



# CASTLE ROCK WATER

## DEC 2025 MONTHLY REPORT

192 MG

WATER DEMAND  
TOTAL

0 %

RENEWABLE  
WATER SUPPLIES

6.2

WATER SUPPLY  
INDEX

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SYSTEM INTEGRITY

0 leaks

WATER QUALITY SAMPLING

0 issues

CUSTOMER ACCOUNTS

28,275



Additional features  
available online

[View report online](#)

# WHAT WE ARE UP TO

## Ray Waterman Facility LAS Conversion

The LAS Conversion Project at the Ray Waterman Regional Water Treatment Center (RWRWTC) is currently under way. This project includes four major components of work that will improve the facility safety, operational flexibility, redundancy, and standardization.

**Scope 1 – Liquid Ammonium Sulfate (LAS) Conversion:** Convert the existing gaseous anhydrous ammonia storage and feed system to liquid ammonium sulfate (LAS) to improve safety for operations staff and surrounding neighborhoods; see detailed comparison of LAS versus aqueous ammonia below.

**Scope 2 – WISE Modifications:** Install new chlorine sample analyzer panels in the yard and construct a new chemical injection vault to relocate ammonia injection downstream of the clearwell, improving sampling response time, simplifying filter backwash procedures, allowing direct acceptance of WISE water into the clearwell, increasing overall plant production, and enabling WISE water acceptance when the RWRWTC is offline.

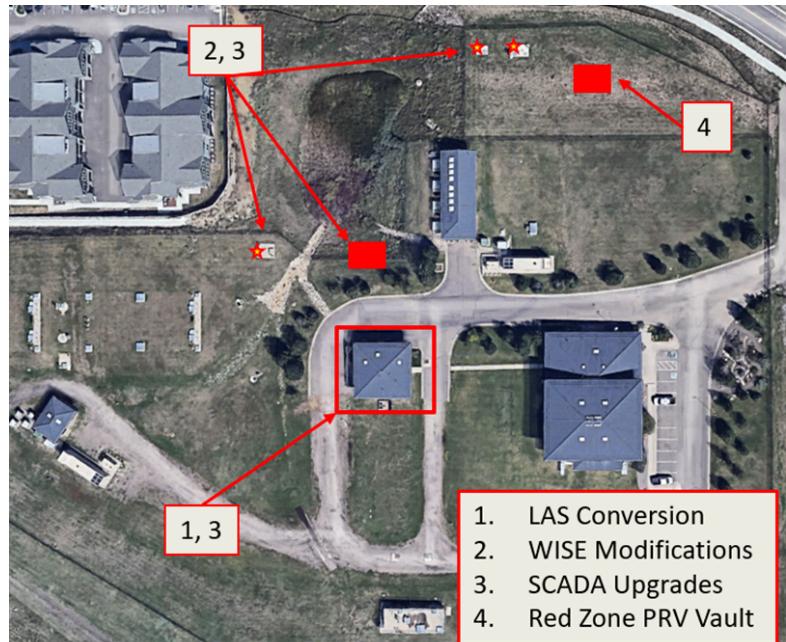
**Scope 3 – SCADA Upgrades:** Upgrade SCADA components in the chemical building, red/green meter vault, and existing WISE vaults to align with master planning standards, implementing elements originally planned under SCADA Phase V to reduce future rework and additional costs.

### Scope 4 –

#### Red Zone PRV Vault:

Install a new pressure-reducing valve (PRV) vault connecting the red zone to the clearwell to provide a redundant and emergency water supply path, allowing red zone water to flow into the clearwell for distribution to the green zone via the high-service pumps.

The project is being phased to keep the plant operational as continuously as possible until construction is complete. Currently,



bypass piping is being installed to allow for installation of the chemical injection vault. Construction is anticipated to be complete by May 2026. The overall construction cost is approximately \$3.8 million. This table compares the safety profiles of LAS and aqueous ammonia, demonstrating that LAS is the safer option, which was a key factor supporting the need for this project.

