ELEVATING OUR COMMITMENT TO YOUR WATER

City of Englewood Utilities

CITY OF ENGLEWOOD

2024 Drinking Water Quality Report
Data For Calendar Year 2023

The City of Englewood is committed to delivering high-quality drinking water to support homes and businesses for our community.

Inside this annual water quality report, you'll find information about your drinking water, including where it comes from, how it's treated to meet drinking water standards, system improvements, water quality test results, and how you can learn more and provide input as a customer.

Our primary goal is to provide you with clean, safe drinking water. Englewood's drinking water is regulated by the Colorado Department of Public Health and Environment (CDPHE) to ensure its safety. More information about CDPHE's drinking water regulations and Englewood's water system can be found on cdphe.colorado.gov. The City of Englewood Public Water System's state ID is CO0103045.

For questions about this report or how to connect with our team, please contact Chris Edelstein, Environmental Compliance Manager at CEdelstein@englewoodco.gov or (303) 762-2650.

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

Dear valued Englewood customers,

I am pleased to provide you with our 2024 Annual Water Quality Report. In this report, you'll find comprehensive analyses of our multiple water sources, outcomes of our water quality testing throughout the year, and details about our treatment processes. At Englewood Utilities, we are committed to ensuring the health and well-being of you and your families through access to clean and reliable drinking water.

Our team of 60 employees is dedicated to delivering drinking water to your home and business that meets all state and federal drinking water regulations. We employ advanced treatment processes and technologies at the Allen Water Treatment Plant to remove contaminants that might be present in our raw water sources. In addition, we perform regular water quality testing throughout the distribution system to make sure that the water that is delivered to you meets all applicable standards.

This year, I am excited to share some significant updates regarding our ongoing investments aimed at enhancing our water system to better serve you and our community. This summer will mark the commencement of construction for the Lead Reduction Program, a five-year initiative dedicated to removing lead service lines from our system. This program underscores our unwavering commitment to public health and safety by minimizing potential lead exposure in our water supply.

Furthermore, we continue to focus on optimizing the treatment processes at the Allen Water Treatment Plant. Over the past year, significant operational adjustments have been made to improve the taste, odor, and hardness of your water. This summer, we are installing a new seasonal ozone treatment process specifically designed to remove naturally occurring taste and odor compounds from the drinking water.

Looking ahead, the Utilities Department is committed to investing over $100 million in our water system over the next few years through several capital improvement projects. Our

