City and County of Broomfield

City Council Study Session

A. Second Quarterly Enterprise Update

Meeting	Agenda Group
Tuesday, July 15, 2025, 6:00 PM	Study Session Item: 2A.

Presented By
Graham Clark, Director of Finance

Community Goals
☑ Financial Sustainability and Resilience

Overview

View Correspondence and visit BroomfieldVoice.com (link to project page OR remove if not applicable)
View Presentation

City Council has requested regular updates from Staff on the status of the Utility Enterprise Funds including revenues, expenses, fund balances, capital projects and future rate impacts. This memo covers where we've come from and walks through 2024 Enterprise fund financial results. It also speaks to new events and updates pertaining to the Utility Rate Assistance Fund, the new Advisory Committee formation, plans for bond issuance, and the latest on 2025 projections.

Attachments

July 2025 Quarterly Enterprise Funds Status Memo1 (1).pdf

Memo for Enterprise Funds Status - July 2025
Prepared By: Ken Rutt, Director of Water Utilities; Byron Ward, Finance Manager

Summary

View Correspondence
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City Council has requested regular updates from Staff on the status of the Utility Enterprise Funds including revenues, expenses, fund balances, capital projects and future rate impacts.

This second Quarterly Enterprise Update includes:

1. Updates on enterprise-related capital projects;
2. Updates for ongoing maintenance operations programs;
3. Enterprise revenues, expenses, and fund balances;
4. Steps for ensuring the long-term financial sustainability of the enterprise funds
5. Overview of development projections
6. Status on launching the Enterprise Fund Advisory Committee
7. Future Rate Recommendations

Subsequent quarterly Enterprise updates will generally follow the format above and will include timely and relevant information as needed. Another quarterly update is tentatively scheduled for the October 21, 2025 Study Session. Additional quarterly updates will be scheduled in 2026. Acknowledging these updates are new based on feedback from Council and residents, staff will continue to work with Council to evaluate the information shared and effectiveness, and continue to adapt to provide transparency, timely and relevant updates regarding the City and County of Broomfield's Enterprise funds.

Financial Considerations

N/A.

Prior Council or Other Entity Actions

- May 28, 2024: Agreement with Schnabel Engineering, LLC for the Great Western Dam Rehabilitation Project.
- July 16, 2024: Staff provided an overview to City Council in a Broomfields Enterprise Funds study session and initial recommendation on utility rate adjustments.
- July 25, 2024: Staff hosted a Public Forum related to the current status of the Enterprise operations and recommended utility rate increases.
- August 21, 2024: Staff hosted a utility workshop at the Broomfield Community Center. During the event, the staff answered questions and hosted a Q&A session.
- September 5, 2024: Staff hosted a second utility workshop at the George Dicero Municipal Building. During the event, the staff answered questions and hosted a Q&A session.
- September 17, 2024: Staff provided additional information on the Enterprise operations, including a presentation from Broomfields subject matter expert consultant AECOM.
- October 1, 2024: First reading of ordinance numbers 2253 and 2255.
- October 22, 2024: Second reading of ordinance numbers 2253 and 2255.
- April 15, 2025: First quarterly Enterprise update
- May 13, 2025 City Council approved Ordinance No. 2269 setting forth a strategic reorganization of Public Works and Water Utilities into two specialized departments

- May 13, 2025, City Council approved Resolution No. 2025-85 creating the Fiscal Leadership on Water advisory committee (FLOW) and identified the purpose for the committee to make suggestions and recommendations related to utility enterprise utility fees, capital improvement project planning, and financial planning.

Boards and Commissions Prior Actions and Recommendations
N/A

Proposed Actions / Recommendations
N/A

Section 1: Updates on Enterprise-Related Capital Projects

Broomfield's pace and type of development significantly impact municipal water infrastructure planning, implementation timing, and expansions and new infrastructure investments. Therefore, water infrastructure planning needs to be flexible and adaptable to changing conditions including development patterns, evolving water management needs, changing policies and regulations, and prolonged drought conditions. Building water utility infrastructure too early can lead to overspending due to increased maintenance costs, outdated technology, and changes in water demand patterns. Additionally, it can lead to future problems related to the ever-changing landscape of federal and state regulations. Examples of changes in regulatory requirements in recent years include increased monitoring frequencies, pH Control, Lead & Copper rule changes, and PFAS.

With these planning principles in mind, the following enterprise related capital projects reflect Broomfield's strategic approach to balancing infrastructure needs with fiscal responsibility. Each project has been carefully evaluated for its timing, scope, and cost-effectiveness in relation to current development patterns and regulatory requirements. The projects outlined below represent our commitment to maintaining reliable utility service while ensuring prudent use of municipal resources and avoiding premature investments that could lead to unnecessary costs.

Future Water Utilities Capital Projects Infrastructure Asset Management Inventory, Long Range Rehabilitation and Replacement, and Water Supply can be found at this link.

Section 1a: Water Resources-Supply Capital Projects

Infrastructure - Chimney Hollow Reservoir
Chimney Hollow Reservoir, west of Carter Lake, will store 90,000 acre-feet for the Windy Gap Project. As the largest participant (29.4%, or 26,464 acre-feet). Northern Colorado Water Conservancy District projects it will take 2 years to fill the reservoir. Windy Gap water, a fully consumable source, is used in both potable and non-potable systems. It's the primary source for Broomfield's non-potable system, providing ~2,500 acre-feet for irrigation to parks and green spaces like Arista, Flatirons Mall, Legacy High School, Anthem, and Interlocken Business Park.

Full utilization and development of Windy Gap water is crucial for achieving Broomfield's Water Efficiency Plan goals and meeting the community's long-term water demands. Without a firm supply

of Windy Gap water, Broomfield will be unable to meet projected water demands for both its potable and non-potable water systems.

As reported to Council and to the public by Northern Water, testing revealed the presence of mineralized uranium that is anticipated to be present in the first fill of the reservoir. The source of the mineralized uranium is the granitic rock being quarried on the west side of the reservoir for placement in the rockfill shell of the asphalt-core dam. Northern has published an FAQ regarding the uranium found on site. The project managers will conduct ongoing monitoring of water quality at the reservoir and will be developing a mitigation strategy that could include treatment and dilution with the significant sources of other water present in the infrastructure nearby.

Staff attended an update meeting on the uranium issue with Northern on July 2, 2025. Based on the meeting we are confident that Northern is aggressively assessing the severity of the issue and is evaluating a wide range of operational and technological options for mitigation of uranium levels. Northern provided updates about on-going sampling for the presence of uranium and analyses they are preparing to estimate potential uranium concentrations in the reservoir and in delivered water when Chimney Hollow is filled.

Participants discussed several options for initial filling of Chimney Hollow given the uranium issue. Discussions will continue at the next participants meeting on August 5, and the options under consideration will include delaying fill of the reservoir. Northern and Windy Gap Water participants are considering an initial fill with a very limited amount of water (approximately 1,800 acre-feet out of a total capacity of 90,000) that would provide valuable new information about the extent to which uranium will leach from rocks on the dam into stored water. The cost for all the new sampling, analysis, and initial mitigation options will be covered under existing funds already made available to Northern for construction of the project. However, there may be additional future costs for participants, including Broomfield, for onsite treatment at the reservoir or for modifications to Broomfield's treatment process.

Siena Reservoir
The Siena Reservoir Pump Station and Pipeline (project code 15G00366) is nearing completion, at 95%. Its objective is to secure Broomfield's water supply during peak summer demand by transferring raw water from Siena Reservoir to Glasser Reservoir or the Water Treatment Facility. The project, initiated in 2024 and costing $14,711,458, is expected to be finalized by the end of summer 2025. The pump station is operational, with the contractor finishing site work and the pipeline subcontractor completing punchlist items.

Section 1b: Potable Water Capital Improvement Projects

Water Meter Replacement Program
The Water Meter Replacement Program is designed to proactively replace all water meters within the CCOB system over 12 years to ensure accurate measurement of water consumption. This 12-year program aims to replace an average of 1,870 meters annually depending on the required meter sizes and the funding allocated. There are currently 22,443 meters in the system.

- The 2025 Program launched on March 24, 2025;
    - **1065 meters** have been successfully installed.

- A dedicated 4-person crew is continuing to meet productivity expectations, averaging approximately 76 meter replacements per week.
- The team continues to monitor progress closely and will provide additional updates on milestones, financial performance, and any adjustments necessary to maintain alignment with long-term objectives.

- 2025 Project timeline: This year's implementation remains on track for completion by the end of September 2025.
- 2025 Project Cost of Materials: All meters have been purchased with approximately **$832,249** in expenditures to date.

Resident Communication and Scheduling

Staff has implemented a comprehensive communication strategy to keep residents informed. Utility Billing began sending notification letters on March 24, explaining the replacement process and providing instructions for scheduling appointments, particularly for properties with inside meter installations. Notifications are sent one week before scheduled work to ensure residents are prepared and to facilitate access.

2025 June Progress Report - Meter Quantities by Size for Exchange:

Meter Size	Quantity to Exchange	Completed, YTD	Meter Size	Quantity to Exchange	Completed, YTD
¾"	1,286	837	3"	11	0
1"	98	98	4"	14	0
1.5"	80	80	6"	0	0
2"	77	50	8"	2	0

2025 Waterline Replacement Projects

Westlake Community Waterline Replacement Project: Cost $2.4 million

The Westlake Community Waterline Replacement project, initiated the week of April 7, 2025, is currently 67% complete. This project involves replacing 4,900 feet of existing 1974 infrastructure with a new 12-inch waterline on Westlake Drive, extending from S Princess Circle to Grove Way/W 134th Place. As of the end of June, 3,300 feet of the new waterline have been installed from S Princess Circle to 132nd Ave.

This replacement is a critical response to frequent breaks and valve failures in the aging infrastructure, which have caused water service disruptions and increased maintenance needs. The project is anticipated to be completed by the end of August 2025.

Diamond Contracting will complete the paving of the new waterline excavation trench per Broomfield Standard and Specifications and all roadway striping after the overall project is finished.

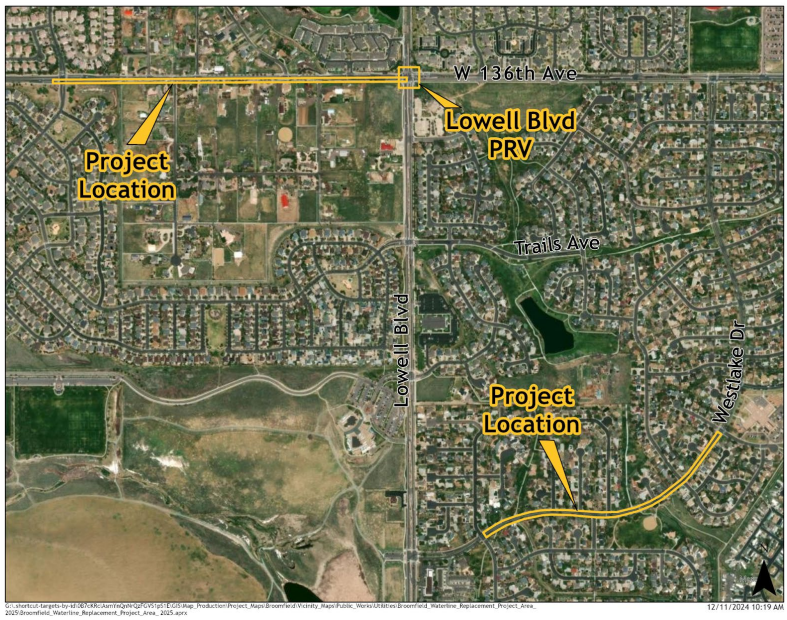
136th Avenue: Combined Cost $1.7 Million -

Staff is undertaking two critical infrastructure projects between Lowell Blvd and Red Deer Trail. These projects are the highest priority for replacement due to age, multiple water breaks, and effects on the distribution system in the event of a failure.

1. Replacing the pressure regulating valve (PRV) located at Lowell Boulevard and W. 136th Avenue which will result in a lane closure during repair. Cost $300,000
   - Reasons for PRV Replacement:
     - Existing pressure regulating valve that has become obsolete due to age and repeated failures.
     - Upgrading the PRV will restore reliability, ensure continued functionality, and bring the infrastructure up to current standards.
   - The PRV replacement is expected to begin in late September 2025.

2. The rehabbing of the aging 20-inch waterline along 136th Avenue from Lowell Blvd to Red Deer Trail. Cost $1.4M
   - The project will involve the strategic slip lining of 3,720 feet of 16-inch pipe, extending from Red Deer Trail eastward to Lowell Boulevard.
   - Reasons for Slip Lining:
     - Minimize disruption to residents and businesses.
     - Substantially reduce impact on existing road infrastructure.
     - Considerably shorten the overall work schedule.
     - Achieve a lower total project cost.
     - Avoid prolonged road closures and severe traffic congestion common with open-cut excavation.
     - Reduce the risk of damaging adjacent utilities.
     - Ideal for complex, congested underground infrastructure and limited right-of-way.
   - The waterline rehabilitation project is slated to commence in late July or early August 2025. This timing is contingent on the conclusion of the Westlake project. Diamond Contracting, who is also managing the Westlake waterline replacement, will be performing the work. All necessary permits have been submitted, and materials have been ordered.

Below is a map showing the locations of the 2025 projects.



North Area Water Tanks
North Area Potable Water Tanks
The North Area Potable Water Tanks project, consisting of two 3-million-gallon tanks, is designed to improve water quality, equalize peak water demands, reduce pressure fluctuations in the distribution system, and provide reserves for firefighting. Upon completion, these tanks will increase potable water storage to 12 million gallons for all areas east of Main Street.

