



# 2026 Water Quality Report

Covering Data for Calendar Year 2025



# History of Thornton – 70 Years and Going Strong

For more than 70 years, water has helped shape Thornton's story. The original Thornton water treatment plant was built on Dorothy Boulevard in 1955, about a year before the city's inception. In the decades that followed, Thornton's population steadily increased, and the need for more homes, water, and public facilities grew. The city matched growth with investment in infrastructure that would sustain Thornton through seasons to come.



The 1960s and 1970s brought structure, with the first City Seal, the opening of Thornton High School, the first recreation center, and a park system. Mayor Margaret Carpenter, the longest-running mayor in Thornton's history, was elected in 1979 and led the city into another age of expansion. Securing its own municipal water rights was a major effort in the mid-1980s with Thornton buying water rights in the Water Supply and Storage Company which is located in the Cache la Poudre River basin.



Thornton's original water quality lab located in the Western Hills neighborhood



Office equipment in the original water quality lab



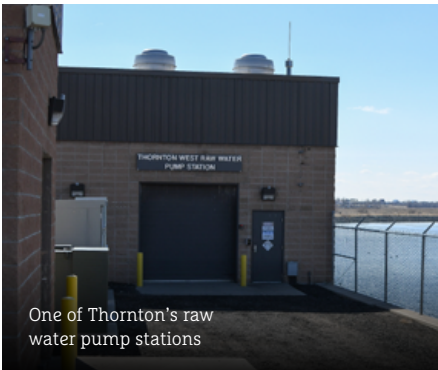
1990s water treatment facility control room

As the city grew in the early 2000s, it invested in upgrades to existing infrastructure, including renovating the Wes Brown Treatment Plant to include modern membrane filtration systems, producing up to 50 million gallons of water per day, and developing storage reservoirs. In 2020, the original Thornton Water Treatment Plant was replaced with a new facility, serving the community with a firm capacity of 20 million gallons of water per day.

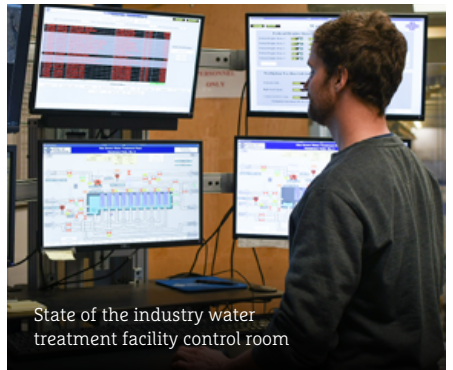
After years of coordination with local partners and community outreach, another major milestone for the city of Thornton is now underway. A 70-mile pipeline traversing through multiple cities and counties to bring the water the city owns in the Water Supply and Storage Company to Thornton homes and businesses is expected to be operational by 2028. This is an example of the forward-thinking mindset that Thornton is accustomed to, keeping future generations at the forefront of decision making. 70 years after its inception, Thornton remains committed to stewarding reliable, quality water for years to come.



Aerial view of Thornton's newly built Thornton Water Treatment Plant



One of Thornton's raw water pump stations



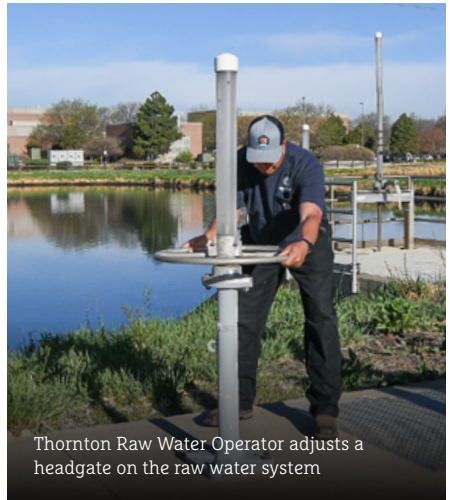
State of the industry water treatment facility control room

