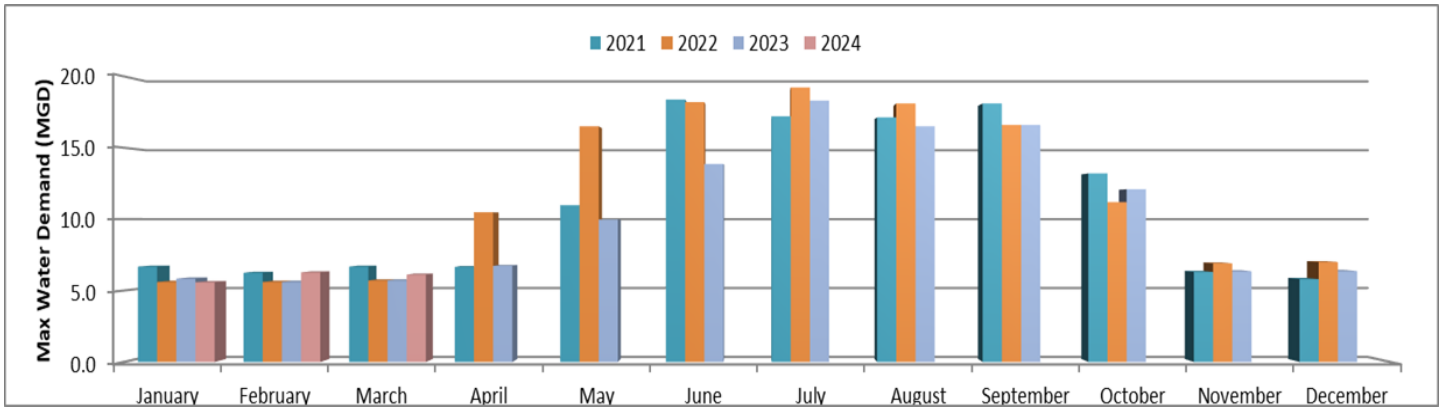
The plan review team reviews building permits to verify proposed water demand to size meters and assess system development fees. The team reviews permits for each single family home, multi-family building, commercial building, commercial tenant improvement, irrigation meter, and temporary trailers.



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:

- 6.1 million gallons/day (MGD)
- 5-year average: 6.2 MGD
- 2% lower than the 5-year average

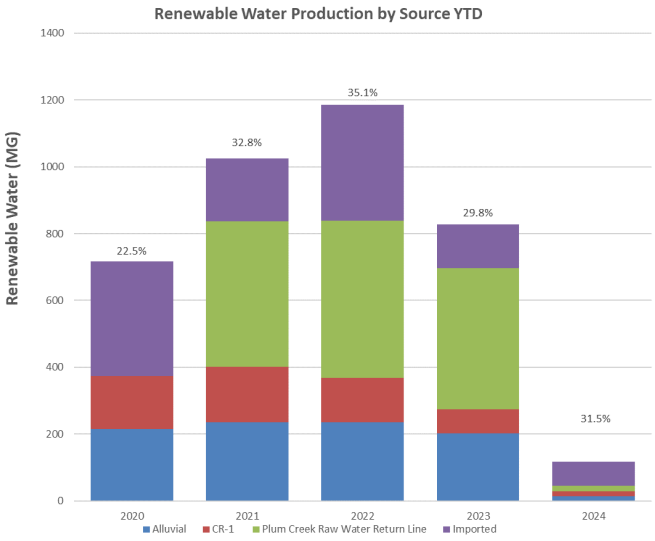
Water Demand Total:

- The water demand total for March was 153.8 million gallons (MG) [471.9 acre-feet (AF)]
- 10% higher than the February 2024 total of 140.3 MG
- 2.5% decrease from the previous year's March 2023 demand of 157.7 MG

Renewable supplies

In total, renewable supplies accounted for 34.3% of the total water supply for the month (48.4 MG of 141 MG) and 31.5% of the annual water supply (136.6 MG of 434 MG)

- The CR-1 diversion produced an average of 0.14 MGD
- The PC diversion produced an average of 0.25 MGD
- The 14 alluvial wells produced an average of 0.35 MGD
- The renewable water production average was 1.56 MGD



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.