Staff is collaborating with Garney, the selected Construction Manager/General Contractor (CMGC), to establish a guaranteed maximum price (GMP) for the project. This price will be based on partially buried tanks, excluding the previously proposed reuse tank. Garney was chosen through a competitive process and has been assisting Broomfield with pricing alternative scenarios and developing the project schedule. The contractor and suppliers will honor the Guaranteed Maximum Price (GMP) due to the 90-day time constraint. Staff anticipates receiving the updated GMP in November.

- Status Update: The construction agreement and engineering construction management agreement are tentatively scheduled for presentation to the Council in December 2025, following the adoption of the 2026 budget bond ordinance. Construction is anticipated to commence in early 2026, contingent on funding availability. The project is expected to take 24 to 30 months to complete, depending on weather conditions and the availability of necessary equipment and materials.

Highway 7 Waterline Project
The project is part of the North Area System Master Plan Improvements and Pipe Capacities (O2Z0291) with a listed funding of $5,714,486 in the Long Range CIP Plan. The funding includes the following projects:

Broomfield is actively engaged in two significant waterline projects aimed at enhancing water distribution and supply for areas north of Highway 7 and 144th Avenue.

1. Sheridan Parkway to Huron Waterline:
    - Project Scope: Installation of a new waterline and upsizing of an existing portion from Sheridan Parkway to Huron.
    - Current Status: Design is nearing finalization, pending modifications and requests from the Baseline Development. Staff and the design team are collaborating with the developer to incorporate these updates.
    - Key Importance: This new waterline will introduce a third crossing of Highway 7, significantly improving Broomfield's ability to supply water to the area north of the highway.
    - Next Steps: Bidding for construction is anticipated for late summer 2025, once development modifications are complete. The construction agreement and schedule are expected to be presented to Council later in 2025.
2. Sheridan to 160th 36-inch Main Water Distribution Transmission Line:
    - Project Scope: Installation of a 36-inch main water distribution transmission line from Sheridan to 160th.
    - Purpose: This waterline will serve areas north of 144th Avenue, improving water pressure and meeting peak day demands.
    - Current Status: The developer is in the process of completing this project.
    - Completion: The waterline is expected to be in service by fall 2025.

Baseline Water System Reimbursements
As part of the Northern Broomfield Water Master Plan Improvements, Broomfield is responsible for oversizing pipe capacities through the Baseline Development. This is per the Managed Growth and Development Agreement (MGDA) with Baseline, which stipulates that Broomfield is responsible for reimbursing the developer as these large transmission lines are completed. In 2025, we project a reimbursement of $4,056,818 for water lines on 160th Avenue and Promenade Street.

Mesa Booster Station
The Mesa Zone Booster Station (project code 18M0044) is in the CIP Long Range Plan at $4,221,541.

The Mesa Booster Station was built to maintain adequate pressure and fire flow in the Walnut, Airport, and Mesa pressure zones, located in southwest Broomfield. These zones serve areas such as the Broomfield Detention Center, the former Lumen corporate campus, Rocky Mountain Regional Airport, Skyestone, and Verve developments.

The Mesa Booster Station and Pipeline project is completed and in the process of being closed out. The system is operating and functioning as designed.

Interlocken Booster Station
The Interlocken Booster Station (project code 25U0034) is in the CIP Long Range plan and has $600,000 allocated for design in 2025 and $4M for construction costs in 2026. Due to funding limitations, the project design has been moved to 2027 and construction in 2028.

The Interlocken Booster Station serves Pressure Zone 1 and the Interlocken campus service area, was constructed in 1984. This Capital Improvement Project (CIP) is slated for rehabilitation, requiring new pumps, motors, controls, an emergency generator replacement, and a SCADA upgrade.

Water Utilities is currently developing the scope of work for the design phase and will collaborate with Procurement to issue a Request for Proposal once funding is confirmed in the 2028 budget.

Section 1c: Stormwater System Capital Improvements

Stormwater Collection Line Rehabilitation 2025 Program
The proposed 2025 Stormwater Collection Line Rehabilitation Program (project codes 0AZ004 & 0AZ0446) in the CIP Long Range Plan totals $1,605,600. The Stormwater Rehabilitation was approved by Council at the April 22, 2025, meeting. C&L Water Solutions has been awarded the contract and notice to proceed.

The 2025 Stormwater Rehabilitation Project is underway, addressing the need to rehabilitate 2,936 linear feet of corrugated metal storm pipes (18-inch to 40-inch diameter) installed in the 1970s. These pipes have been prioritized due to corrosion. The project utilizes Ultraviolet Cured-in-Place Pipe (UV CIPP) liner, a trenchless method that minimizes disruption and cost. This lining process will extend the pipe life by up to 50 years and prevent further corrosion.

The project encompasses four primary areas:

- Miromonte Park Area
  - Status Update : This area is designated as Priority One, with work set to begin by the end

of August 2025, weather permitting. Barring any unforeseen events, this phase of the overall project is expected to take approximately two weeks.

- Lac Amora Area
  - Status Update: This area is designated as Priority Two, with work scheduled to begin after completion of the Priority One phase in the Miromonte Park area. Construction is expected to start by mid-September, weather permitting. Barring any unforeseen circumstances, this phase of the project is anticipated to take approximately two weeks.
- Northmoor Area (E. 7th Ave.)
  - Status Update: This area is designated as Priority Three, with work planned to begin following the completion of the Priority Two phase in the Lac Amora area. Construction is expected to start by early October, weather permitting. Barring any unforeseen circumstances, this phase of the project is expected to take approximately one week.
- Broomfield Plaza Area (Sheridan Blvd.)
  - Status Update: This area is designated as Priority Four, with work scheduled to begin after the completion of the Priority Three phase in the Northmoor area. Construction is expected to start by mid-October, weather permitting. Barring any unforeseen circumstances, this phase of the project is anticipated to take approximately one week.

C&L Water Solutions will execute the work with completion prior to December 31, 2025.

Section 1d: Sewer Collection System Capital Improvements

Sewer Collection Line Rehabilitation 2025 Program
The 2025 Sewer Line Replacement and Rehabilitation Program (project code 0AZ004), outlined in the CIP Long Range Plan, has an allocated budget of $1,017,200, with a projected cost of $817,200. The initial base and three annual agreements for this program will conclude at the end of 2025. Following the approval of the 2026 budget, staff will collaborate with the Finance department to initiate the bidding process. This rehabilitation is vital for maintaining the safety and functionality of the community's sewer system.

The sewer video inspection team has identified 4,540 linear feet of 15-inch clay pipes, originally installed in the 1970s, that are prioritized for rehabilitation. These pipes require a UV Cured-In-Place Pipe (CIPP) liner due to corrosion caused by H2S. UV CIPP is a trenchless method, minimizing disruption and costs by eliminating the need for excavation. Lining these concrete/clay sewer mains with a cured-in-place-pipe product will extend their lifespan by up to 75 years and provide protection against future corrosion.

The 2025 project will rehabilitate the following:

Midway Park Sewer Rehabilitation Project – 2025 Status Update
The Midway Park sewer rehabilitation project for 2025 is proceeding as planned. This project involves rehabilitating 4,540 linear feet of 15-inch sewer line, extending from Hwy 287 to Main Street, through the application of cured-in-place pipe (CIPP) lining technology. The estimated cost for this endeavor is $817,200.

- All necessary materials have been sized, ordered, and are currently in production. C&L Water Solutions has been awarded the construction contract. Construction commenced on June 23, 2025, with an anticipated completion by late August, contingent on weather conditions.

Rehabilitation of these sewer mainlines will minimize the likelihood of pipe failure and the resulting backups.

Manhole Rehabilitation Project – 2025 Status Update
The Manhole Rehabilitation Project, a $200,000 initiative, began on April 21st. This project focuses on the structural lining of 35 manholes along 120th Avenue, from Chase Street to Perry Street.

The contractor, Concrete Conservation, has completed 26 manholes. Through collaboration with the contractor, staff identified cost efficiencies that allowed for the expansion of the project to include 9 additional manholes, all within the original contract budget. Concrete Conservation is currently awaiting material delivery and anticipates resuming work on these additional manholes by mid-July.

Project completion is expected by the end of July. The rehabilitation utilizes Spectrashield lining technology, a proven method for extending the lifespan of essential wastewater infrastructure. This initiative addresses aging components to prevent infiltration and corrosion, ultimately enhancing long-term system reliability within the sewer network.

Sewer Lift Station
The Sewer Lift Station Compliance project (project code 21Q0038) has a 2025 CIP Long Range Plan budget allocation of $8,278,418.

The Colorado Department of Public Health and Environment (CDPHE) governs sewer lift stations in Colorado, requiring municipalities to obtain approval for construction and operation through site applications for each station.

Currently, four of the 13 existing lift stations operated by CCOB lack historical records or site application information. These stations, built in the 1980s, have led to a noncompliance notification from CDPHE, requiring CCOB to update them to current regulations. Other municipalities with stations from the same period face similar compliance requirements.

Funding for the site application process and complete rehabilitation work has been secured through the 2021-2025 Budgets. Broomfield is collaborating with Burns & McDonnell and Moltz Construction to design and construct the necessary improvements for the four lift stations in priority order: Interlocken, Lac Amora, Sunridge, and Outlook. Improvements to the Interlocken (Industrial Lane) and Lac Amora (Oak Circle) lift stations are complete. Updates on the remaining two projects are provided below:

Sunridge Lift Station - 2025 Update
Council approved the Sunridge Lift Station Construction Agreement (Resolution No. 2024-152) at the November 12, 2024 meeting, and CCOB recently received approval from CDPHE. Construction easements have been requested from the Sunridge Condominium Association and staff is waiting for approval of permanent and construction easements from the Sunridge Condominium Association for construction to begin.

- Project Status Update: Staff met with the Sunridge Condominium Association Board on May 14, 2025. The Board did not execute the easements.
  - The Board was originally concerned with the necessary removal of the trees adjacent to the existing station and are now concerned with changing the access drive to the

station from adjacent to the condominiums to Miramonte. The team is moving the access adjacent to the condominiums as requested and will present the requested design change at the August meeting.

- Staff has requested to attend the next scheduled board meeting on August 26, 2025.

Construction is scheduled to take 12 months due to the constricted site.

Outlook Lift Station

- Project Update: The design agreement for the Outlook Lift Station was reviewed and approved by Council at the April 22, 2025, meeting. Staff and the design team held a kick off meeting on May 22, 2025 and will be reviewing a concept design in early July prior to obtaining survey data for the site. Design will take 12 to 18 months depending on review timelines from CDPHE.

Water Recovery (Wastewater Treatment) -2025 Update

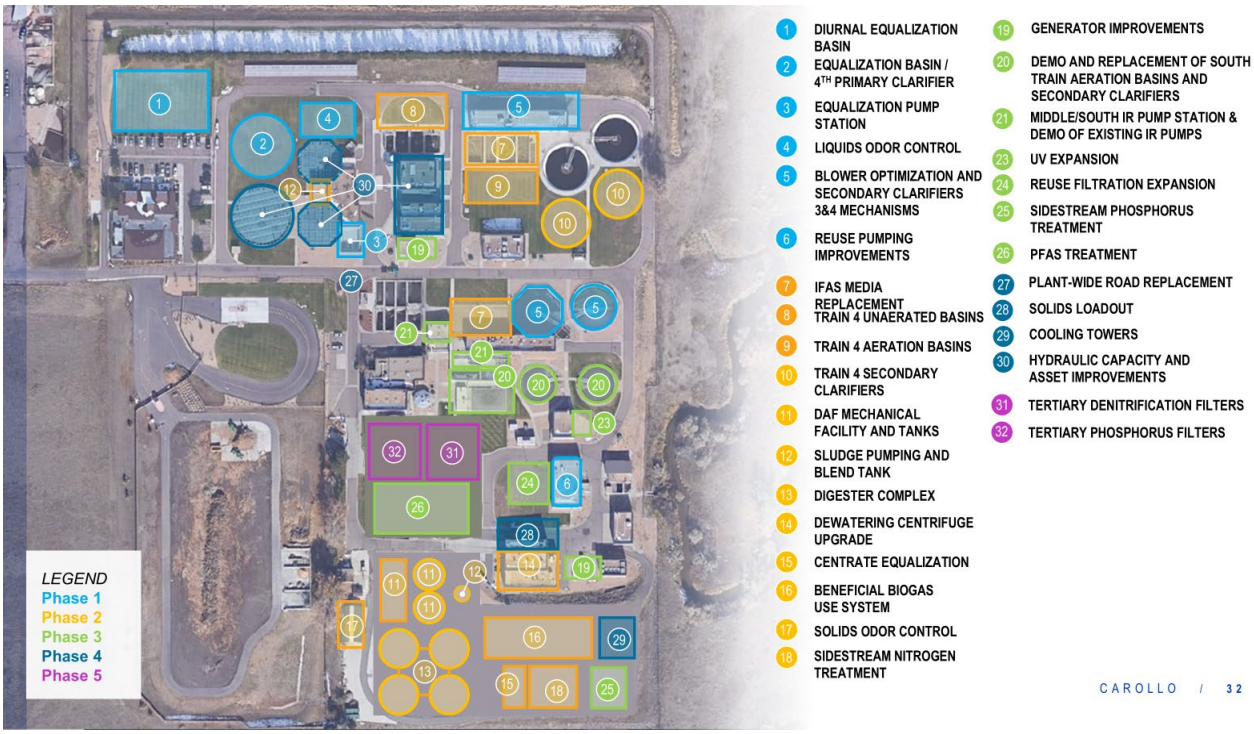
The Wastewater Treatment Reclamation Facility Expansion (project code 23S0045) in the 2025 CIP Long Range Plan has $21,389,205 and $4,041,427 (project code 11E0005) for a total of $25,430,632 and a total of $627,944,964 through the wastewater master planning period of 2041.