Category	Liquid Ammonia Sulfate	Aqueous Ammonia
Primary role	Surfactant (cleaning, emulsification, wetting)	pH control, nitrogen source, chemical conditioning
Acute human health risk	Low–moderate	Moderate–high
Skin contact	Mild to moderate irritation with prolonged exposure	Corrosive at higher concentrations; can cause burns
Eye contact	Irritation possible; typically reversible	Severe irritation or permanent damage possible
Inhalation risk	Minimal (low volatility)	Significant – vapors can irritate or damage respiratory tract
Volatility / vapor hazard	Very low	High (especially at elevated pH and temperature)
Worker exposure concern	Splash/contact during handling	Fumes, leaks, confined-space exposure
PPE typically required	Gloves, eye protection	Gloves, goggles, face shield; respirator in some cases
Aquatic toxicity	Toxic to aquatic organisms at elevated concentrations	Toxic to fish and invertebrates (unionized NH <sub>3</sub> highly toxic)
Regulatory discharge concern	Effluent surfactant limits; foaming	Ammonia-N permit limits; acute toxicity criteria
Environmental persistence	Readily biodegradable	Converts to nitrate/nitrite; contributes to nutrient loading
Risk of chemical reactions	Generally stable; low reactivity	Reacts with chlorine to form chloramines
Odor complaints	Rare	Common; strong public nuisance potential
Emergency response risk	Low	High (spills/releases treated as hazardous events)
Storage hazards	Low	Moderate–high (pressurization, fumes. corrosion)

# STAFF RECOGNITION

## CERTIFICATIONS



**Peter Gaudioso**  
Distribution 2



**Colin Champine**  
Collections 2



**David Madsen**  
Treatment B



**Joshua Vaughn**  
Treatment C

158+ certifications in 2025

### 2025 Staff Holiday Party

Wear your 'ugly' sweater



### WATER STAR AWARD

**Matt Attiayah**, Asset Program Manager



Matt works largely behind the scenes, but his job impacts all of us one way or another—with little recognition about the importance of what he does. Matt's work is constantly evolving and yet anytime we reach out with a request or a question, he responds immediately—often in person. He has helped me numerous times since he joined CRW, always with a smile. In fact, I overhead him just the other day in a nearby office, answering questions and discussing options on how he can make things easier and more efficient to suit the other employee's needs. His customer service is outstanding and so much appreciated by me and my work group.



## High Five

# STAFF RECOGNITION

**Nathan Hannick** We had an urgent last-minute request from the CRR1&2 Design Team to locate all of the utilities around the Plum Creek Diversion Pump Station in advance of a meeting with the design team and contractors to determine the best route to connect the new reservoir electrical and communications lines. I contacted Nathan on a Thursday about the request and he had everything located and well-marked by Monday before the Tuesday morning meeting. The locates were very helpful in determining an alignment for the pump station connections. Nathan followed up with me when the locates were completed and also checked in after our onsite meeting. I know Nathan had to rearrange other priorities to make this happen so quickly. This demonstrates Nathan's commitment to Town values in working as a team towards common goals and providing exceptional service to internal customers. Thanks Nathan!

**Katilin MacPherson** During the Thanksgiving holiday, Kaitlin worked with the Finance team to ensure timely end-of-month ACH processing. She showed initiative by coordinating schedules across departments and successfully executing file processing, even though it required processing on a town holiday.

**Jill Skelton** Jill conducted research across multiple online platforms and compiled a comprehensive packet of examples to enhance our website. Her recommendations focused on improving site flow, ensuring easier navigation, and updating content for relevance and clarity. These ideas were first shared with her Senior CSR and subsequently presented to the Customer Relations Program Manager. In addition, Jill provided valuable feedback on verbiage updates for the Castle Rock Water – How Do I segment of the website.

**Lauren Moore** I would like to recognize that Lauren took care of ALL the batteries and taped every single one to donate and cleanup, so we only have one bucket instead of 3.

**Jack Berry** I would like to thank them for getting the ladder and getting up to the platform

**Dwight Keller** and putting the Christmas tree and boxes up.

**Rate Our Service**

**4.9**

For 2025 survey responses, customers provided a 4.9 out of 5 rating for customer service received in billing, cross connection, landscape inspection and meter assistance.