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

Water Resources

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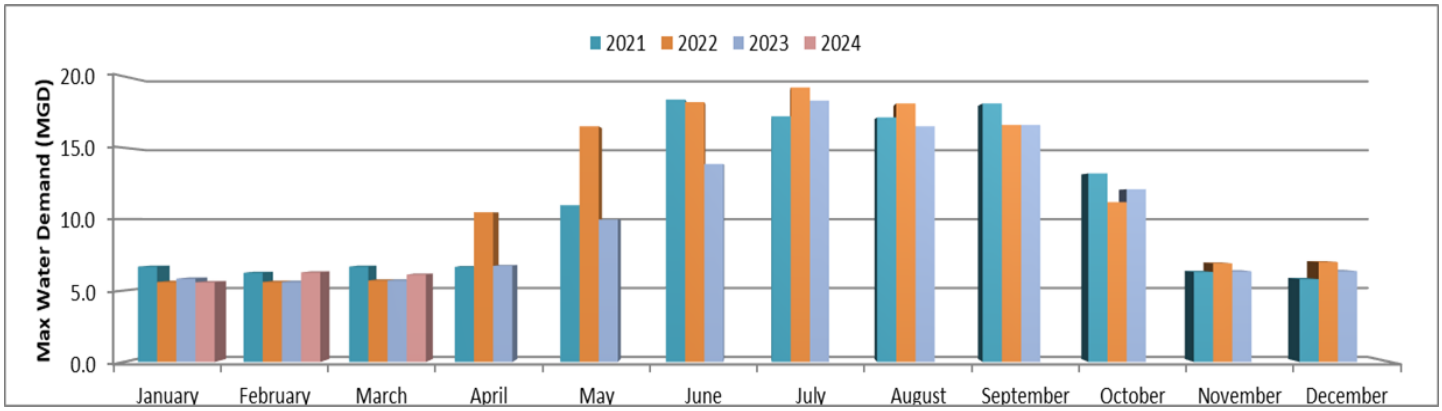

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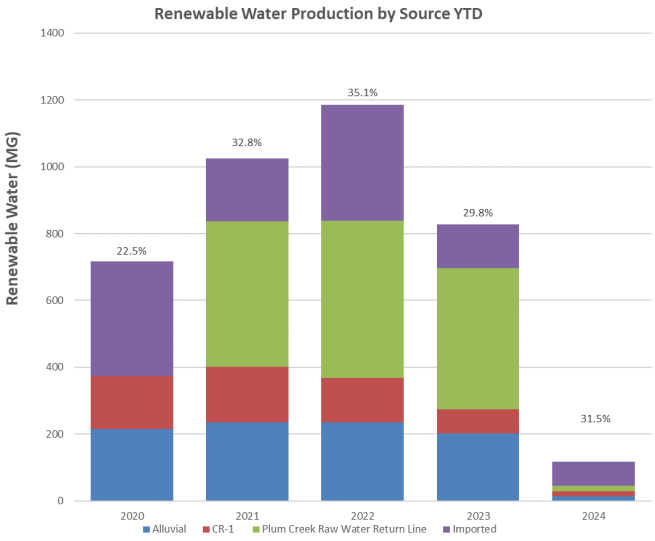

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Water Resources

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.