The Wastewater Treatment Reclamation Facility Expansion (project code 23S0045) in the 2025 CIP Long Range Plan has $21,389,205 and a total of $524,653,617 through the planning period 2035 beyond the current plan. The updated estimated cost as of March 2025 is now $548,305,000. Council approved the Wastewater Utility Plan (also referred to as a Master Plan) at the October 10, 2023, meeting (Resolution No. 2023-142).

The improvements and upgrades will need to be completed in 5 phases beginning in 2025. Key drivers in the costs are capacity, asset renewal, biosolids, reuse, and regulatory requirements are summarized in the table below:

Wastewater Reclamation Facility Upgrade and Expansion Updated Cost March 2025	
Project Driver	Percent of Total Cost
Capacity	17
Asset Renewal	20
Biosolids	18
Reuse	6
Regulatory	39
Total	100

The exhibit below provides an overview of each of the 5 phases which are identified by the various colors.



Phase 1

Staff and the design engineering and construction teams recently completed the review of the 90% design documents for Phase 1 of the Water Recovery Facility. With the review complete, the design team has issued a Permit Review drawing set which was submitted to CCOB's building department in mid-March.CDPHE has reviewed the project and issued a process design report approval and is in the process of issuing the site approval which will allow Broomfield to begin construction.

Staff has requested the selected Construction Manager/General Contractor, Moltz Construction, to proceed with the development of a guaranteed maximum price (GMP) for the project based on the Permit Review drawing set. Moltz was previously selected by a competitive process and has been assisting Broomfield in pricing alternatives and schedule development. The Phase 1 GMP with contingency allowances of 10% are: Engineering Services - $6,614,771 and Construction - $67,220,035

Project Status Update:

- The Phase 1 design has been completed and site application for construction approval from Colorado Department of Public Health and Environment (CDPHE) has been received.
- Due to current funding constraints, Phase 1 of the BWRF project will be executed in two distinct packages:
    - Early Work Package (EWP): This package, presented with available 2025 Budget funds, is crucial for procuring key long-lead equipment (e.g., variable frequency drives, pumps, electrical equipment, blowers, generators) and initiating construction. This allows critical work to commence immediately, bridging the period until bond funding can be secured in early 2026.

- Late Work Package (LWP): This package will be presented to Council in late 2025, following the presentation of the 2026 Budget, which will include the necessary bond funding.

The purpose of the Early Work Package (EWP) is to allow for the procurement of key long-lead equipment (variable frequency drives, pumps, electrical equipment, blowers, and generators) and construction funding for the project until bond funding can be secured in early 2026. This approach is necessary due to funding constraints, as Phase 1 of the project is being contracted in two parts (Early Work Package and Late Work Package) to align with available funds in the 2025 Budget.

To ensure project schedule adherence and regulatory compliance, an additional phase (Phase 1b) has been in part advanced from the Phase 2 project. Phase 1b will include the work on the Secondary Train, including the development of the new Train 4, originally included in Phase 2. The design and construction will both need to be completed within the 2026 bond funding schedule.

Similarly, the two proposed engineering services agreements will be presented in two parts (Early Work and Late Work) due to funding availability.

Broomfield will be seeking bond funding in early 2026 for the work. Bond funding requires 85 percent of the provided funding be spent within a three-year period. In addition, Broomfield has elected not to acquire additional bond funding until 2032.

A tentative date to present the project to Council is July 22, 2025. Pending Council approval, construction would begin in late July 2025 and take 30-36 months to complete depending on weather and the availability of equipment and materials. A formal schedule will be provided to Council with the GMP in July. The design and construction team cannot anticipate delays or cost fluctuations that may occur due to economic conditions during this time.

Section 2: Updates for Ongoing Maintenance Operations Programs

Section 2a: Potable Water Distribution Operations and Maintenance Programs

Potable Water Distribution System

Water distribution systems are large complex networks that represent the vast majority of the physical infrastructure for water systems, and serve as the final barrier against contamination from external or internal sources such as microbial growth or corrosion within the system.

Together the system delivers high-quality treated water from the Water Treatment Facility to Broomfield consumers with adequate pressure and flow rate.

The Water Distribution Systems maintenance programs are to protect water quality and public health. A series of underground pipes, hydrants, valves, pressure regulating valves, manholes,

pumping stations, and other components convey water to homes, businesses, and industries from the water treatment plant.

Distribution Flushing Program: Staff flushes the water distribution system annually, typically in the spring. This procedure is necessary to help maintain the water quality in the distribution system, and is performed by systematically opening fire hydrants throughout the city. During flushing operations, the community may notice temporary discolored water from taps and faucets; the water is safe to drink and any discoloration should subside within 24 hours. There may also be increased water on roadways near opened hydrants.

- The flushing program typically begins the 1st week of April. Crews worked through the city flushing a different section each week for five weeks.
  - Status Update: On May 2, 2025, staff completed the 2025 flushing program, operating and flushing a total of 4,415 fire hydrants

- Fire Hydrants: Each hydrant is serviced to ensure proper operation and maintenance. Additionally, every hydrant is flushed to maintain high-quality water and ensure its functionality for fire protection services, in compliance with the level of service requirements set by State and Federal agencies.
  - Status Update: As of the end of June, the 2025 programs, all flushing activities have been completed. Staff has completed maintenance activities on 2,600 fire hydrants, accounting for 60% of the total. The program is currently on schedule to be finished by December 31, 2025.

- Valve Maintenance: The Utilities Valve Maintenance Program is tasked with cleaning and exercising every valve in the water distribution system, operating, cleaning, and repairing. Each year 50% of the system is scheduled for service.
  - Status Update: As of the end of June, the 2025 valve maintenance activities—including repairs—are 13% complete, with 922 of the 7,434 scheduled valves addressed. With the flushing program completed, staff is shifting maintenance activities toward completing valve and PRV programs by December 31, 2025.

- Pressure Regulating Valve (PRV) maintenance: The PRV Maintenance Program ensures compliance with State and Federal standards by cleaning and maintaining all valves annually. The program involves inspecting, recording pressures, and operating 100% of the PRVs annually, with a complete rebuild of 20 valves per year, ensuring each valve is rebuilt every 5 years. Key objectives include: Preventing water service interruptions; Ensuring emergency readiness and proper valve function; and Reducing water outages and extending valve life, cutting maintenance costs.
  - Status Update: As of the end of June, the 2025 PRV program has completed 10% of the scheduled PRV inspections and verifications. Rebuilds are currently at 20% completed. The annual inspections are behind schedule. The rebuilds are on track to complete by December 31, 2025.

- Backflow and Cross Connection: Ensures compliance with State and Federal service requirements through inspecting commercial, industrial, and multi-family properties for compliance. Key objectives include: Identify and control cross-connections to prevent

backflow incidents; Maintain the Backflow Solutions Inc. cross-connection/backflow database per CDPHE requirements; and Achieve the CDPHE-mandated 90% compliance ratio.

- Status Update: As of the end of June, the Cross Connection and Backflow program is currently 99.49% compliant exceeding all state and CDPHE regulations.

Section 2b: Sewer Collection System Operations and Maintenance Programs

Sewer (Wastewater) Collection System

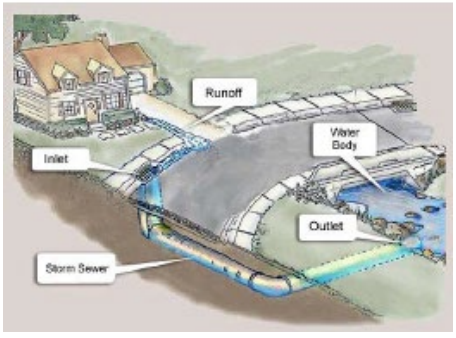
The Sanitary Sewer System is designed to safely carry wastewater (sewer) from homes, businesses, and industries to the Water Recovery Facility (wastewater treatment). Wastewater is generated from daily activities such as bathing, toilet flushing, laundry, dishwashing, cooking, cleaning, and commercial and industrial processes. Unlike stormwater, which is collected and flows untreated directly to nearby water bodies, wastewater is treated to remove contaminants before being released into the environment.

Sewer Collection Maintenance

- Sewer Video Inspection: The TV Inspections Program inspects the sewer pipes for the entire system every four years. This ensures compliance with State and Federal regulations, including the Colorado Discharge Permit Requirement. The purpose of this program is to reduce sewer overflows and backups, assess sewer conditions, and minimize inflow and infiltration. The program inspects 25% of the system annually, identifies problem areas, prioritizes cleaning, and uses CCTV to optimize future repairs and replacements.
  - Update: As of the end of June, sewer video inspection activities are 54% complete, and maintenance has inspected 44 miles of sewer mainline of the annual goal 83 miles. The program remains on track for completion by December 31, 2025.

- Sewer Cleaning: The Sewer Cleaning Program is responsible for cleaning and maintaining pipes for the entire system every two years.
  - Update: As of the end of June, sewer cleaning activities are 47% complete, and maintenance has cleaned 77 miles of sewer mainline of the annual goal 165 miles. The program remains on track for completion by December 31, 2025.

Section 2c: Stormwater Operations and Maintenance Programs



Stormwater Program

Stormwater runoff is water from rain or melting snow that does not soak into the ground. It flows from rooftops, paved areas, bare soil, and lawns into storm drains or ditches. Storm sewers and ditches collect stormwater runoff and empty it directly to local bodies of water. Storm collection systems are a separate collection system from sewers. Stormwater is not treated and transports everything directly to surrounding streams, lakes, and other bodies of water.

The Stormwater Division is responsible for implementing Broomfield's Municipal Separate Storm Sewer Systems (MS4) Permit, street sweeping operations, drainage maintenance operations, storm sewer collection system and maintaining the stormwater infrastructure.

MS4 Permit Requirements

- Public Education and Outreach on stormwater quality and pollution prevention.
  - Status Update: As of June 2025, the Division has conducted 5 Public Education and outreach events including Hazardous Household Waste, Stormwater Academy, Women's Night Out, RTD bus shelter ad campaigns from April through June to promote stormwater education and "Protect Our Water System" ad campaigns during the month of May in Our Broomfield Magazine.

- Construction site erosion and sediment control: Erosion and sedimentation are natural processes, which are increased by land-disturbing activities. Construction activities related to commercial, industrial and residential development can cause an increase in localized erosion rates. Erosion can reduce or destroy the aesthetic and practical values of neighboring properties. The City is committed to enhancing and protecting existing development, streams, lakes, wetlands and rivers that may be impacted by sediment-laden runoff and encourages builders to maintain the natural balance between sediment supply and transport. It is also the City's policy to encourage water erosion control by leaving land undisturbed as long as possible (by project phasing) and using temporary and permanent erosion control Best Management Practices (BMPs).
  - Status Update: As of the end of June, 563 construction inspections have been completed. In conducting these inspections, 16 verbal warnings and 3 notices of violations have been issued and conducted 2 on-site enforcement meetings. All corrective actions have been implemented to ensure compliance with stormwater regulations on construction sites.

- Design standards and ongoing maintenance requirements for permanent water quality control measures. In 2025, CCOB began phasing on-site inspections of all permanent stormwater features at regular intervals. These include extended detention basins, rain gardens, bio-swales, detention basins, retention ponds and water quality ponds.
  - Status Update: As of the end of June, 77 private and public permanent water quality control measures have been inspected. CCOB routine maintenance has occurred at 24 basins and conveyances for maintenance of permanent water quality control measures.

- Pollution prevention and good housekeeping for municipal operations. This internal program focuses on municipal facilities and activities, and is designed to help prevent pollutants from entering the storm drainage system. Annual inspections of maintenance yards, fueling stations, parking lots, vehicle parking areas, storage facilities, and retention and detention ponds.
  - Status Update: As of the end of June, 27 housekeeping inspections have been completed. No corrections have been taken, as all sites were meeting stormwater compliance regulations for good housekeeping practices.

- Illicit discharge detection and elimination. An illicit (illegal) discharge is any discharge to a municipal storm sewer system (storm drains, pipes, and ditches) that is not composed entirely of stormwater. The stormwater staff responds to reports of spills and illegal dumping that may enter the storm drainage system and threaten the health of our streams. This includes vehicle accidents, airplane crashes, and commercial, industrial, and residential activities. For

example, disposing of motor vehicle fluids or hazardous waste, or infiltration from cracked sanitary sewer pipes, septic tank seepage, illegal sanitary connections and degradation of older manholes.

- Status Update: As of the end of June, 25 illicit discharges have been responded to and remediated. The Division has responded to oil leaks, sand, paint, and sediment related illicit discharges. Of the 25 reports, 3 Notice of Violations have been issued for the illicit discharges. 2 of the Notice of Violations are from water main breaks that occurred on construction sites, and 1 notice of violation was issued for improper cleaning processes of a private company.

Pond Management Program

The Stormwater Division is responsible for the Pond Management Program. The staff is required to inspect all 511 private and public basins and ponds. CCOB is responsible for managing and maintaining 47 ponds, and staff is working to finalize the scope of work for the evaluation of the public stormwater ponds including a bathymetric survey to survey and map the bottom elevations for each pond. In addition to underwater pond data, pond banks, and outlet structures/pipes are planned to be surveyed and measured in order to correlate past design drawing elevations and help estimate pond storage volumes and outflow characteristics. Once the survey data is complete, point data is assembled in Auto CAD to create contour data for the pound bottom and sides. Then a topography from the bathymetric surveys for each pond will be developed to assist with maintenance needs and prioritization. Providing a thorough assessment of each pond within Broomfield is necessary to ensure effective and efficient use of financial and staff resources.