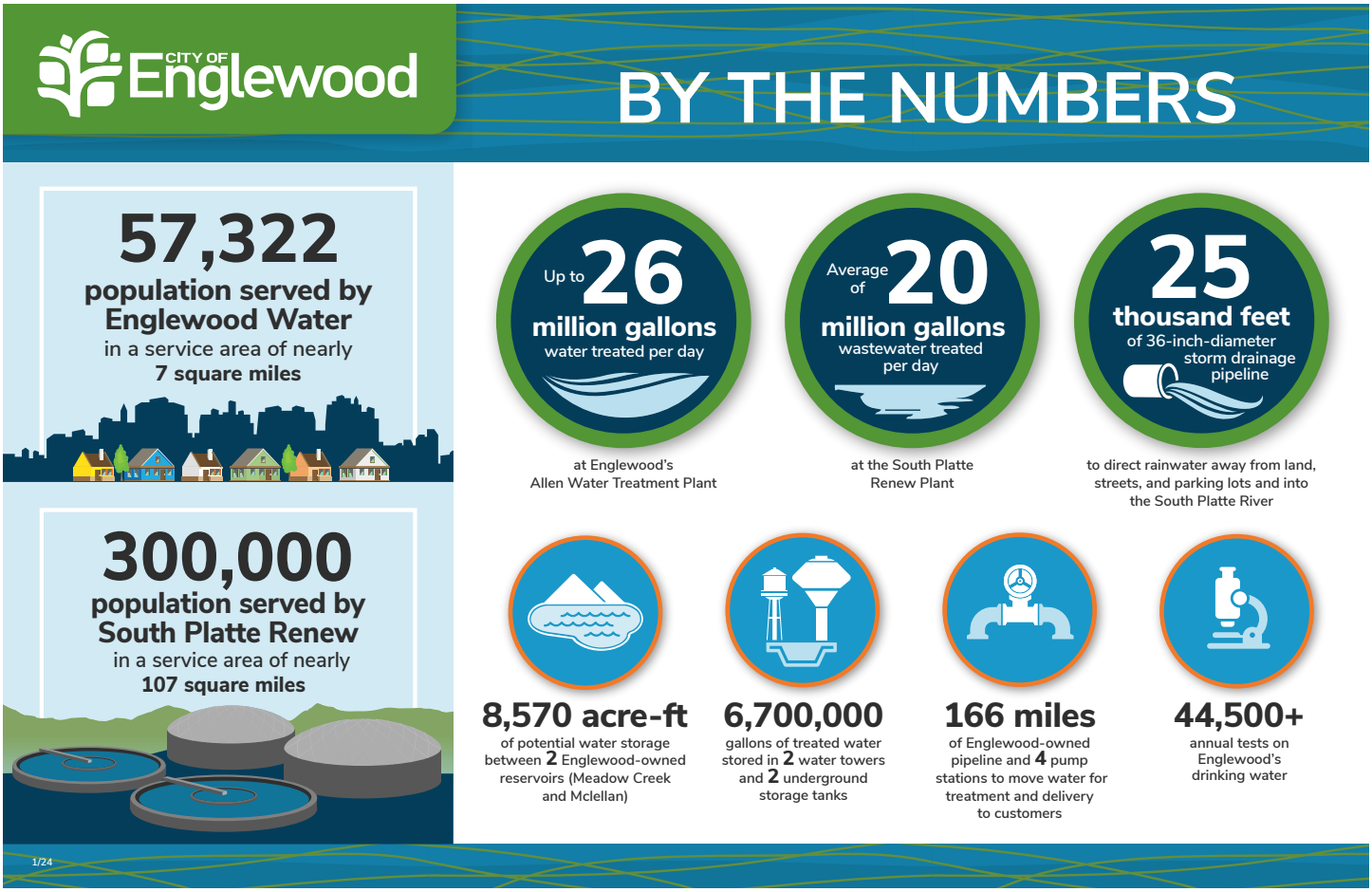
largest of these, the City Ditch Piping Project, is set to begin construction this summer and extend through 2025. Upon completion, we anticipate a significant improvement in the quality of Englewood's source water, leading to better drinking water for all.

These investments reflect our dedication to building a modern, sustainable water utility that meets the evolving needs of our customers while safeguarding precious environmental resources for future generations. Through innovation and efficiency, we remain steadfast in ensuring the long-term reliability and resilience of our water system.

Thank you for being a valued customer of the City of Englewood Utilities Department. We welcome any feedback or concerns you may have about our water system, and look out for our Annual Customer Survey in August of 2024.

Sincerely,

Pieter Van Ry,
Director of Englewood Utilities and South Platte Renew



How Your Drinking Water is Regulated

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting **epa.gov/ground-water-and-drinking-water**.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Microbial contaminants: viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants: salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides: may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.

Radioactive contaminants: can be naturally occurring or be the result of oil and gas production and mining activities.

Organic chemical contaminants: including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.


Meadow Creek Reservoir

Where Our Water Comes From

The City of Englewood relies on 100% surface water from two primary sources:

- South Platte River
- City Ditch/Chatfield Reservoir

Our two emergency water sources are:

- McLellan Reservoir
- McBroom Ditch/Bear Creek

Protecting Our Source Water

The Colorado Department of Public Health and Environment has provided Englewood Utilities with a Source Water Assessment Report for our water supply (dated 11/8/2004). For general information or to obtain a copy of the report, please visit cdphe.colorado.gov/ccr under "Guidance: Source Water Assessment Reports." The direct web page is located at cdphe.colorado.gov/swap-assessment-phase. Customers can search by entering the system name or ID and may contact Chris Edelstein, Environmental Compliance Manager at (303) 762-2650 for assistance. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan.