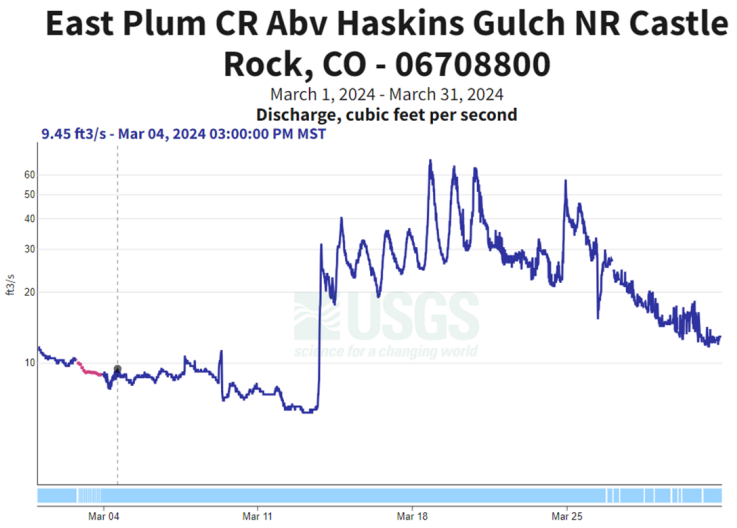
- The average reusable supplies used by Castle Rock for March 2024 was 7.4%

Storage

Current reservoir storage

- Chatfield Reservoir: 2,000 AF
- Rueter-Hess Reservoir: approximately 104 AF
- Castle Rock Reservoir No. 1 (CRR1): 144.8 AF

Local Plum Creek supplies

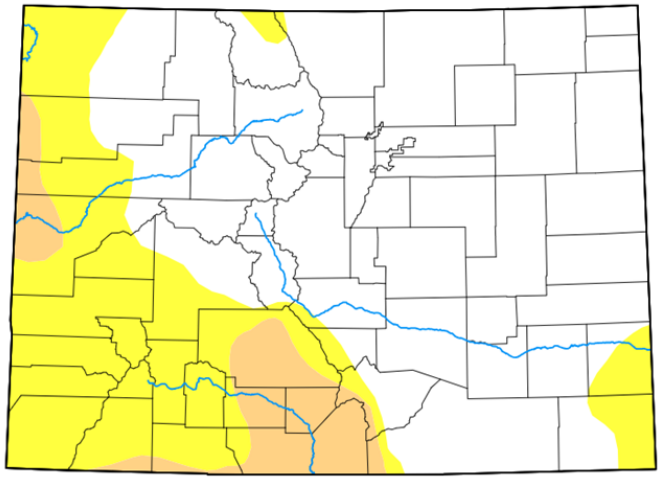


The hydrograph shows the estimated flows in East Plum Creek basin.

- Flows ranged from 6.01 to 68.7 cubic feet per second (cfs)
- The monthly average streamflow was 20.02 cfs
- The 24-year mean is 14 cfs

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.



Map released: Thurs. March 28, 2024
Data valid: March 26, 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):
Brad Rippey, U.S. Department of Agricultu

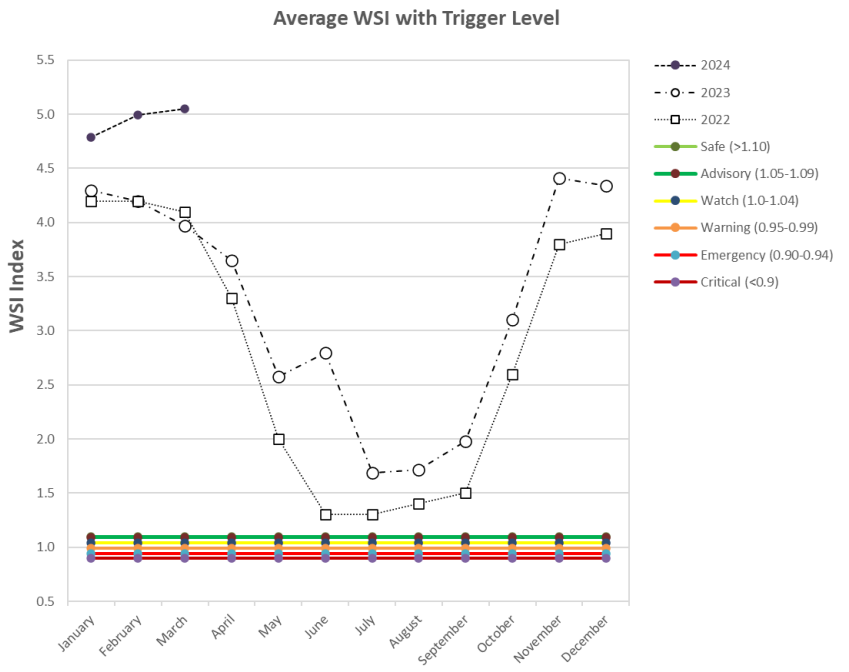
Pacific Islands and Virgin Islands Author(s):
Richard Heim, NOAA/NCEI