- Status Update: As of the end of June 2025, the Stormwater Division has contracted with SOLitude Lake Management to conduct sediment surveys on 17 City-owned and maintained stormwater ponds. Over time, sediment accumulates in these ponds, reducing their capacity to hold water. This can impact flood mitigation, vegetation, and water quality. When managing stormwater ponds, it is important to assess their condition by conducting sediment surveys. These surveys measure both the depth and volume of accumulated sediment, providing the City and County of Broomfield's Stormwater Division with critical data needed to evaluate pond health and functionality. The Stormwater Division is currently awaiting the final results of the surveys and will use the findings to inform future maintenance and management strategies.
- Status Update: As of the end of June 2025, the Stormwater Division met with ICON Engineering, Inc. to update the Reservoir Dredging Needs Assessment Summary Report 2012. In 2012, the report included data collection, pond survey, drainage and flood control assessment, and natural resources assessment. The Stormwater Division has determined that this survey report needs to be updated to reflect more current conditions. June 18, 2025 was the kickoff meeting for updating and evaluating these ponds. The report is expected to be completed by December 31, 2025.
- Status Update: The Stormwater and Water Quality Division deployed 2 ultrasonic algae control systems (LG Sonic Units). The LG Sonic Unit systems use sound waves to block algae's access to sunlight and nutrients, causing the algae to sink to the bottom and die off. The LG Sonic's measure water quality parameters including Chlorophyll, Phycocyanin, Temperature, Turbidity, pH, and dissolved oxygen. The LG Sonic Units have been deployed at two locations: The Trails at Westland Pond and at Sagar Reservoir. These ponds were chosen because they typically have green and blue-green algae blooms, which the ultrasonic system targets. Deployment was completed on Thursday June 26. Educational signs have been installed notifying the public of their functionality.

Storm Collection Maintenance
Storm collection maintenance is vital for protecting the environment, preventing flooding, and protecting public safety and health by managing runoff. Regular maintenance ensures that stormwater drainage systems, such as storm drains and culverts, remain clear and functional, allowing for the proper flow of rainwater and runoff. This reduces the risk of property damage, road hazards, and environmental contamination caused by standing water or overflow. Proper maintenance also helps manage water quality by preventing debris and pollutants from entering water bodies, promoting a cleaner and healthier environment for the community.

- Storm Video Inspection: Broomfield Utilities manages 174 miles of stormwater collection mainlines. The TV Inspections Program inspects and maintains stormwater pipes (6" to 42" in diameter), aiming to inspect the entire system (918,720 linear feet) every five years. The purpose of the program includes: Protect the storm sewer system's integrity; Inspect 20% of the system annually; Identify high-risk areas and prioritize cleaning; Use CCTV to assess conditions and prioritize repairs and replacements; Reduce flooding and erosion risks to streets and properties; and Support the capital improvement program by prioritizing future repairs.
  - As of the end of June, stormwater video inspections activities are 18% complete, and maintenance has inspected 6 miles of stormwater mainline of the annual goal 31.5 miles. The program will be on track for completion by December 31, 2025 now that this program is fully staffed.

- Storm Cleaning: Broomfield Utilities is responsible for 174 miles of stormwater collection mainlines. The Stormwater Cleaning Program maintains pipes ranging from 6" to 42" in diameter, aiming to inspect the entire system (918,720 linear feet) every five years and includes the key components: Reduce flooding and blockages in the stormwater system; Comply with State and Federal regulations; Clean 20% of the system annually; Minimize stormwater flooding and identify high-risk areas; Reduce the risk of flooding; Assess storm sewer conditions; and Lower the city's liability related to flooding.
  - Status Update: As of the end of June, stormwater cleaning activities are 62% complete, and maintenance has cleaned 20 miles of stormwater mainline of the annual goal 31.5 miles. The program remains on track for completion by December 31, 2025.

- Street Sweeping: Runs year-round to provide safe conditions for all modes of transportation by removing debris and other materials from roadways and bike lanes and includes the key components: Protect air and water quality and prevents debris from entering the storm drains which comply with state and federal stormwater quality requirements; Residential streets are swept 4 times per year; Main arterials 6 times per year; After each snow event; and When requested by the Police Department and as needed for special events.
  - Status Update: As of the end of June, the Division has completed 1,719 miles of street sweeping. Residential streets are swept four times per year and main arterials six times per year. To date, the Division has swept residential areas twice and main arterial areas four times.

- Drainage Maintenance includes: Annual inspections; Cleaning and removal of sediment; Repair of municipal surface drainage infrastructure; Trash and debris removal; and Outlet structure cleaning.

- Status Update: As of the end of June, staff has complete routine storm cleaning operations at 24 basins and conveyances.

Water Quality and Regulatory Compliance Monitoring

Water Quality maintains two certified laboratories (environmental and water recovery). Staff are responsible for analyzing drinking water and wastewater samples to determine their quality and compliance with regulatory standards. Staff assists the Stormwater Program by analyzing stormwater and pond water quality, providing critical data for informed decisions about aeration, chemical treatment, suitability for wildlife support, and stormwater retention.

Emerging technologies in water and wastewater analysis encompass a wide range of technological and scientific breakthroughs. These technologies aim to improve the efficiency, accuracy, and reliability of water analysis processes. As advances in water quality analytical technology occur, staff will evaluate the advantages and disadvantages of investing in them.

In April, an automated algae identification instrument called Flow Cam was acquired and set up for the Environmental (drinking water) lab. This device is set to enhance Broomfield's ability to react to shifts in water quality across its drinking water reservoir, ponds, and reclaimed wastewater reservoir.

Currently, staff is building Broomfield's algae library, as summer progresses, algae form colonies with distinct shapes, requiring staff to also train the software to identify these colonial forms. To date, the Flow Cam has captured 869,301 images over 208 analyses. Staff have classified these images into 31 different types of algae, including 5 types of cyanobacteria. By the end of this season, a comprehensive dataset will be available, enabling full implementation of the Flow Cam for trending algae analyses in Broomfield's ponds and reservoirs.

As summer advances, staff are actively developing Broomfield's algae library. Algae are forming colonies with distinct shapes. To date, the Flow Cam has captured 869,301 images across 208 analyses. These images have been classified into 31 different types of algae, including 5 types of cyanobacteria. By the end of this season, a comprehensive dataset will be ready, allowing for full implementation of the Flow Cam for trending algae analyses in Broomfield's ponds and reservoirs.

A new phosphorus analyzer is scheduled for installation the week of July 13th in the water recovery (wastewater) lab. This new instrument will automate analyses and dilutions, and enable automatic import of results into the laboratory data management system. These features are expected to reduce potential lab errors, including those related to data transcription and dilution.

Regulatory Compliance

The division is responsible for researching and tracking the development of new regulations and evaluating the impact of water and wastewater regulations changes by preparing input, formal comments, and testimony for the State's rulemaking process.

Drinking Water

Due to the new Administration, the EPA announced in May that they will keep the current National Primary Drinking Water Regulations (April 2024) for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS), which set nationwide limits for these "forever chemicals" in drinking water at 4 parts per trillion. However, they do intend to:

- Extend compliance deadlines for PFOA and PFOS from 2029 to 2031
- Revisit the individual maximum contaminant levels (MCLs) of 10 ppt for PFHxS, PFNA, and GenX and the hazard index framework.
- Propose the revised rule this fall, and the final rule in the spring of 2026.

The Colorado Department of Public Health and Environment (CDPHE) will still move forward with the Water Quality Control Commission hearing in August 2025 to modify Regulation 11 to include PFAS.

Wastewater
Senate Bill 25-305 Water Quality Permitting Efficiency was introduced through the Joint Budget Committee, and it concerns the process that the Colorado Department of Public Health and Environment (Division) utilizes to issue wastewater permits. Many municipalities have expressed concern about the time it takes to receive new permits and a lack of transparency. This bill is tying funds for the 2025-2026 budget to the requirements outlined in the bill; the funds will be "released" as these requirements are met. The bill will require the Division to:

- Be transparent- report to the Water Quality Control Commission a detailed discussion on how the Division plans to reduce the wastewater permit backlog, implement recommendations from permittees for permitting efficiency, and increase safe drinking water inspections. Currently, many individual wastewater permits are administratively extended at least 5 years and sometimes longer.
- Limit Permit Modifications- permit reviews will be limited to requested changes only
- Have timelines-establish timelines and allow pre-public notice reviews for errors
- Provide Financial Flexibility- consider local funding limits before requiring infrastructure upgrades and allow compliance schedules over 20 years
- Allow Third-Party Support-permittees may hire outside contractors if the Division can't respond to permit renewal within 60 days
- Provide data access-the Division must share all data used in the permit renewal decision.

All of these are beneficial for Broomfield.

Section 3: Enterprise Revenues, Expenses, and Fund Balances

Over the last three years, staff and AECOM assessed our utilities infrastructure, shifting focus from new builds to maintaining aging systems. This strengthens our ability to prioritize critical maintenance.

Now in year two of a five-year plan, AECOM's modeling has clarified both near- and long-term operational and financial needs. We are evolving our revenue approach for a balanced funding model, ensuring each fund sustains itself and infrastructure, reducing reliance on growth for primary funding.

These analyses led to the difficult but necessary recommendation to increase utility rates. This decision, based on facts, rate modeling, and AECOM's input, strengthens investment in water, wastewater, and stormwater systems for long-term reliability.

Approved 2025 rate changes include water and sewer fee increases and a new Stormwater Enterprise Fund, crucial for system reliability, meeting water demands, and public health and safety.

Utility Rates Implemented for 2025

For many years, Broomfield has had some of the very lowest, if not the lowest, utility rates on the Front Range. This approach has left thinning fund reserve levels and insufficient revenues to cover or bond for upcoming critically important capital projects. The recent rate and license fee increases approved in 2022, 2023, and 2024 help provide adequate funding while placing Broomfield around the average for utility rates in the Front Range.

The largest portion of the most recent rate increase was the water base fee, which increased from $16.93 to $36.91. This strategic decision, combined with the stormwater fund addressed below, is helping reduce reliance on usage revenues, which are variable and dependent on precipitation and consumption levels. Increasing the water base fee will provide needed stability to the Enterprise Fund revenues. With 2025 precipitation levels above average throughout spring, this strategy is already proving effective.

Creation of a Stormwater Fund

All other Front Range municipalities had a stormwater charge in place before Broomfield took this step in 2025. The creation of the Stormwater Fund will help stabilize Broomfield's enterprise funds in two ways. First, residential customers are charged a fixed monthly fee of $11 for single family homes, $8.80 for multi-unit townhomes and duplexes, and $6.60 for multi-unit apartments. Secondly, non-residential customers are charged $2.50 per 1,000 impervious square feet and total impervious square footage is expected to be steady over time with modest development growth. The following shows the projected revenue from the Stormwater Fund for 2025.

Customer Type	Approximate Customers	Monthly Charge	Projected Revenue ($m)
SFH	20,000	$11.00	$2.6
Mobile Homes	900	$8.80	$0.1
Townhomes & Duplexes	1,750	$8.80	$0.2
Apartments	16,500	$6.60	$1.3
		Subtotal:	**$4.2**
Customer Type	**Impervious Sq Ft.**	**Charge**	
Non-Residential	102,000,000	$2.50	**$3.1**
		Total Revenue:	**$7.3**

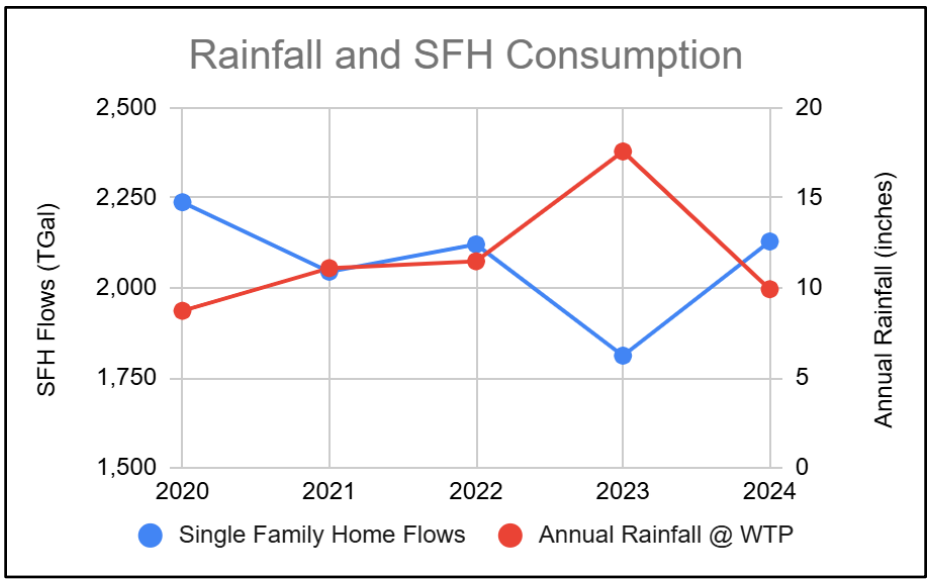
* Charged $2.50 per 1,000 impervious square feet per month.