# 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.

### DAILY MAXIMUM DEMAND

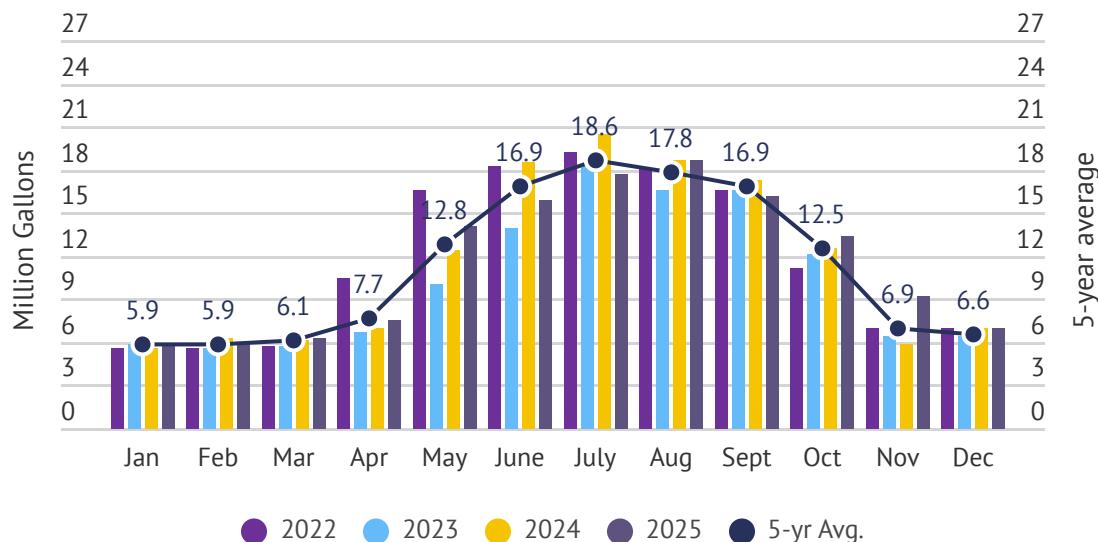
- 7.0 million gallons/day (MGD)
- 5-year average: 6.6 MGD
- 6% higher than the 5-year average

### MONTHLY DEMAND

- The water demand total for December was 192.0 million gallons (MG) [589.3 acre-feet (AF)]
- 3% lower than the November 2025 total of 197.4 MG
- 24% increase from the previous year's December 2024 demand of 155.2 MG

### ANNUAL DEMAND TOTALS

- 2025 total demand: 3,308.3 MG
- 1.9% less demand than 2024



# WATER RESOURCES

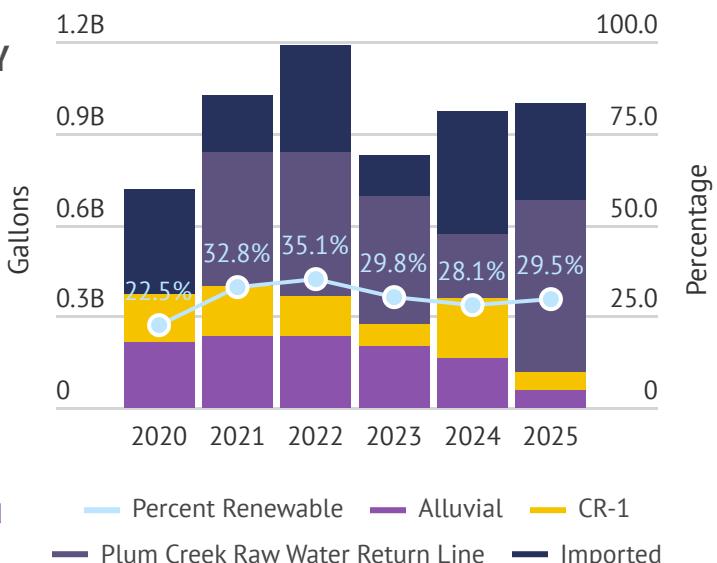
## RENEWABLE WATER SUPPLY

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

0%  
DEC.