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.

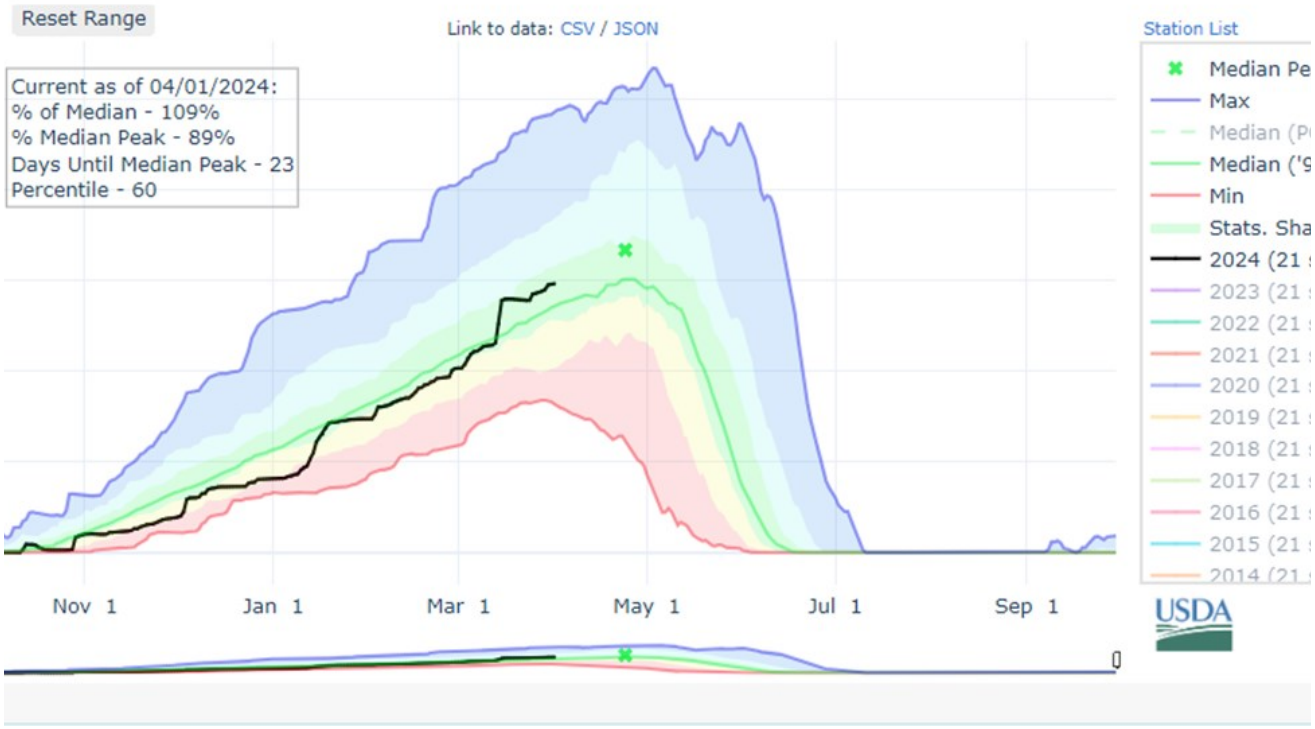
- The average WSI for March 2024 was 5.1.