Section 3a: 2024 Consumption Data and Results by Fund

The recommended and approved 2025 rate increases were based on projected revenues and expenses for 2024 through 2028. Since the rates were adopted in October 2024, we now have 2024 consumption data and audited revenue and expense results for 2024. Reviewing how actual revenues and expenses compare to the projected numbers that were utilized in staff's analysis can give an initial indication of any impact on future rate increases.

Year over Year Consumption Update

The average annual rainfall over the last 5 years is 11.76 inches and the average total consumption across all single family homes is 2,070,000 gallons. The chart below shows the relationship between rainfall and the total consumption of single family homes. This demonstrates how consumption dropped significantly in 2023 due to increased rainfall, leading to lower usage revenue that year ($10.4M) compared to 2024 ($14.1M).

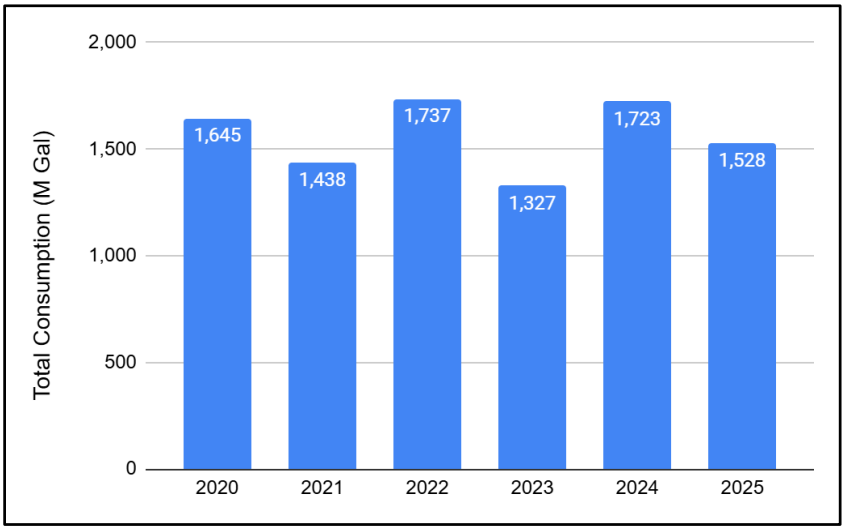


Water usage for Broomfield in 2024 resulted in both the highest single day peak demand and the highest overall usage for the year. In 2024, Broomfield used a total of 4,267,578,000 gallons with a peak day of 25,571,000 on July 12, 2024. The previous maximum annual water usage was 4,096,712,000 in 2020 and peak day of 24,936,000 in 2022.

Water consumption was higher on a year-over-year basis during the 1st quarter of 2025, but was lower in the 2nd quarter due to the higher than average precipitation in May. For the year through June, consumption is down in 2025 by about 11% compared to 2024, driven primarily by substantial rainfall in June.

- January was up 3% from 2024
- February was up 3% from 2024
- March was up 2% from 2024
- April was up 8% from 2024
- May was down 12% from 2024
- June was down by 27% from 2024

2025 vs Previous Years for January to June Total Consumption



Section 3b: 2025 - Where We Are Headed

As part of the city's current annual budget process, Water Utilities is developing a five-year planning budget that covers 2026 through 2030. Within the budget process, Council approves and appropriates funds only for the first year, fiscal year 2026. Council will be asked to approve the budget recommendation made by staff regarding the 2026-2030 Capital Improvement Program (CIP) at the meetings where the overall budget is scheduled to be adopted by Council in October 2025.

The results for 2024 are in line with or better than expectations. However, it is important to consider additional factors not included in the 2024 projections, such as the establishment of the Utility Rate Assistance Fund (URAF) program, adjustments to future revenue and expense forecasts, updates to long-term CIP plans, and progress regarding bond ratings and issuances.

Billing Assistance - Utility Rate Assistance Fund Impact

As of June 30th, 1,623 total applications have been processed for utility rate assistance. It should be noted that the first quarterly memo in April incorrectly stated a total of 2,340 applications due to an issue with the software utilized to track and process URAF. An error in the applied formula along with the merging of two reports to give the sum for the URAF program totals distorted the

totals. Staff has been able to address this issue with the software to ensure proper reporting moving forward. It should be noted there were no issues with incorrect payments or approvals as the issue was isolated to the reporting of the total application numbers only.

Of the 1,623 through June 30th, 1,321 have been approved for assistance. To support applicants, the team working on the Utility Rate Assistance Fund (URAF) has:

- Processed 1,623 applications
- Answered 478+ phone calls
- Responded to 214 emails
- Assisted 157 walk-in applicants
- Provided one-on-one consultations to over 164 residents

The team continues to meet residents where they are by hosting walk-in application sessions at the Broomfield Community Center, offering biweekly appointments at the City and County Building, and continuing in-person outreach at Broomfield FISH, the Broomfield Library, scheduled citywide events, and Paul Derda Recreation Center. Additionally, digital communication efforts are being shared with apartment complexes and network partners. The 1,623 applicants represent approximately 13% of the estimated 12,500 households that meet the 100% Area Median Income (AMI) requirement.

This translates into a minimum $300k annual cost. There will also be approximately $60k of personnel costs for managing the URAF in 2025 for a total minimum cost of $360k. If applications continue to be submitted at this same rate, personnel costs will also rise due to the need to extend the terms of the limited-term employees hired to support this program. Currently, the total cost for 2025 is projected to be at least $400,000 to $600,000, which amounts to roughly a 1% to 1.5% increase in rates.

The URAF was intended to provide financial relief for the 2025 rate increase for those residents who qualify. This was intended as a one time program due to the more significant rate increase that occurred in 2025. At this time, staff has not included a budget for the continuation of URAF in 2026 or future years.

Federal Loan Potential

The City and County of Broomfield (Broomfield) is working with the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division and State agencies such as DOLA and CWRPDA to work step by step through the application process for the Drinking Water State Revolving Loan Fund (DWSRF). Staff is evaluating the use of these funds for the construction of a water tank to meet the current Broomfield population's needs. This low interest loan offered at below market interest rate is funded via federal grant and so comes with associated requirements, such as the Davis-Bacon wage provisions, reporting obligations, and the "Build America, Buy America (BABA) Act" stipulations.

Current Status: The revised scope of work was approved by CDPHE in May 2025. Broomfield submitted a Project needs Assessment in June 2025 and is preparing to submit the Environmental Needs Assessment next by August 2025.

Currently, staff is conducting a cost-benefit analysis to determine whether the savings from reduced interest rates over the life of the loan outweigh the additional costs associated with complying with these federal requirements. Approximately $30M of the $70M water tank project costs could be funded via DWSRF loans. We will provide an update on the findings of this analysis during a future update.

Changes to Projected 2025 Revenues and Expenses

Over the last couple of months, staff has been refining 2025 revenue and expense projections to help inform final rate recommendations. As has been stated, the changes implemented to rates for 2025 have been a stabilizing factor in the revenue side of the projections.

Bond Ratings
Moody's rating agency announced new bond ratings for CCOB in the third quarter of 2024. The Sewer Revenue Bonds were upgraded from Aa3 to Aa2. The Water Revenue Bonds were affirmed stable at Aa2.

The main factors considered for ratings upgrades are:

- Sustained improvement of debt service coverage excluding one-time license fees
    - Increase in recurring revenues (base/usage charges as opposed to license fees)
- Maintaining strong reserve levels
- Decrease in overall leverage (debt ratio)
- Maintaining strong days cash on hand

Higher bond ratings mean:

- Increased credibility
    - Broomfield's bonds are considered low risk for default and investment grade
    - It confirms from an outside perspective we are managing our finances effectively
    - It shows that we are managing our operations competently
    - Bond stabilization and upgrade based on recommended rate increases being approved

- Lower interest rates
    - Over the life of the bond, Broomfield will pay less in interest
    - Savings of approximately $2.6M over the life of the bonds

Bond Issuance Plans

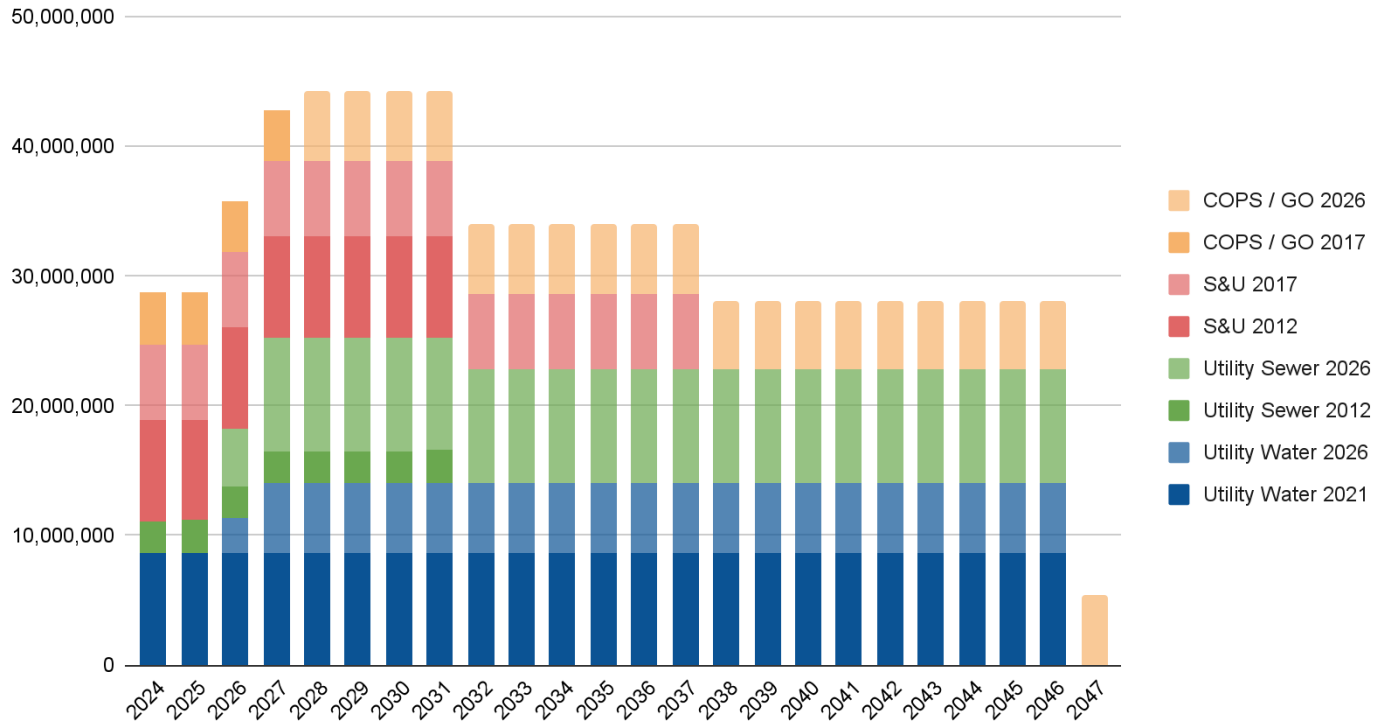
Staff has begun bond issuance preparation for two bonds related to Enterprise Funds in 2026. Staff issued an RFQ seeking proposals from bond underwriting firms with relevant experience issuing Enterprise Fund bonds. Several vendors responded by the June 30th deadline, and staff is currently reviewing those responses. CCOB is still targeting issuance in early 2026.

For the water fund, staff recommends issuing a $70M bond for funding the new water tanks. Broomfield's water system model identifies capital improvements that will be needed as Broomfield develops. The model specifically focuses on the phased development of the areas north of W. 144th Avenue that are quickly developing. Design is complete and construction is anticipated to begin in

2026. Construction is projected to last 36 months. The associated annual debt payment is anticipated to be approximately $5.3M over 20 years.

For the sewer fund, staff recommends issuing a $114M bond for funding the Wastewater Treatment Facility Expansion. Due to future increases in population and regulatory requirements from the CDPHE, the Wastewater Treatment Facility will need to commence a significant expansion to adequately treat the increase of wastewater and maintain compliance with current and future regulatory requirements. Project drivers include capacity, asset renewal, biosolids, reuse, and regulation. Construction is to begin in 2025. The associated annual debt payment is anticipated to be approximately $8.8M over 20 years.

CCOB Debt Structure (Existing vs New)



5 Year Fund Balance Projections

The tables below show where staff is currently projecting fund balances to end for water, sewer, reuse and stormwater. Revenue results are based on the 5 year rate increases shown in the Future Rate Impact Projection section of this memo found below. These projections include updates for CIP long range plan, Operating Expense refinements, projected bond issuance and interest rates, and projected URAF program costs.

Water Fund Projections

($M)	2025 Proj	2026 Plan	2027 Plan	2028 Plan	2029 Plan
Beginning Water Fund Balance	**$51.2**	**$20.0**	**$14.9**	**$10.9**	**$2.4**
Charges for Services	$32.2	$37.7	$41.2	$44.9	$49.0
License & Tap Fees	$8.2	$9.1	$10.4	$10.8	$11.2
Miscellaneous / Interest	$1.7	$1.3	$1.2	$1.2	$1.2
Contra Revenue (URAF)	($0.6)	$0.0	$0.0	$0.0	$0.0
Total Revenue	**$41.5**	**$48.13**	**$52.7**	**$56.9**	**$61.4**
O&M Expenses	$23.9	$26.0	$26.8	$27.7	$28.5
Debt Payments	$8.7	$11.4	$14.0	$14.0	$14.0
CIP	$40.1	$15.9	$15.8	$23.7	$13.0
Total Expenses	**$72.6**	**$53.3**	**$56.6**	**$65.5**	**$55.6**
Ending Water Fund Balance	**$20.0**	**$14.9**	**$10.9**	**$2.4**	**$8.2**
Days O&M Exp on Hand (Target: 180)	*302*	*205*	*147*	*31*	*104*

Footnote: $70M of bond proceeds and CIP cost for the Water tanks are netted out in the 2026 projections.