2065 goal: 100%

Renewable water represented 29.5% of annual water supply



In total, renewable supplies accounted for 0% of the total water supply for the month (0 MG of 179.6 MG) and 29.5% of the annual water supply (999.6 MG of 3,386 MG)

- The CR-1 diversion produced an average of 0.0 MGD<sup>1</sup>
- The PC diversion produced an average of 2.58 MGD
- The 14 alluvial wells produced an average of 0.0 MGD<sup>1</sup>
- The renewable water production average was 0.0 MGD

<sup>1</sup>PCWPF is offline for the expansion project November 2025 through April 2026.

## 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.

2.6%  
Dec. 2025

Reusable  
water was  
29.5% of  
water supply

## STORAGE

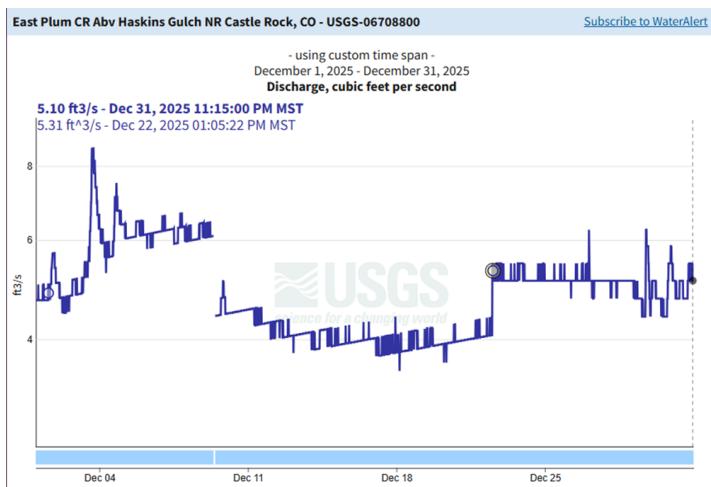
- Chatfield Reservoir: 1,151 AF
- Rueter-Hess Reservoir: 536.2 AF
- Castle Rock Reservoir No. 1 (CRR1): 0 AF
- Castle Rock Reservoir No. 2 (CRR2): 659 AF
- Walker Reservoir: 47.3 AF

# WATER RESOURCES

## EAST PLUM CREEK FLOWS

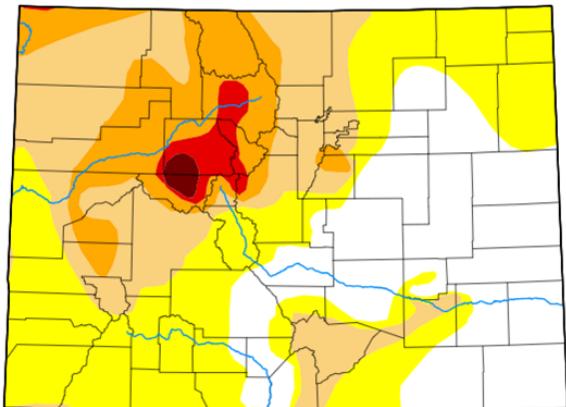
The hydrograph indicates the estimated flow in East Plum Creek basin.

- Flows ranged from 3.5 to 8.6 cubic feet per second (cfs)
- The monthly average streamflow was 4.9 cfs
- The 25-year mean is 5.6 cfs



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

## Colorado



Map released: Weds. December 31, 2025

Data valid: December 30, 2025 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):