Potential sources of contamination

The potential sources of contamination that may exist are: EPA Superfund Sites, EPA Abandoned Contaminated Sites, EPA Hazardous Waste Generators, EPA Chemical Inventory/Storage Sites, EPA Toxic Release Inventory Sites, Permitted Wastewater Discharge Sites, Aboveground, Underground and Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine Sites, Other Facilities, Commercial/Industrial/ Transportation, High Intensity Residential, Low Intensity Residential, Urban Recreational Grasses, Quarries / Strip Mines / Gravel Pits, Row Crops, Fallow, Pasture / Hay, Deciduous Forest, Evergreen Forest, Mixed Forest, Septic Systems, Oil / Gas Wells, Road Miles

How You Can Help

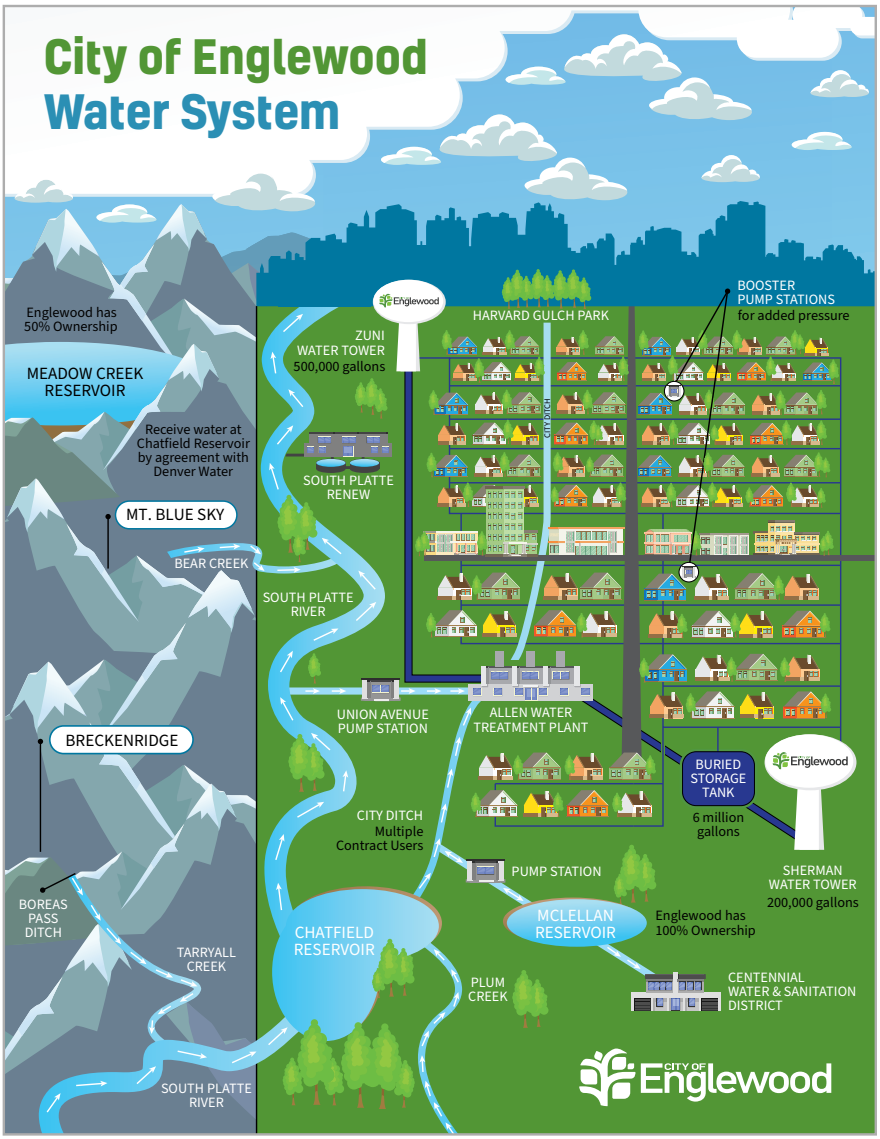
Englewood's waterways provide drinking water, recreational opportunities, and wildlife habitat. We all must do our part to protect our waterways from pollution. Start by understanding how the waterways become polluted and take steps to reduce stormwater pollution in our everyday activities. Learn what you can do to help protect your drinking water sources at: englewoodco.gov/utilities under **About Us** and **Protecting Waterways**.