Sewer Fund Projections

($M)	2025 Proj	2026 Plan	2027 Plan	2028 Plan	2029 Plan
Beginning Sewer Fund Balance	**$91.9**	**$57.7**	**$45.8**	**$49.2**	**$49.6**
Charges for Services	$18.0	$20.9	$22.7	$24.7	$26.9
License Fees	$5.7	$6.1	$8.8	$9.2	$9.5
Miscellaneous Revenue	$2.3	$2.5	$2.1	$2.1	$2.2
Total Revenue	**$26.0**	**$29.5**	**$33.7**	**$36.0**	**$38.6**
O&M Expenses	$11.9	$12.6	$13.0	$13.4	$14.0
Debt Payments	$2.5	$6.8	$11.2	$11.2	$11.3
CIP	$45.9	$21.9	$6.1	$11.0	$4.9
Total Expenses	**$60.2**	**$41.4**	**$30.3**	**$35.6**	**$30.2**
Ending Sewer Fund Balance	**$57.7**	**$45.8**	**$49.2**	**$49.6**	**$58.0**
Days O&M Exp on Hand (Target: 180)	*1751*	*1309*	*1364*	*1335*	*1487*

Footnote: $114M of bond proceeds and CIP cost for the Water tanks are netted out in the 2026 projections.

Reuse Fund Projections

($M)	2025 Proj	2026 Plan	2027 Plan	2028 Plan	2029 Plan
Beginning Reuse Fund Balance	**$10.5**	**$6.7**	**$2.2**	**$2.0**	**$1.9**
Charges for Services	*$1.6*	*$1.9*	*$2.0*	*$2.2*	*$2.3*
License Fees	*$0.0*	*$0.0*	*$0.0*	*$0.0*	*$0.0*
Miscellaneous Revenue	$0.4	$0.3	$0.2	$0.2	$0.2
Total Revenue	$2.1	$2.2	$2.2	$2.3	$2.5
O&M Expenses	$1.8	$1.9	$1.9	$2.0	$2.1
Debt Payments	$0.0	$0.0	$0.0	$0.0	$0.0
CIP	$4.0	$4.8	$0.4	$0.4	$0.4
Total Expenses	$5.9	$6.7	$2.4	$2.4	$2.5
Ending Water Fund Balance	$6.7	$2.2	$2.0	$1.9	$1.9
Days O&M Exp on Hand (Target: 180)	*1306*	*417*	*372*	*343*	*330*

Stormwater Fund Projections

($M)	2025 Proj	2026 Plan	2027 Plan	2028 Plan	2029 Plan
Beg Stormwater Fund Balance	**$0.0**	**$1.3**	**$1.0**	**$2.7**	**$4.8**
Charges for Services	$6.6	$7.2	$7.7	$8.2	$8.8
License Fees	$0.0	$0.0	$0.0	$0.0	$0.0
Miscellaneous Revenue	$0.0	$0.0	$0.0	$0.0	$0.0
Total Revenue	**$6.6**	**$7.2**	**$7.7**	**$8.2**	**$8.8**
O&M Expenses	$2.6	$3.5	$3.6	$3.7	$3.8
Debt Payments	$0.0	$0.0	$0.0	$0.0	$0.0
CIP	$2.6	$4.0	$2.4	$2.4	$2.3
Total Expenses	**$5.3**	**$7.5**	**$6.0**	**$6.1**	**$6.2**
Ending Stormwater Fund Balance	**$1.3**	**$1.0**	**$2.7**	**$4.8**	**$7.5**
Days O&M Exp on Hand (Target: 180)	*180*	*103*	*267*	*464*	*699*

Section 4: Steps for Ensuring the Long-term Financial Sustainability of the Enterprise Funds

Section 4a: Restructuring for Long-Term Success

To reflect CCOB's commitment to providing more focused, specialized and effective support for the community's evolving needs, Council approved Ordinance 2269, setting forth a strategic reorganization of Public Works and Utilities into two specialized departments:

- Public Works Department: Custodial Maintenance, Energy and Environment (formerly Oil & Gas), Facility Maintenance, Fleet Services, Street Maintenance, and Sustainability. Enhancing the Public Works Divisions to have a laser focus on the core functions in alignment with Council and Community priorities.
- Water Utility Department: Water Resources, Water Treatment, Sewer Collections, Water Distribution, Water Recovery (Wastewater & Reuse Treatment), Water Quality & Regulatory, Stormwater, and Capital Improvement & Construction Inspections. Providing enhanced focus, specialized knowledge in operations, regulations, and technical expertise required to manage and maintain the complexity of the water utility systems.

The reorganization aims to enhance service delivery and organizational effectiveness by specializing departments. This move, driven by increased regulatory demands, Council priorities, and population growth (with over 25 new staff), allows for focused leadership and improved efficiency. By creating two specialized units, CCOB can offer more responsive, expert service, better manage its expanded workforce, and ensure accountability and long-term success for its public water utilities. Ordinance No. 2269 was introduced on April 22, 2025, and approved at the meeting on May 13, 2025.

Ken Rutt has been formally hired as Director of the Water Utility Department and is also serving as interim director of Public Works Department until a Public Works Director is hired. Recruitment for the Director of Public Works Department is currently underway.

The departments have initiated the formal restructuring process, focusing on structural and resource alignment with Finance (budget, purchasing), Human Resources, and IT. Public Works and Water Utilities leadership and staff are actively involved to facilitate expectation management, communication, goal setting, and progress monitoring. These key alignments have been prioritized to ensure ongoing collaboration and communication between the now distinct departments.

Section 4c: Asset Management

Staff applies both a maintenance management and asset management strategy to maintain Broomfield's water, wastewater and stormwater infrastructure providing our community with high quality water utility services. The City and County of Broomfield partnered with AECOM to undertake a review of Public Works' and Water Utilities asset management practices, data, processes, and technology, and provided a gap analysis summary and roadmap.

In 2024, staff partnered with AECOM to evaluate and assist with developing the funding levels required to keep water and sewer assets in a state of good repair. This effort (Phase 1) applied AECOM's Capital Investment Planning Support Tool (CIP Tool) for all Water Utilities ("wet") assets (water, wastewater, and stormwater) within the Public Works (PW) Department. The CIP tool was

applied to separately address water, and sewer and stormwater assets over a 20-year analysis period. In October 2024, staff and AECOM presented the findings to the Council.

Following the 2024 efforts, staff continued to engage with AECOM to complete a deeper dive into the "wet" assets and the associated financial model (Phase 2). This effort combined the AECOM Capital Investment Planning Support Tool (CIP Tool) applied in Phase 1 with the associated financial model to address risk. AECOM refined the water and sewer pipe asset inventory, refined the asset decay curves, and ran new constrained funding scenarios using the CIP Tool. The analyses focused on an explicit consideration of risk in the prioritization of capital needs.

To accomplish the analysis, AECOM applied its analytical platform CIP Tool to incorporate GIS data output including asset description, asset classification, asset location, asset age, and asset condition scoring to determine when assets may reach the point of failure to prioritize repair or replacement from a capital perspective.

The objective in Phase 2 is to improve the method for prioritizing infrastructure renewal and replacement needs in the CIP Tool by introducing consideration of a risk-based factor, which is consistent with best practice in asset management. The risk component of the prioritization score is in the form of the classic (Probability of Failure) x (Consequence of Failure) structure that is advocated in the asset management body of knowledge (e.g., ISO 55000, International Infrastructure Management Manual), where:

- Probability of failure: based on asset age and condition (via an age versus rate of failure curve)
- Consequence of failure: based on the number of affected customers (i.e., the number of water and sewer connections) and gallons consumed.

Methodology
The CIP tool is a decision support platform developed to emulate capital programming decisions based on known facts and the quantification of investment policy. It assists with:

- Developing inventory-based estimates of state-of-good-repair (SGR) backlog by organizational unit and by asset class
- Projecting future SGR needs by organizational unit and by asset class
- Projecting the impact on asset condition, asset reliability, and operating cost by asset class, resulting from alternative constrained funding scenarios and comparison to unconstrained funding

The CIP Tool provided several performance measures to evaluate the impact of future spending and prioritization on the capital program. By utilizing these capabilities, we can evaluate the short-term impacts on asset condition and asset performance based on the asset replacement funding program, as well as long-term impacts on asset condition and asset performance levels to achieve Broomfield's strategic goals, such as eliminating the SGR backlog over a specified number of years.

The performance measures included:

- SGR Backlog (2025 $): Value of assets whose age exceeds their useful lives and in the queue for replacement. Assets in the queue are prioritized and funded in priority order Assets remain in the queue until funded
- Reliability: Average failure-impacted taps affected per year. Based on age vs. rate of failure asset decay curves.

- Asset condition: Measured on a scale of 5 (New) -to-1 (Worn)
- % of assets at SGR: $-weighted average portion of assets whose age is less than their useful lives.

The spending measures included:

- Annual capital spending: $ spent on assets renewed or replaced. Annual spending profiles for each asset class based on experience. All asset classes in a stacked bar chart
- Annual O&M costs: Maintenance costs associated with asset conditions.
- Annual capital + O&M costs: Sum of the above.
- Cumulative capital + O&M costs: Cumulative sum of the above.

Recommendations
In October 2024, AECOM presented recommendations to the Council, proposing additional funding to address the state of good repair (SGR) backlog and improve Broomfield's system. It was suggested that water assets require at least $6 million annually, and sewer assets need between $8 to $10 million per year.

The 2025 Phase 2 project, AECOM refined the method for prioritizing infrastructure renewal and replacement needs by the additional consideration of a risk-based factors. The finding and conclusion confirmed the recommended $6 million in annual funding for water assets and $9 million in annual funding for sewer and stormwater assets.

The 2024 Asset Management Partnership with AECOM overview available at this link.
The 2025 Asset Management Partnership with AECOM report is available at this link.

- Detailed AECOM $6M Water Spending Table link.
- Detailed AECOM $9M Sewer Spending Table link.

Section 4d: Water Systems Emergency Preparedness

Water Utilities is continuously working to develop the team to respond to both routine and emergency situations. One of the key areas is water systems emergency preparedness. Emergency preparedness for water systems is critical to protecting our communities public health and maintaining essential services during disasters.

Staff from the Water Utilities, Public Health and Environment, Emergency Management, and North Metro Fire are working with the CDPHE Drinking Water Training Specialists to set up and participate in the following tabletop exercises:

- Waterline Breaks - On January 13, 2025, staff participated in a Waterline break tabletop exercise with a CDPHE Water Training Specialist. Training was focused on water break exercises that most municipalities face around Tier 1 violations. EPA defines Tier 1 violations as situations where there is significant potential for immediate impact on human health and over 100 residents without water service for extended periods of time. A Tier 1 incident usually results in a boil water order.

  The exercise demonstrated that Broomfield has a high level of preparedness in the water supply network. This is attributed to significant redundancy, system looping, and sectional isolation.

Broomfield's distribution system benefits from interconnections with Denver Water and the City of Westminster, enabling access to multiple water sources during emergencies. Additionally, the City and County of Broomfield's Standards and Specifications mandate looping in all new developments, effectively eliminating single feeds.

Strategic placement of shutoff valves, typically every 500-1000 feet, facilitates sectional isolation. This allows for the isolation of small segments during repairs, thereby minimizing the number of affected customers and making Tier 1 violations from waterline breaks a rare occurrence for CCOB.

- Wildfire - On May 30, 2025, staff participated in a wildfire tabletop exercise with a CDPHE Drinking Water Training Specialist. The exercise evaluated the response and coordination efforts of staff during a wildfire affecting distribution zones, leading to evacuation, power outage, and ongoing recovery.

  This exercise evaluated Broomfield's response and coordination capabilities during a wildfire scenario involving potential evacuations and power outages. Key focus areas included maintaining essential services during disruptions, establishing clear evacuation protocols, and ensuring effective initial emergency response procedures.

  The exercise emphasized activating critical communication channels, including the 911 system and the department operations dispatch center. Discussions highlighted the importance of effective communication during wildfire emergencies, prioritizing resources appropriately, and responding decisively when critical infrastructure is threatened.

  A major theme was managing communication complexities during wildfire events while balancing public safety with the operational needs of essential facilities like the distribution system and water treatment plant. The exercise underscored the importance of maintaining clear communication between Distribution, plant operators and dispatch to coordinate evacuations and keep appropriate personnel informed. Remote access and control capabilities for the water plant were identified as crucial for continuous monitoring and rapid response to emerging issues during wildfire events.

  The City and County of Broomfield distribution system is designed in part to handle domestic fire fighting (residential structural fires) during peak demand with fire protection. The City and County of Broomfield Standard and Specification states the design of the potable water distribution system shall be based on the following criteria:
    - Available fire flow shall be 20 PSI residual minimum.
    - Minimum fire flow (2 hour duration) for any newly developed areas - Single family detached dwellings and duplexes 1,500 gallons per minute and all other buildings 3,500 gallons per minute for the 2 hour duration.

  Municipal water supply systems, including Broomfield’s, are not designed to fight large wildfires. The expectation related to fire protection has been to provide enough water to fight smaller-scale residential and commercial structural fires that are not fueled by wildland vegetation.

As stated above, a key engineering design concept in firefighting water supply is fire flow - the amount of water a system is expected by regulators to provide to fight urban fires. Firefighters primarily rely on these water systems in the immediate area during a wildfire drawing from fire hydrants.