Snow Pack

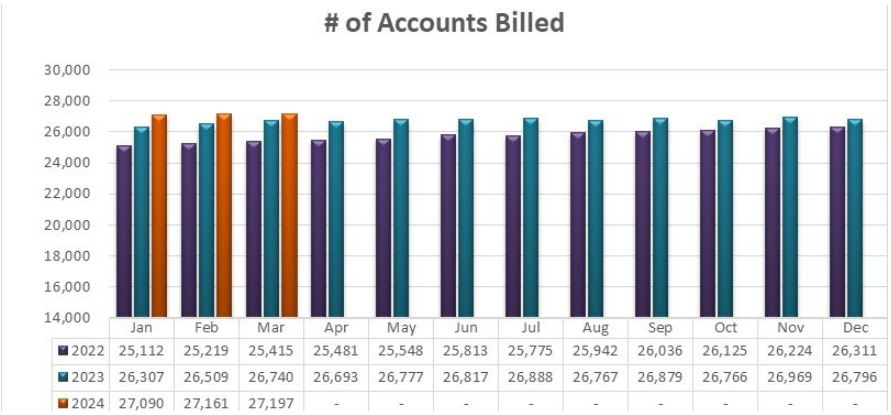
South Platte River Basin Snow Pack

- Year-to-date precipitation at 103% of median.
- Snow Water Equivalent (SWE) at 109% of median.



Business Solutions

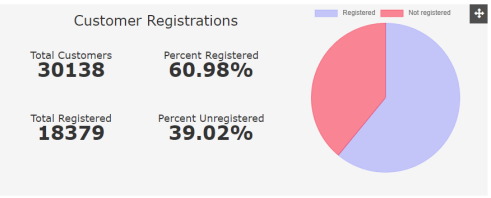
Customer Service & Billing

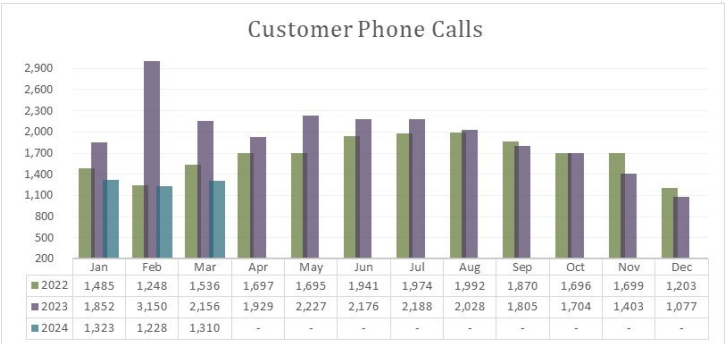


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	25,112	25,219	25,415	25,481	25,548	25,813	25,775	25,942	26,036	26,125	26,224	26,311
2023	26,307	26,509	26,740	26,693	26,777	26,817	26,888	26,767	26,879	26,766	26,969	26,796
2024	27,090	27,161	27,197	-	-	-	-	-	-	-	-	-

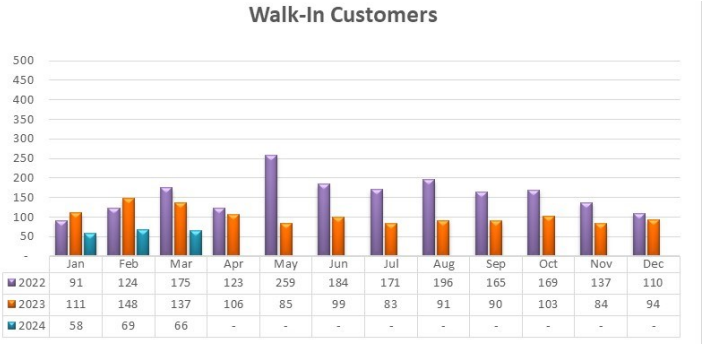
CRgov.com/MyWaterBill

Having an online account benefits customers with 24/7 access to account information,