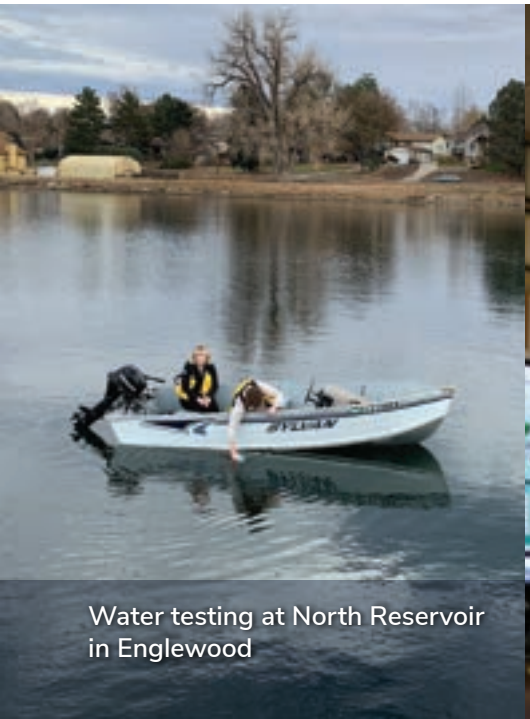
The Journey of Your Water

A drop of water travels a long way before it reaches your tap. It begins with mountain snowpack that melts and flows into rivers and reservoirs that provide Englewood's water. Raw, or untreated, water is delivered from the mountain system to the city's Allen Water Treatment Plant through the South Platte River and City Ditch.

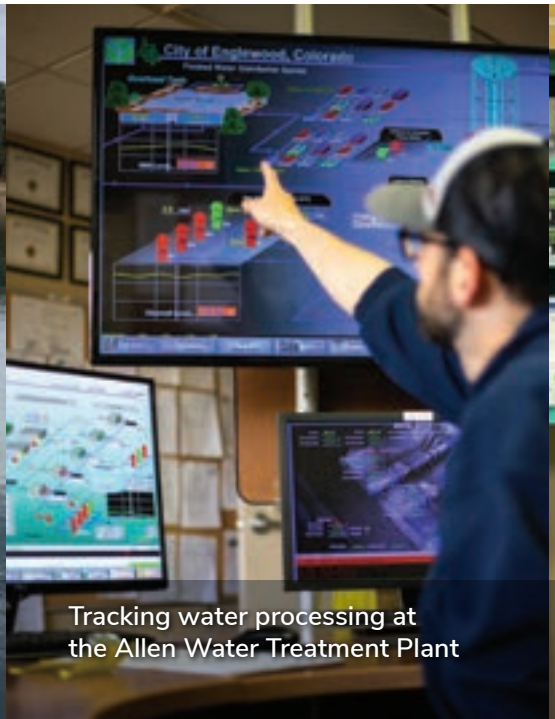
Once it is cleaned and purified at the Allen Water Treatment Plant, drinking water is then stored in tanks before being delivered through miles of pressurized pipes to your homes and businesses. The Englewood Water system has about 166 miles of pipe ranging from 4 to 24 inches in diameter.

A dedicated team of operations and maintenance staff manage distribution system operations, infrastructure maintenance, water main repairs, meter reading, and water main flushing. This team is on call 24-hours-a-day, 7-days-a-week to ensure water is available anytime you turn on your faucet. All of this is accomplished at a cost of less than one penny per gallon for safe, dependable drinking water delivered to your tap.