[Rocky Bilotto](#), NOAA/NCEI

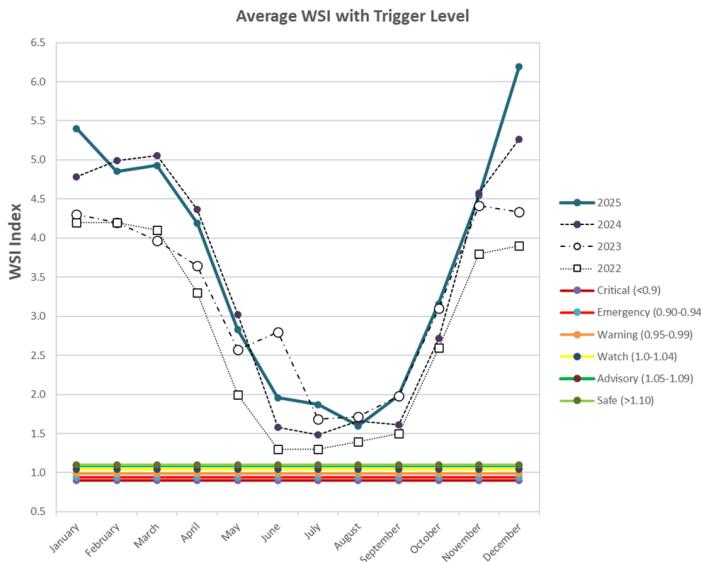
Pacific Islands and Virgin Islands Author(s):

[Anthony Artusa](#), NOAA/NWS/NCEP/CPC

## WATER SUPPLY INDEX

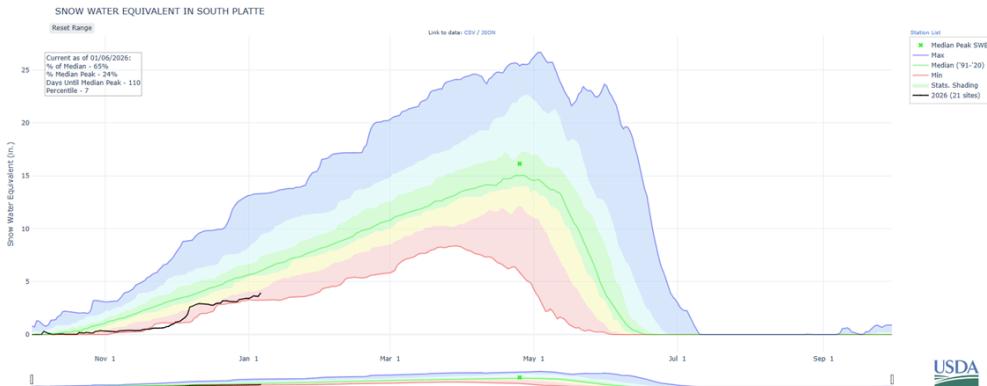
6.2

WSI



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 79% of median
- Snow Water Equivalent (SWE) at 65% of median

# BUSINESS SOLUTIONS

## CUSTOMER SERVICE

### CUSTOMER ACCOUNTS

28,275 2.2% increase  
from 2024

### 2025 TOTALS

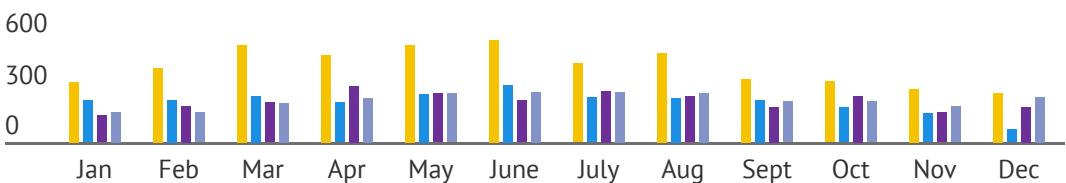
875 walk-ins  
14,796 phone calls  
8,449 email inquiries  
2,845 transfers

### TRANSFER OF SERVICE

Transfers of service represents the start/stop for service for new properties and those changing ownership.



● 2022 ● 2023 ● 2024 ● 2025



### CUSTOMER OUTREACH

OUTLET	POST	REACH		
Facebook	5 posts	52.k reach	211 engagements	39 shares
NextDoor	1 post	1,214 impressions	8 reactions	
LinkedIn	1 post	754 impressions	9 engagements	25 clicks
Customer mail	15,916	71% open rate		

The Town saw 1.2 million views with  
4,000 net increase of followers on social media.