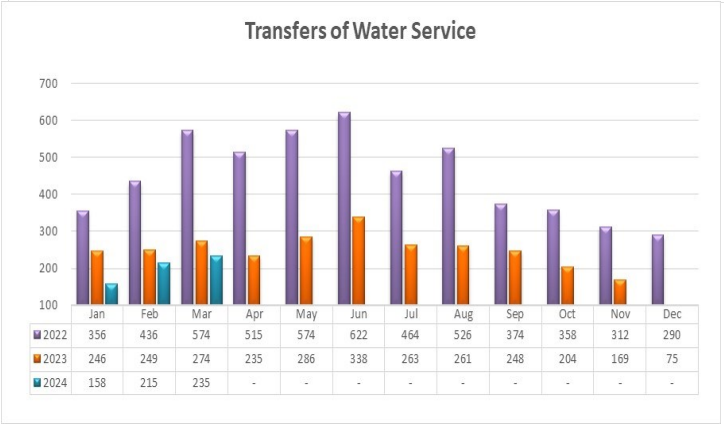




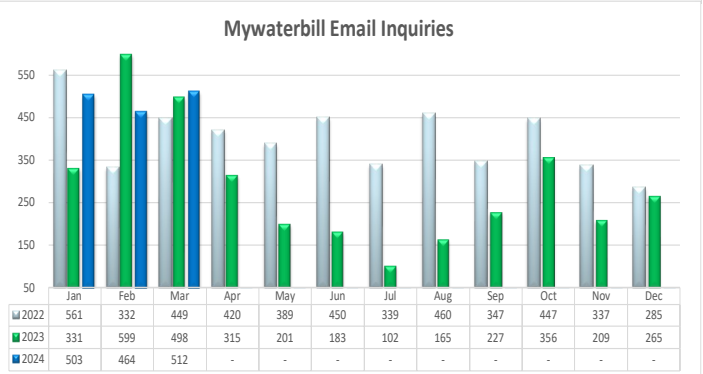
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	1,485	1,248	1,536	1,697	1,695	1,941	1,974	1,992	1,870	1,696	1,699	1,203
2023	1,852	3,150	2,156	1,929	2,227	2,176	2,188	2,028	1,805	1,704	1,403	1,077
2024	1,323	1,228	1,310	-	-	-	-	-	-	-	-	-



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	91	124	175	123	259	184	171	196	165	169	137	110
2023	111	148	137	106	85	99	83	91	90	103	84	94
2024	58	69	66	-	-	-	-	-	-	-	-	-



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	356	436	574	515	574	622	464	526	374	358	312	290
2023	246	249	274	235	286	338	263	261	248	204	169	75
2024	158	215	235	-	-	-	-	-	-	-	-	-



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	561	332	449	420	389	450	339	460	347	447	337	285
2023	331	599	498	315	201	183	102	165	227	356	209	265
2024	503	464	512	-	-	-	-	-	-	-	-	-

Customer Outreach & Education

Facebook – 6 posts / 58.2K reach / 2.2K engagement / 43 shares
Instagram – 5 posts / 6.9K reach / 156 engagement / 6 shares
LinkedIn – 2 posts / 868 impressions / 24 reactions
Email — 1 post / 12,660 reach / 64% open rate
HOA email—1 post / 91 reach / 51% open rate

Topics:

- *Rebates*
- *Demonstration garden*
- *Fix a Leak Week*
- *Garden In A Box*

In the news!

Denver 7 News	Castle Rock Water wants to build a demonstration garden
CBS News Denver	Reusing and purifying, this Colorado town will use 100% renewable water by 2065.
CPR News	Want to recycle your own water at home? A new proposal could make that easier in Colorado.