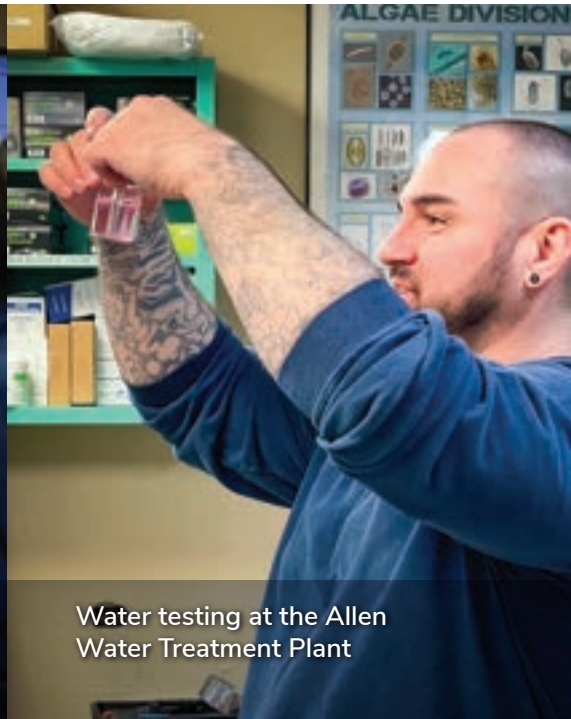




Water testing at North Reservoir in Englewood



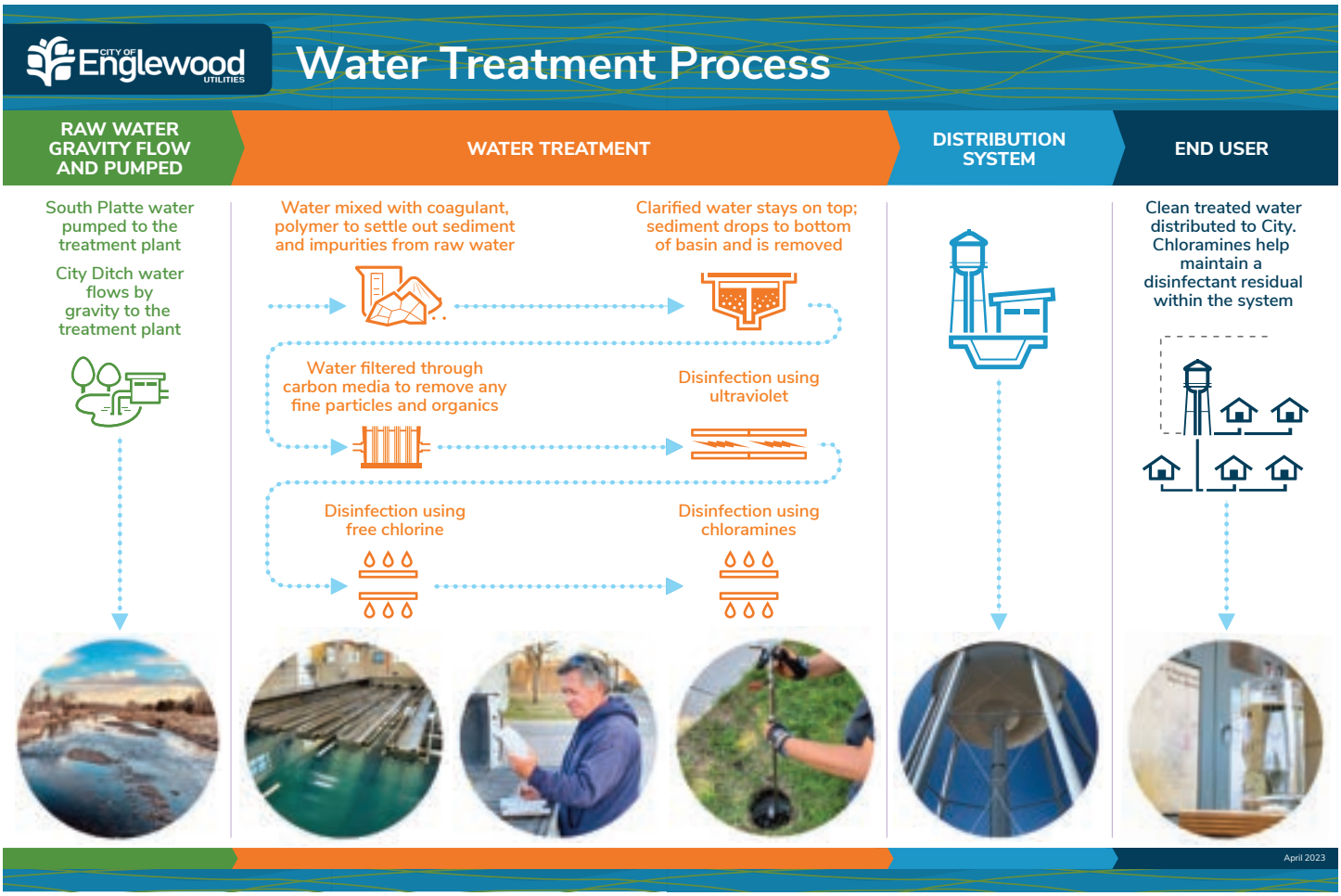
Tracking water processing at the Allen Water Treatment Plant