TOPICS  
Winter watering  
External direct mail alert

# METER SERVICES



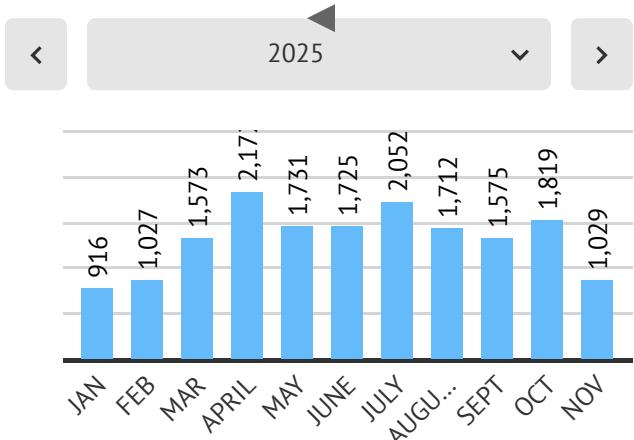
*About 98% of the 28,000 customer connections have been upgraded to Advanced Metering Infrastructure technology.*

*Measuring skipped reads is a strong indication of the level of preventative maintenance being done by our team.*

## ALL SERVICE WORK ORDERS

Standard work orders include meter replacement and AMI upgrade, bulk hydrant move-outs, curb stop maintenance, MXU installation, flow detection and pressure checks.

18,324 total for 2025

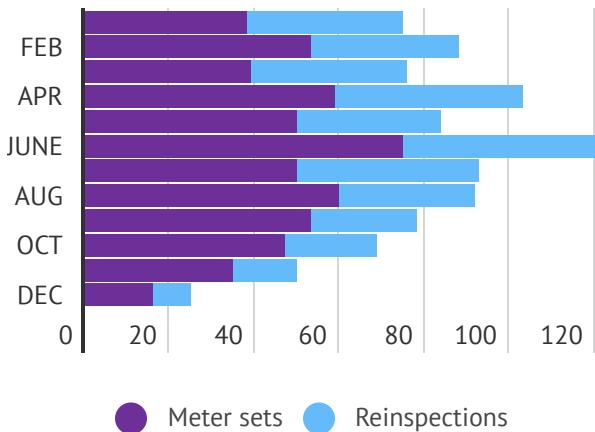


## METER SET INSPECTIONS

Meter set inspections, to ensure code compliance, are required on all new meters installed. 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.

955 total inspections in 2025

39% average reinspection rate



# OPERATIONS



0

## OUTAGES

0 for the year



0

## PRESSURE

0 for the year



0

## OVERFLOWS

5 total

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



0

## LINE BREAKS

19 total

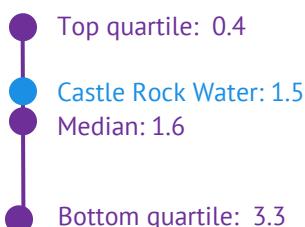
GOAL: Remain in the top quartile for AWWA benchmarking for leaks and breaks through regular maintenance and rehabilitation.

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

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

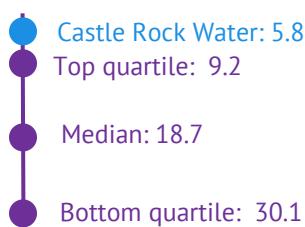
### SANITARY SEWER OVERFLOWS

AWWA Index: SSO rate/100 mi



### WATER SYSTEM INTEGRITY

AWWA Index: Leaks and breaks/100 mi



15,210 total for 2025



# STORMWATER COMPLIANCE

Q4 2025

The Stormwater Division manages stormwater runoff to minimize flooding hazards and to protect water quality in our watersheds. Services include:

- Construction site inspections
- Spill reporting, enforcement and response
- Public education and outreach
- Pond maintenance oversight

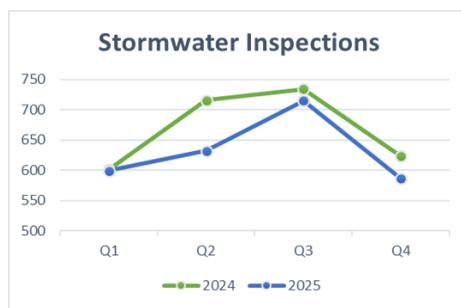
## Trends

Over the past 5 years, inspections have been declining likely due to the economic downturn. Customer service requests flow with weather conditions as seen by the noticeable jump in 2023 due to the onslaught of rain and flooding issues we received in May and June of that year.