Additional information regarding Wildfire Preparedness and Lessons Learned from LA and Marshall Fires.

Broomfield's Water Utility Wildfire Preparedness

The following are important capabilities, infrastructure and research taken by Broomfield for responding to wildfires.

- Emergency Diesel Powered Generators - Why is diesel power important? During the Marshall fire, natural gas service was shut down making the natural gas emergency powered generators ineffective in providing power to keep the water systems running fully.
- Participate in the Colorado Mutual Aid Agreements for personnel, water sampling, analysis and equipment access through the state of Colorado Water/Wastewater Agency Response Network (COWARN)
- Water System interconnections with Denver Water and the City of Westminster to support emergency pressure and water needs.
- Conduct department, organization, and multi-organization exercises to practice addressing the operations, managerial, scientific, and communication challenges during and following a wildfire.
- Policy and procedures to top off all finished water storage tanks in anticipation of an approaching fire, a power loss, or distribution system damage that can prompt water leaks.
- Maintains 2 Laboratories at two different locations to provide water testing for emergency sampling/analysis support.
- Distribution pressure zone separation, and backflow prevention devices to protect the water system
- Identified untreated source water that could be used - Siena and Great Western Reservoirs for firefighting helicopters
- After Fire Policy and Procedure - to require water meter removal and the physical disconnection of damaged and destroyed properties from the water distribution system if no functional backflow prevention device exists.
- Policy and Procedure to conduct water analysis of the property service line, install a backflow prevention device, or replace infrastructure before damaged property services are reconnected to the distribution system.
- Post event debriefing as part of emergency response, experiences, what went well, what went not as well, improvements, future needs, to improve overall system, response and actions.
- Actions steps include working with subject matter experts on water distribution system contamination response and recovery actions, and technical support.

Additional items staff are currently working with our vendors and design engineers.

- Remote shutoff valves - staff is investigating the various options of integrating the shut-off feature with the smart meter technology. The auto shut off feature will still allow about 1/8 of a gallon to flow.These meters require monthly cellular service at location. Staff is continuing to evaluate this option as follows:

- A cellular signal survey would be required. Typically, 3 to 4 antennas need to be installed with fees to ensure adequate coverage. Cost TBD
- The smart meter cost is $839 each compared to $412 for our current upgraded meter. The upgraded smart meter would add $8,661,747 to the current meter replacement program.
- Meter Pit conversion costs for residential is $38 and commercial $500
- Monthly cell cost per meter is $0.92 multiplied by 20,317 meters for a monthly cell cost of $18,691 ($224,292/annually).

- Reuse distribution system fire hydrants in high fire areas where the reuse distribution system is already installed. Staff is identifying potential sites in high fire-risk areas to evaluate the availability of reuse water.

Water Resilience, Risk Assessment, and Vulnerability Analysis of Water Infrastructure

Water resilience refers to the ability of water and wastewater utilities to withstand and quickly recover from natural and human-made disasters. Increasing resilience will help safeguard access to safe drinking water and properly treated wastewater.

The Safe Drinking Water Act (SDWA) section 1433, which was amended by America's Water Infrastructure Act (AWIA) section 2013 in 2018, requires community water systems that serve more than 3,300 people to complete a risk and resilience assessment (RRA) and develop an emergency response plan (ERP).

Broomfield is required to assess the risks to, and resilience of, our water systems. The assessment includes:

1. The risk to the system from malevolent acts and natural hazards;
2. The resilience of the pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage and distribution facilities, electronic, computer, or other automated systems (including the security of such systems) which are utilized by the system;
3. The monitoring practices;
4. The financial infrastructure;
5. The use, storage, or handling of various chemicals; and
6. The operation and maintenance of the system.

The assessment includes an evaluation of capital and operational needs for risk and resilience management.

Additional information regarding America's Water Infrastructure Act.

Section 4e: Public Outreach - Public Works and Water Utilities Academy Sessions

Public outreach is critically important in building trust, credibility and awareness related to both the Public Works and Water Utilities core functions. In October of 2023, the Public Works and Communication team established a monthly newsletter dedicated to Public Works and Water Utilities. The newsletter is sent out on the 4th Wednesday of each month. The goal is to increase awareness and enhance transparency through providing information about public services, initiatives or activities.

In addition, between May 17 and July 9, 2025, staff invited the community to the Public Works and Water Utilities Academy sessions. These sessions were hosted at each facility related to the operations of the services provided to the community. Sessions included a short presentation, tour, demonstration and question and answer opportunities for the public. The goal of these sessions was to engage our community, provide awareness and inspire interest in each of the fields enhancing the workforce.

Over 70 residents attended the various Public Works and Water Utilities Academy Sessions in 2025. At this time, staff is considering academy sessions in 2026 for residents that may have missed the opportunity in 2025.

Section 4f: Water Planning

Broomfield's water planning effort is a continuous process that forecasts the current potable water supplies and the ultimate development of Broomfield. It identifies the scope and timing when significant capital improvements are required. Additionally, it covers the financial planning required to fund both the rehabilitation of existing capital facilities and the development of new ones.

Broomfield's ability to sell water licenses and support future growth is dependent upon the quantity of existing supplies and the capacity of several key facilities. More specifically, four functional categories control Broomfield's ability to serve current and future customers. These include:

1. Water Supply – Broomfield's water supply portfolio includes Denver Water, Colorado-Big Thompson (C-BT) units, and Windy Gap units.
2. Raw Water Transmission Conveyance (Peak summer demand) – Broomfield's supplies are delivered through two pipelines: Conduit 81 for Denver Water and the Southern Water Supply Pipeline for C-BT and Windy Gap units.
3. Water Treatment – Broomfield treats its supplies from C-BT and Windy Gap. Denver Water is delivered as treated water.
4. Water Distribution – The potable water system includes approximately 447 miles of pipeline, five booster pump stations, and four storage tanks.

Recent planning efforts have focused on all four of the above since they make up the greatest proportion of current and future capital expenditures and require the longest lead times to implement. In some instances, the duration of the planning and permitting efforts may span 5 to 20 years, while the design and construction can be completed in as little as 2 to 3 years. When new water licenses are sold and the demand begins to approach the capacity limits of these functional categories, system improvements must be funded and constructed to avoid having to limit the sale of new water licenses or the possibility of shortages or reduced service levels. Therefore, to avoid restricting water license sales or implementing water restrictions, it is extremely important to time the construction of new capital projects as closely as possible to the need.

The last functional area, water distribution, is equally as important as the first three. Water Utilities is working with AECOM, to review and assist with refining the water distribution and sewer collection infrastructure assets replacement tools. We are refining the asset decay curves and considering risk in the prioritization of capital needs. We are also refining the risk component of the prioritization score consistent with best practices in asset management. The risk component of the prioritization score includes Probability of failure x Consequence of failure.

- Probability of failure: based on asset age and condition (via an age versus reliability curve)
- Consequence of failure: based on the number of affected customers (based on the number of water and sewer taps).

Staff is continuing to refine and enhance our asset management approach which reflects a strategically developed program that reduces the lifecycle cost of managing the assets.

Water Supply

Water supply is most commonly measured in "acre-feet." An acre foot is conceptually an acre of land covered by one foot of water. An acre-foot provides a year's supply of water for approximately two households.

Summary of Broomfield's Potable Water Supplies

Water Source	Units Owned	Yield of Supply (AF)	Status
Denver Water	Contract	6,500	Firm
Colorado-Big Thompson (C-BT)	13,698	9,589	Firm
Windy Gap	56	5,600	Not Firm - work in progress
Total Firmed Supplies		16,089	
Total Supplies		21,689	

The Northern Colorado Water Board sets a quota each year in April for C-BT shares. Based on the quota established, staff evaluates and reviews the amount of water available, projects daily demands, water loss and peak demands to coordinate Broomfield's water supply ensuring uninterrupted water service for our community. In 2024 the quota was set at 0.7. The quota impacts Broomfield's supply from C-BT as follows:

Colorado Big Thompson (CBT) Unit Ownership	Shares	Quota				
	Acre-feet	0.5	0.6	0.7	0.8	0.9
Fixed Yield (acre-feet)	5,089	3,562	3,562	3,562	3,562	3,562
Variable Yield (acre-feet)	8,609	4,305	5,165	6,026	6,887	7,748
Total Yield (acre-feet)	13,698	7,867	8,728	9,589	10,450	11,310

1. Denver Water - provides treated water through a contract that outlines our obligations as follows:
   a. Minimum annual purchase – 4,700 acre-feet
   b. Maximum annual purchase – 6,500 acre-feet
   c. Minimum weekly delivery – 3.5 million gallons (0.5 MGD average)
   d. Maximum 30 day limit – 975 acre-feet (10.59 MGD average)
   e. Instantaneous maximum flow rate – 9,028 GPM (13.0 MGD average)

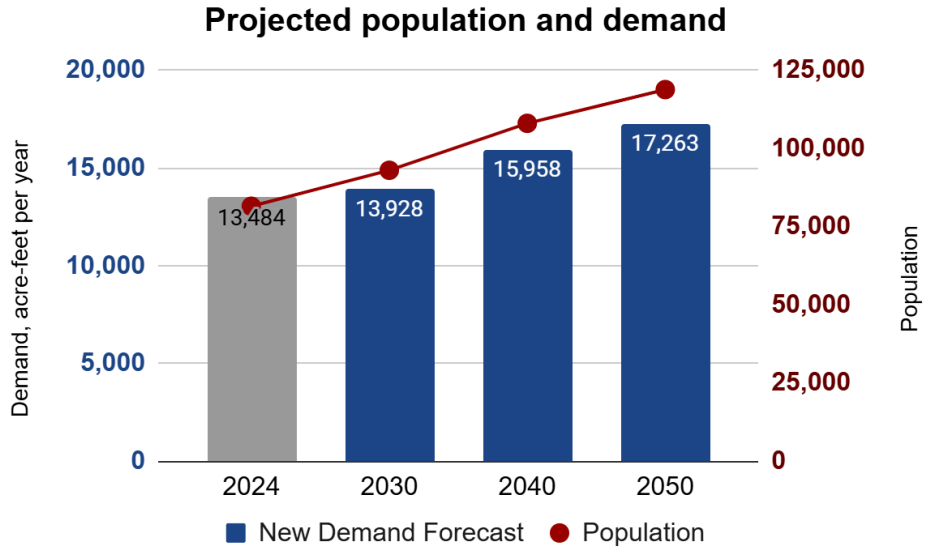
Future Potable Water Use

Broomfield developed a new potable water use forecast model in 2023, and the forecast is updated regularly to incorporate the latest information on development and population projections. The philosophy behind the new model includes the following:

- Apply a methodology that is consistent with standard industry practices and the Colorado State Water Plan
- Incorporate conservative assumptions to ensure that system expansion stays ahead of growth, but not excessively conservative in a way that would lead to overbuilding the water system
- Project water use separately for single family, multi-family, and commercial/industrial customers
- Allow for relatively quick updates when there are changes in population/growth projections, water use behavior at the household or business level, and as we learn more about the impacts of conservation programs
- Develop a water use growth trajectory that allows us to estimate the timing of needed capital improvement projects (CIPs) and determine the full scale of needed CIPs based on projected water demand at build-out

Broomfield's approach combines analysis of existing water use among residential and commercial customers with our projections of future population and commercial property development. Overall, per capita water use in Broomfield has declined by about 16% since 2012.

The current potable water use forecast (updated based on growth projections from February 2025) is shown in the chart below. Water use in 2024 was above average due to slightly warmer and drier conditions. We expect the population to increase by about 45% by 2050 and total water use to increase by about 28%. Water use growth will be less than population growth due to the increasing shift from single family development to multi-family development.



There are several sources of uncertainty that could make future water use higher or lower than the projections shown above. These uncertainties are summarized below.

Factors that could make future water use higher than the forecast	Factors that could make future water use lower than the forecast
Hotter, drier or longer summers increases outdoor irrigation compared to historical patterns	The new landscape ordinance reduces outdoor water use by a large margin in all new developments (we're working on this)
Residential or commercial growth accelerates beyond Community Development projections	Hotter, drier or longer summers leads to more turf replacement (people give up on turf)
Multi-family housing development does not increase as much as projected	Conservation accelerates substantially more than past trends

Water Storage Analysis - The Becky Property

In February 2000, Broomfield acquired the 132-acre Becky Property and associated water rights near Erie from The Becky Family Investment Company for $3,725,000. The purchase included 254 Colorado Big Thompson (CBT) units, one share of New Consolidated Lower Boulder Ditch stock, and 0.66624

shares of Base Line Land and Reservoir Company. The primary motivation for the acquisition was the CBT units, now valued at an estimated $17,780,000 and incorporated into Broomfield's water supply.

The Becky Property has remained vacant, and Broomfield no longer considers it vital for water storage. The city is now considering selling the property. A recent appraisal values the property and remaining water rights at $1,800,000 "As Is," with the buyer assuming permitting and gravel recovery risks. If Broomfield allows for a longer due diligence period for gravel permitting, the estimated sale price could increase to $2,500,000 - $3,700,000, though this would extend the sale process by up to three years.

Three potential buyers have expressed interest, including the Town of Erie, which previously sought a first right of refusal in 2019. Erie is currently developing a proposal. Proceeds from the sale would fund the Great Western Reservoir rehabilitation project.

Section 4g: Water Conservation Programs

To conserve existing water resources and maximize Broomfield's future water supply, the Water Resources Division is committed to developing and maintaining a robust water efficiency program that aligns with the goals outlined in the city's 2020 Water Efficiency Plan.