Water testing at the Allen Water Treatment Plant

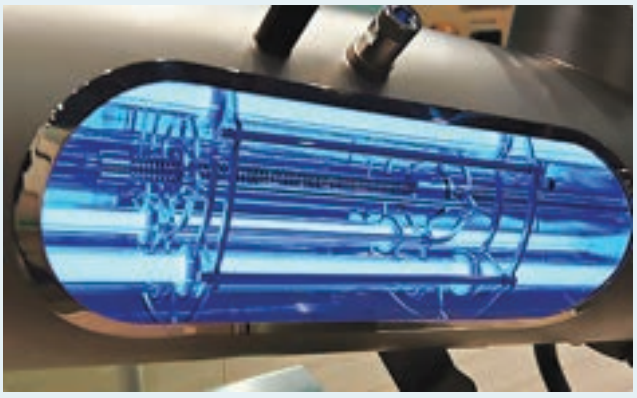
How Your Water is Treated

Raw water is delivered to the Allen Water Treatment Plant from City Ditch and the Union Avenue Pump Station along the South Platte River. At the Allen Plant, water undergoes a multi-step treatment process to meet federal and state drinking water standards. The licensed water treatment operators oversee treatment operations around the clock to ensure safe drinking water is delivered to Englewood customers.



Benefits of Ultraviolet Disinfection

Englewood is one of a few public water systems in the state of Colorado using multiple Ultraviolet (UV) treatment units for disinfection during the water treatment process. UV disinfection in water treatment uses UV light to sterilize water by reducing the level of bacteria, viruses, and other harmful biological contaminants. The wavelength of UV light allows it to penetrate pathogens and microbes and break down their basic DNA structure, thereby killing them. UV disinfection is effective, chemical-free, environmentally friendly, low maintenance and efficient.



Water Quality Test Results

See Terms and Abbreviations on opposite page

City of Englewood routinely monitors for contaminants in your drinking water according to Federal and State laws. The following tables show all detections found in the period of January 1 to December 31, 2023, unless otherwise noted. Certain contaminants are monitored less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some data may be more than one-year-old. Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, then no contaminants were detected in the last round of monitoring.

RAW AND FINISHED WATER SAMPLES

Parameter	Year	Frequency	Average	Range Low – High	Sample Size	Unit of Measure	TT Minimum Removal Ratio	TT Violation	Typical Sources
Total Organic Carbon Ratio	2023	Monthly	0.99	0.56 to 1.55	12	Ratio	1.00	No	Natural organic matter present in the environment

*Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts including trihalomethanes (TTHMs) and haloacetic acids (HAA5s). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

SAMPLED IN THE DISTRIBUTION SYSTEM

Parameter	Year	Frequency	TT Requirement	No. Samples Below Level	Sample Size	TT Violation	**MRDL	Typical Sources
Disinfectant as Total Cl_2	2023	Monthly	At least 95% of samples per month must have a total chlorine residual of at least 0.2 ppm	0	60	No	4.0 ppm	Drinking Water additive used to control microbial growth