## Inspections

The inspection team regulates permitted residential and commercial properties. Total inspections tracked 19% lower from 2024 to 2025. Overall, inspections from Q1 2024 to Q4 2025 dropped a little over 2%.



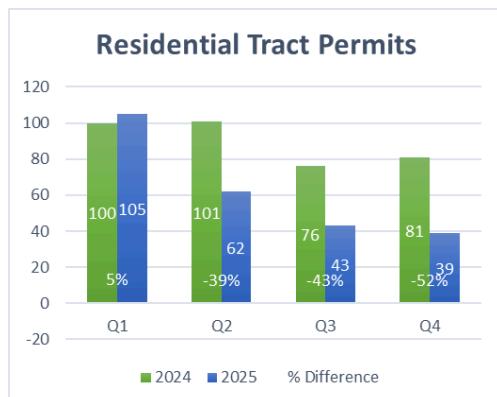
## Customer Service Requests

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 decreased back to baseline after the typical high volume in the summer. Also, total CSRs are down 32% from 2024 to 2025.



## Permits

Total annual residential tract permits were 30% lower from 2024 to 2025 compared to the 10% drop from 2023 to 2024.



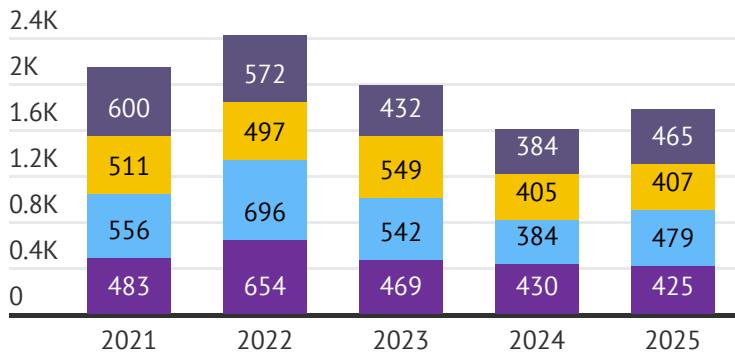
# PLAN REVIEW Q4 2025

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

## PLAN REVIEWS

● Q1 ● Q2 ● Q3 ● Q4



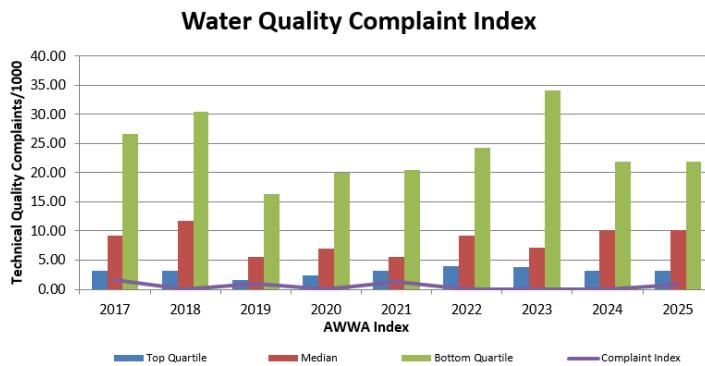
293  
# of projects  
in Q4

## PERMITS

PERIOD	Single Family	Commercial	Misc	Multi-family	TOTAL
1st Quarter	261	42	9	8	320
2nd Quarter	347	37	8	4	396
3rd Quarter	196	41	17	1	255
4th Quarter	168	35	13	0	216

The plan review team reviews building permits to verify proposed water demand to size meters and assess system development fees.

# WATER QUALITY



For 2025, Castle Rock Water had 0.80 complaints per 1,000 customers.

Castle Rock Water remains in the upper quartile for fewest water quality issues.

- Staff conducted 23 in-home water quality visits in 2025

# CONSERVATION

REBATES	Residential	Nonresidential	Total
Applications	129	25	154
Sq. ft. removed	99,931	162,595	262,526
Rebated amount	\$317,413	\$528,434	\$845,846