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

Mar.: 0.52%

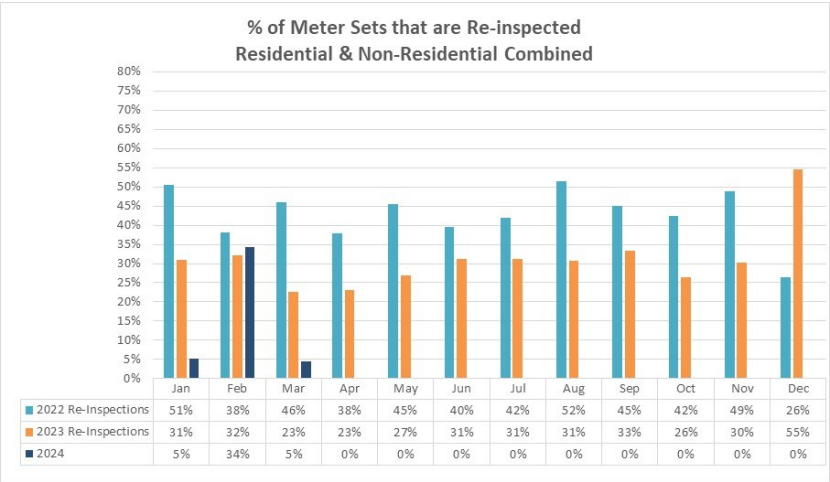
Measuring skipped reads is a strong indication of the level of preventative maintenance being done by our team. A skipped read is indicative of a problem with the metering infrastructure (i.e. battery, wiring, etc.). Fewer skipped reads means more properly working meters, which is good for all our customers.

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

Meter Set Inspections

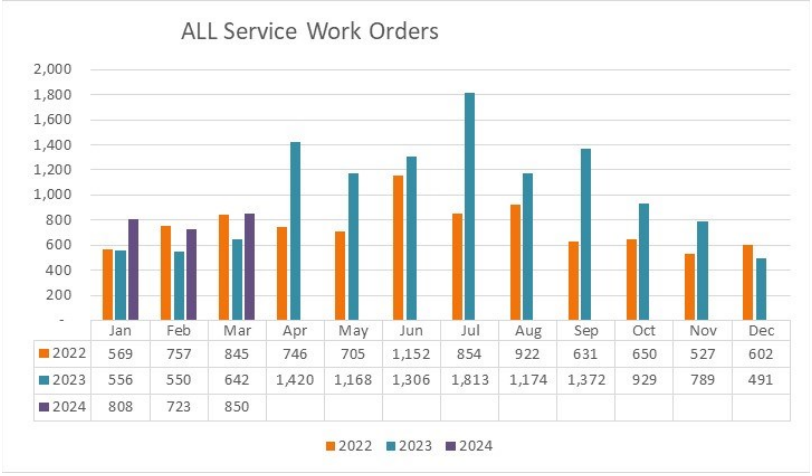
Re-inspections: 5%

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.

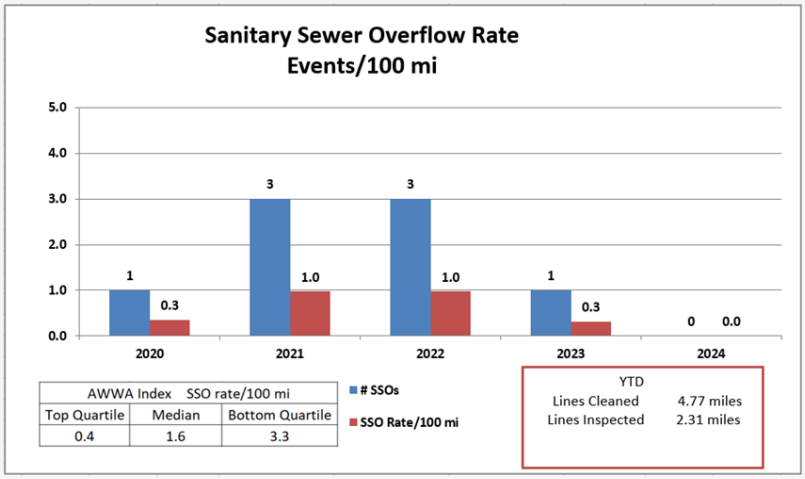


Work Orders

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.