The running annual average for all four quarters of 2023 was <4.0 ppm

Parameter	Year	Frequency	Average Result	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2023	Quarterly	13.51	5.6 to 20.3	48	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2023	Quarterly	56.33	24.4 to 80.8	48	ppb	80	N/A	No	Byproduct of drinking water disinfection

Parameter	Monitoring Period	90th Percentile Result	Sample Size	Unit of Measure	90th Percentile Action Level	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	07/10/2023 to 09/15/2023	0.07	66	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	07/10/2023 to 09/15/2023	4.4	66	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Lead in Drinking Water

If present, lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Chris Edelstein at 303-762-2650. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

SAMPLED AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM

ENGLEWOOD CITY OF, PWS ID: CO0103045

Parameter	Month/ Year	Frequency	Level Found	TT Requirement	TT Violation	Typical Sources
Turbidity	Nov 2023	Monthly	Highest single measurement: 0.105 NTU (in November)	Maximum 1 NTU for any single measurement	No	Soil Runoff
Turbidity	Dec 2023	Monthly	Lowest monthly percentage of samples meeting TT requirement for city technology: 100 %	In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Radionuclide Parameters	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Gross Alpha	2020	2.09	2.09 to 2.09	1	pCi/L	15	0	No	Erosion of natural deposits
Combined Uranium	2023	7	7 to 7	1	ppb	30	0	No	Erosion of natural deposits

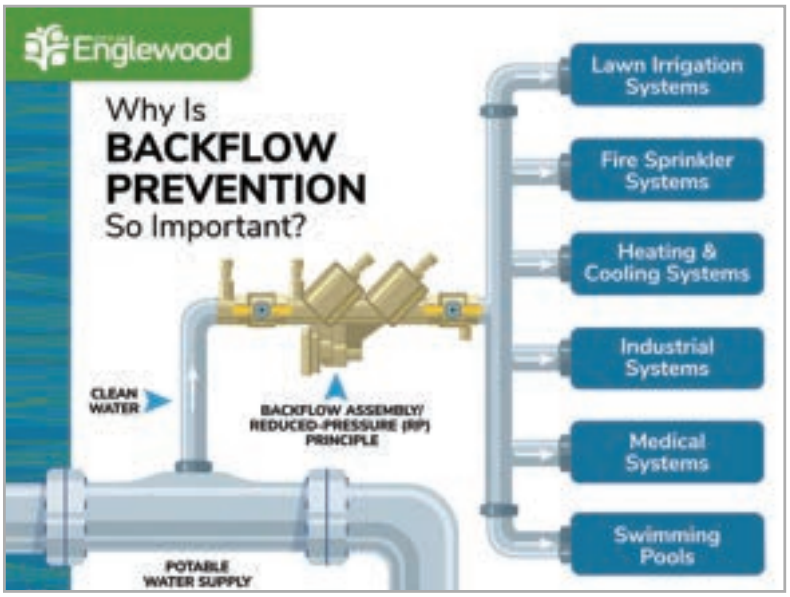
Inorganic Parameters	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2023	0.06	0.06 to 0.06	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2023	0.61	0.61 to 0.61	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2023	0.6	0.6 to 0.6	1	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2023	8	8 to 8	1	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

*Secondary Parameters	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2023	59.8	59.8 to 59.8	1	ppm	N/A

*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (MRDL)** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in $10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.



Backflow Prevention

Backflow prevention is important to protect drinking water supplies from connections to potentially hazardous material. Backflow prevention assemblies are devices installed onto a pipe to only allow water to flow in one direction. Think of it as a one-way gate that allows water from the city's public water supply to flow into your building or home's piping but stops water if it ever tries to flow backwards into the main water supply. These devices are required at commercial and multifamily structures at cross-connections according to the City's backflow plan as regulated and enforced by the Colorado Department of Health and Environment.

To protect the City's water supply, Englewood Utilities is:

1. Ensuring commercial and multifamily properties perform annual certification (testing) of backflow devices by August 15th.
2. Performing cross-connection surveys at all commercial and multifamily structures to identify hazards and follow up on all uncontrolled cross-connections.
3. Educating customers on what they can do to prevent backflows into drinking water supplies.