The benefits of Waterwise Landscaping include:

- Reduce monthly water bills
- Plants/gardens are more drought-tolerant than turf
- Once established, native plants require less maintenance than turf grass
- Reduce fertilizer, pesticide, and herbicide use
- Flowers are attractive and pollinator friendly

2025 Water Conservation Programs Available to the Public	
Garden In A Box	July 2025 Update: 222 discounts claimed, 38 remain available
Lawn Replacement Program	July 2025 Update: 19 completed projects, 16 projects in planning; actively marketing
Large Property Turf Replacement Rebate Program	July 2025 Update: No projects yet; actively marketing to HOAs
Slow the Flow Sprinkler Evaluations	July 2025 Update: 59 completed, 6 more scheduled; all six Controllers and Sensors claimed
Rebates for Water Conservation Devices	July 2025 Update: 196 total rebates issued, including 58 toilets and 58 smart irrigation controllers

Non-potable Reclaim (Reuse) Water

One of the major elements of the Broomfield water system is an extensive non-potable water system that is supplied by advanced treated wastewater effluent (called reclaimed wastewater) and raw surface water supplies that are blended with the reclaimed wastewater. The blended water, called non-potable water, is used for outdoor irrigation of parks, golf courses, commercial areas, and other landscaped areas within the service area boundaries of Broomfield. The non-potable water system is completely separate from the potable water system.

The non-potable water system exists for the following major reasons: 1) to provide more than a one-time use of the two major water supplies for the City, 2) to preclude the water acquisitions that would otherwise be needed to meet the water demand.

Great Western Reservoir

Broomfield Reuse water can be produced year-round at the Broomfield Water Recovery Facility and stored in Great Western Reservoir until needed during the irrigation season. This storage reservoir is the key component in the non-potable system since storage is required to meet the nonpotable reuse irrigation demands.

Since 2001, Broomfield's management of Great Western Reservoir (Great Western) has utilized engineering consultants, Schnabel Engineering, LLC (formerly Deere and Ault Consultants, Inc.) to support staff on reservoir monitoring and maintenance activities that require specialized expertise. Typical supplemental services include Emergency Action Plans for all three Broomfield local reservoirs (Glasser, Great Western and Siena), preparation of reservoir monitoring reports submitted to the State of Colorado as required by the State Engineer's Office (SEO), as well as, engineering analysis and review associated with reservoir monitoring and maintenance activities and studies recommended by the SEO.

In 2020 in response to recommendations made by a SEO Dam Safety Inspector in 2019, the 2020 scope of services included annual monitoring reports for all three reservoirs, as well as assistance and consultation during the annual SEO inspections of all three reservoirs.

Historically, monitoring reports for Great Western were completed in one year and the report for Siena and Glasser Reservoirs in the following year. Following the 2019 inspections, the SEO's office urged Broomfield to complete monitoring reports for all three reservoirs annually, especially Great Western because of its age, size, and proximity to the Skyestone neighborhood. The original Great Western dam was constructed in 1904. The following map shows the general location of the reservoir.

The SEO requested several follow-up actions for Great Western and Siena. Both reservoirs' Safe Storage Level classification was listed as "conditional full storage" in the SEO's 2019 Inspection Reports. A Conditional Full Storage classification indicates that "the dam may be used to full storage if certain monitoring, maintenance, or operational conditions are met." Attention to the SEO's requests has minimized the possibility of moving into a restricted storage classification. The follow-

up actions included Great Western Outlet Pipe Video and Inspection, Great Western Toe Drain Camera Inspection, Cleaning, and Engineering Review.

Monitoring data has shown that there is an elevated water surface within the Great Western dam embankment, indicating that the toe drain system is not functioning as designed (photo). Through the inspection and monitoring program, staff and our engineering consultant identified visible buildup of sediment and mineralization in both toe drain pipes which has restricted flow through the system. Additionally, inspections of the dam's main outlet pipe suggest that the pipe's joints are pulling apart and its weko seals are bulging.

SOUTH TOE DRAIN BEFORE CLEANOUT

SOUTH TOE DRAIN AFTER CLEANOUT

The toe drain system at Great Western Dam was constructed in 1966. The toe drain system is a standard component in most earthen embankment dams; they help drain natural seepage through the embankment to maintain the stability of the dam.

Under the requirements of the State of Colorado Dam Safety Program, Great Western Reservoir conditions are monitored continuously throughout the year and there is a formal dam safety inspection by state officials once a year (note that Siena and Glasser dams are also inspected each year).

In response to the recent inspections indicating that the toe drain system is not functioning as designed, staff is working through a multiple phase approach to include a comprehensive assessment, water modeling and financial analysis of each of the options listed below.

On May 28, 2024, Council approved the agreement with Schnabel, Inc. to conduct engineering investigations into the dam's structural issues and to analyze alternatives for making repairs. Based on Schnabel's engineering work, they have identified three potential alternatives for addressing the issues at Great Western requiring significant investments that are well over 30 million dollars:

1. Selective Replacement of the Toe Drain and Outlet -
    - Permanently grouting and sealing the existing outlet pipe and constructing new outlet works outside the embankment; partial excavation of the dam to replace the toe drain system.
    - Pros: Lower cost; the reservoir can be partially used throughout construction
    - Cons: Structural issues with the dam embankment remain and could require additional work in the future
2. Full Dam Replacement
    - Excavate and remove the existing dam embankment down to bedrock from each existing abutment and rebuild a new dam with all new toe drains, outlets and other infrastructure
    - Pros: Entirely new dam and supporting infrastructure that we would expect to require no major rehabilitation or construction for 50+ years (only routine maintenance)
    - Cons: Higher cost; the reservoir would be completely offline and unusable for approximately two years
3. Breach and Decommission the Dam

- Excavate a channel in the existing dam so that it no longer can store any water and cease operations of Great Western Reservoir
- Pros: lower initial cost
- Cons: Significant impacts on the available capacity to both the reuse and potable water systems including the ability to meet reuse irrigation usage demand requiring several reuse customers to convert to potable, increasing the capacity of **potable** waterlines, water treatment plant, and impacts to Broomfield Reservoir sizing and timing of construction. Potential environmental impact
- related to the reservoir sediment and surrounding area.

- Status Update: As of the end of June, Schnabel worked with Smith Environmental and Engineering to collect 20 sediment samples within the reservoir and in areas around the reservoir that could be affected by potential construction. The samples were tested for radiological contamination and Smith conducted preliminary risk modeling to determine if any of the construction alternatives could pose a threat to community health. Sampling results show that the concentration of radionuclides within the reservoir sediment and and in soil around the reservoir are consistent with the extensive historically recorded background levels that are attributed to atmospheric weapons tests. Further, their preliminary risk modeling showed that potential radiation exposure for onsite construction workers and nearby residents would be indistinguishable from typical background levels in Colorado. Once Broomfield determines which alternative (listed above) it will utilize to address the dam's structural issues, Smith will conduct additional sampling and risk modeling that will be more specifically targeted at the planned areas of construction.

Staff has been monitoring water quality in Great Western Reservoir to include radionuclides since the reservoir was converted to non-potable reuse storage and became operational in 2004. All of our Great Western Reservoir water quality radionuclide testing has met water quality standards.

Next Steps

The next phase of the Great Western comprehensive strategy is to complete a reuse system assessment to update and refine a model of our reuse storage and distribution system. To evaluate the impacts to both the reuse and potable water systems based on Schnabel's three potential alternatives.

This systematic approach provides decision-makers with a structured framework to identify vulnerabilities, model potential scenarios, develop targeted solutions, and recommend a path forward. Staff have met with two engineering firms to discuss approaches and we have begun drafting a scope of work. We expect to issue a request for proposals by September. Staff anticipates bringing Council the recommendations in early 2027.

Section 5: Overview of Development Projections

Both residential and commercial development slowed in 2024 due to continued higher than anticipated interest rates, tightening credit markets, and existing residential and commercial vacancy rates. In parallel, Broomfield has experienced changes in the rate and type of commercial development for similar reasons and changes in office occupancy and utilization due to hybrid and remote work patterns

This slowed residential development was reflected in a total of 376 residential permits being issued in 2024, less than the 841 originally projected. However, an additional 369 residential permits issued in 2025 were prepaid in 2024, so the total permits paid for in 2024 was 745. Current 2025 projections anticipate 684 residential permits to be paid for in 2025. As of June 30, 2025, 289 residential permits have been paid for thus far.

Water Utilities and Finance are provided regular updates of both the updated LRFP development projects and current planning and building activity from Community Development. These projections and updates allow for updates to Water Utilities Capital Improvement plan and Finance's license fee revenue projections in the utility rate modeling.

Section 6: Enterprise Fund Advisory Committee

On May 13, 2025, City Council approved Resolution No. 2025-85 creating the Fiscal Leadership on Water Advisory Committee (FLOW) and identified the purpose for the committee to make suggestions and recommendations related to utility enterprise utility fees, capital improvement project planning, and financial planning.

Council directed staff to move forward with forming the committee with 7 members and no alternates. The purpose and duties of the FLOW will be as follows: provide suggestions and recommendations to City Council and CCOB staff related to utility enterprise utility fees, capital improvement project planning, and financial planning. The FLOW shall be empowered to conduct all other acts necessary to assist with their purpose and duties. The FLOW shall report back to Council during the quarterly Enterprise updates, such report may be provided in the form of written communication or verbally during the meeting. City Council has now identified seven residents based on their knowledge or experience with finance, water resources, budgeting and operations.

Members must be residents of Broomfield, and if any member ceases to reside in Broomfield, their membership shall immediately terminate. The terms of office of members of the FLOW shall be four (4) years for members. To stagger the terms of the members and for the initial FLOW, three (3) members will be selected for four and a half (4.5) year terms to end on March 31, 2030, and four (4) members will be selected for two and a half (2.5) year terms ending on March 31, 2028. Following the completion of the initial terms, all members will have four (4) year terms.

At this time, the typical standing meeting will be on the first Thursday of each month beginning in August 2025. To facilitate onboarding for the committee, two training meetings were scheduled for Thursday, June 26th, and Thursday, July 10th.

It is staff's goal to introduce the draft budget and five year CIP plans to the committee in August and get initial feedback, but it is important to note that this timing will not allow committee members to have been involved in providing early feedback to significantly influence the 2026 budget process, which has already begun and will be largely complete by August. The goal will be for this committee to be provided in-depth training regarding enterprise funds, have established by-laws, and be provided detailed information regarding the five year capital infrastructure plan by the end of 2025

so that the committee can provide recommendations early in the process of drafting the 2027 budget, which will begin in early 2026. This will ultimately lead to a board recommendation regarding the 5-Year CIP and rate recommendation to Council for the 2027 budget.

Section 7: Future Rate Recommendations

This marks the second year of the five-year rate plan. We are pleased to confirm that the previously shared rate projection of a 15% increase—communicated to the public in fall 2024—remains the current recommendation. This recommendation incorporates updated information, including 2024 financial results, the successful launch of the Stormwater Fund, capital improvement planning supported by AECOM, and the Utility Rate Assistance Fund (URAF) program application rate.

The only exception is the Stormwater Fund. Based on current analysis, staff recommends a reduced rate increase of 9%, as the originally projected 15% is no longer necessary.

Impact to Rates for Single Family Home

Fee Type	2025	2026	Diff (%)
Water Base Fee	$36.91	$42.45	15%
Water Usage (0 - 5k gal)	*$2.39*	*$2.75*	*15%*
Water Usage (6 - 9k gal)	*$3.82*	*$4.39*	*15%*
Water Usage (> 9k gal)	*$5.41*	*$6.22*	*15%*
Sewer Cost/1,000 gallons	$5.44	$6.26	15%
Sewer Fed Mandate Charge	$0.52	$0.52	0%
Sewer Env Compliance Fee	$9.00	$10.35	15%
Stormwater Fee	$11.00	$12.00	9%

Additionally, staff is recommending a 15% increase for the monthly Reclaimed water fee, which would increase from $11.45 to $13.17.

Projected Future Rate Increases

Fund	2026	2027	2028	2029
Water, Sewer, Reuse	15%	7%	7%	7%
Stormwater	9%	7%	7%	7%

Projected Future Development Fee Increases

Staff is recommending a 4% increase to the water and sewer development license fees for 2026, which is in line with typical CPI (Consumer Price Index) annual growth rates. The current plan would be to continue increasing the license fees by 4% annually beyond 2026 as well unless the CPI rate fluctuates significantly, or fund balances increase to the extent that the 4% is not deemed necessary.

Direction From Council

Staff is seeking direction from Council regarding these anticipated rate and development fee increases for 2026. If Council directs staff to proceed with the rate increase as anticipated in the five year plan, additional information will be prepared and made available to residents including a tool to help estimate the impact for their particular residence, information for single family and multi-family residential units. Additional detail would be provided in the future memorandum prepared for Council's formal consideration of the utility rate increase, which would be anticipated in October 2025.

Conclusion

Staff will continue to closely monitor and update Council through regular Enterprise Fund updates. The meetings on the following dates will provide the opportunity for further updates and discussion:

- August 19, 2025: Economic & Fiscal Update
- October 14, 2025: First Reading of Enterprise Fund rate ordinances for 2026
- October 21, 2025: 3rd Quarterly Enterprise Update
- October 28, 2025: Second Reading of Enterprise Fund rate ordinances for 2026

Thanks to prudent financial decisions in 2024, the financial position of the Enterprise Funds are strengthening. We remain committed to transparency, accountability, and ensuring every dollar is spent wisely.