Operations & Maintenance

LEVELS OF SERVICE		March 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 March.***
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 March.*** 
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 March.*** ***We conducted 3 educational visits.***

Utility locates

811 Know what's below. Call before you dig.

Water locates conducted
Mar.: 1,079 locate tickets

Locating public water, wastewater and stormwater lines.

Operations & Maintenance

LEVELS OF SERVICE

March 2024

Drinking Water Supply Outages

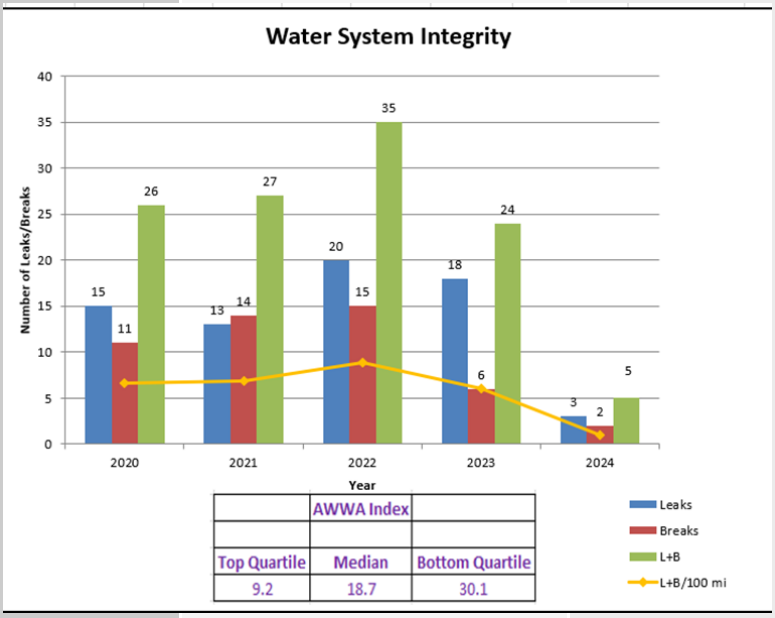
<5% of our customers will experience water outages for one or more events totaling more than 30 hours/year.

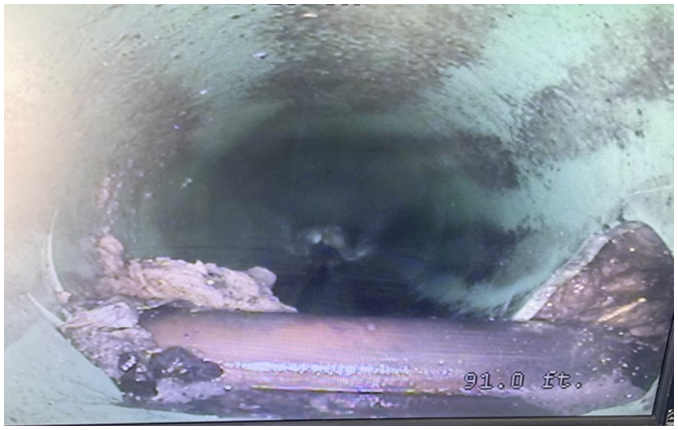
Castle Rock Water remains in the Top Quartile for water system integrity based on the American Water Works Association benchmarking.

There were two water system integrity issues in March.

There was a planned valve replacement in the Woodlands. During the replacement, 29 homes had less than normal pressure for three hours.

There was a main break in Founders caused by corrosion on the 8" ductile iron pipe. Thirty home-owners experienced less than normal pressure during the 10-hour repair. (Pictured)





While conducting sewer line CCTV operations, a standard maintenance procedure, the Collections Team identified a communication line that had been directly bored through an existing sewer line. Luckily, this issue did not cause a sewer backup to nearby homes. The team is actively working with Development Services to have the line removed, the sewer line repaired and conditions returned to normal.