2023 Highlights of the Backflow Prevention and Cross-Connection Control Program

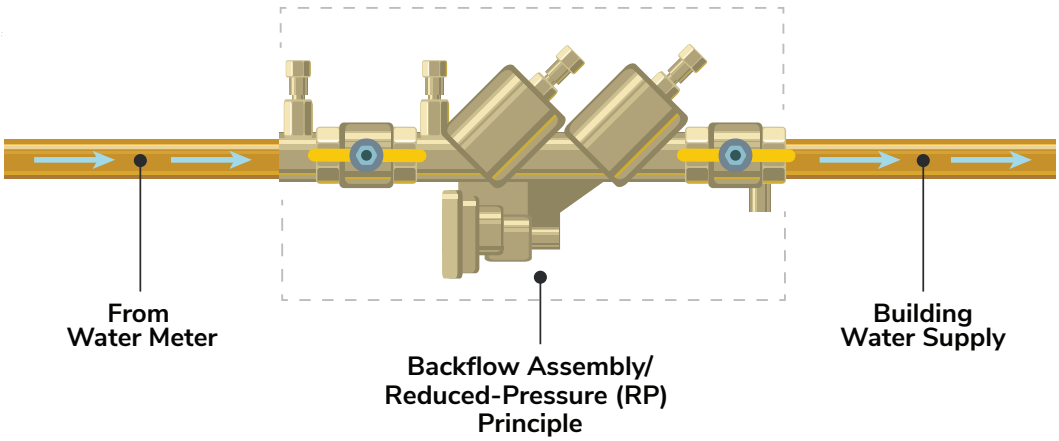
614 commercial/industrial and multifamily service connections were inspected and verified for the absence or presence of cross-connections

192 uncontrolled cross-connections were identified

154 uncontrolled cross-connections were controlled with the installation of a backflow prevention device

38 cross-connections are continuing their work to control a cross-connection within regulatory timeframes

1,836 backflow prevention devices were tested or inspected



Example: of a commercial/multifamily structure with a backflow device installed for full building containment.

Optimizing Our Water System

Englewood is investing nearly $100 million over the next several years to improve our water system's reliability and drinking water quality. Some system components are more than 70 years old — well beyond their recommended lifespan, and it's time to upgrade. Optimization and modernization of treatment processes and equipment is also in progress.

As these projects are completed, customers should notice incremental improvements to the taste, odor, and hardness of the drinking water over time. Key improvements include:

- Converting open channel sections of City Ditch to underground pipe
- Adjusting where raw water is delivered into the treatment plant
- Implementing ozone and optimizing chemicals during treatment
- Upgrading control systems, water treatment and filtration equipment and processes
- Improving how we monitor and treat odor-causing compounds in our water sources
- Testing new treatment, distribution and storage technologies and operations processes

Lead Reduction Program

Englewood Utilities Lead Reduction Program is a multi-year program to remove all lead service lines and replace them with copper lines. Safe drinking water is our top priority, and Englewood Utilities is taking significant steps in the coming years to eliminate lead pipes from the water system. While water is currently lead-free when it leaves the water treatment facility and travels through the distribution system, it can come in contact with historic lead service lines or plumbing throughout your home. If your home was constructed before 1960, you may have a lead service line providing water to your home. As a part of the Lead Reduction Program, Englewood Utilities will replace the entire lead service line from the water main in the street to just inside your home with a copper service line.

Go to **www.englewoodco.gov/lead-reduction-program** for additional program information, to sign up for ongoing program updates, and to check your service line material property on the interactive online map. **Got questions? Email us at lead@englewoodco.gov.**

Get Involved!

We encourage residents to learn more about how our water system works and provide input by attending scheduled public meetings. Information on the Englewood Water and Sewer Board meetings can be found on the city's website at englewoodco.gov under Meeting Information.

We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day. Learn more about your water services at englewoodco.gov/utilities and follow us on social media.

CITY OF Englewood UTILITIES

1000 Englewood Parkway | Englewood, CO 80110

City of Englewood's 2024 Drinking Water Quality Report