This 2026 Annual Water Quality Report provides an overview of the tens of thousands of water quality samples and analyses performed in 2025. Staff monitors the drinking water from where it starts as snowmelt in the headwaters of the South Platte River basin, throughout the treatment process and distribution system, to where it ends at customers' taps. The city's Water Quality Laboratory analyzes water samples for numerous contaminants to ensure your water is safe to drink. Most importantly, microbiological tests are performed to detect the presence of dangerous pathogens. This report summarizes the testing for the 2025 calendar year and presents other information that is important to know. For the year, no state or federal drinking water standards were exceeded.

Thornton continues to make steady progress toward reducing PFAS in drinking water and meeting upcoming federal standards. The city is advancing the design of Thornton Water Treatment Plant improvements supported in part by funding secured through lawsuit settlements with PFAS manufacturers as well as grants from the Colorado Department of Public Health and Environment. This project is tentatively scheduled to start delivering water in late 2028. Interim measures, including blending water sources, taking high-PFAS wells offline, increasing powdered activated carbon treatment, and enhancing monitoring, are already helping to meet upcoming PFAS regulatory limits taking effect in April 2029. Further, Thornton's Water Quality Laboratory has achieved certification to analyze PFAS samples in-house, allowing staff to evaluate treatment performance more quickly, reinforcing Thornton's commitment to protecting public health. Please contact Water Quality if you have questions or would like to know more recent and localized water quality data.



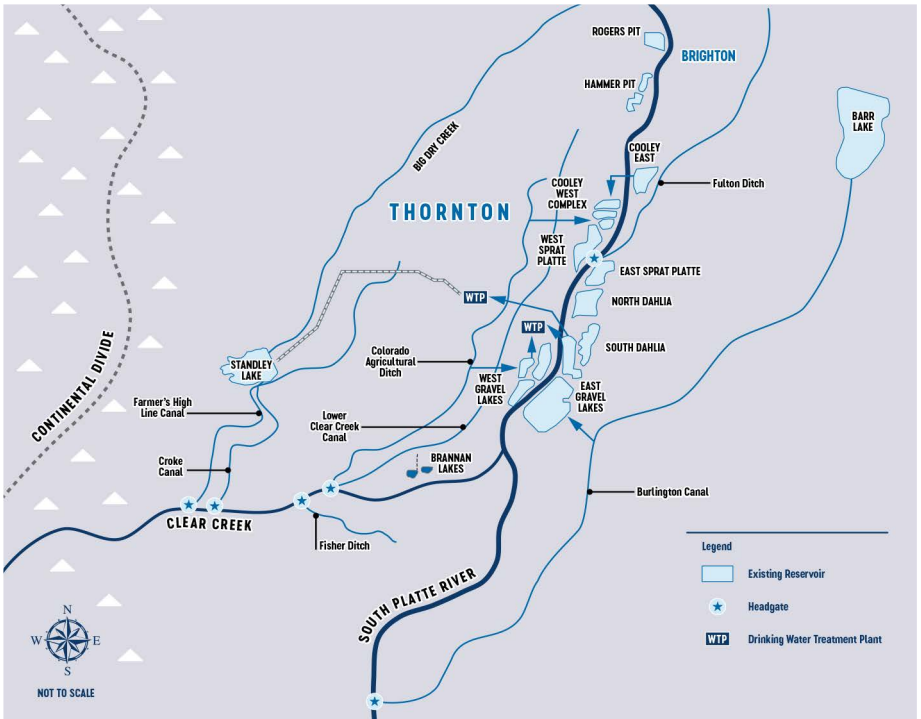
Thornton Raw Water Operator cleans debris from ditch trash racks on the raw water system



Thornton Raw Water Operator adjusts a headgate on the raw water system

# Thornton's Water Sources

Thornton's drinking water starts as snowmelt in the mountains. The city maintains a large and complex portfolio of water rights in the South Platte River, Clear Creek, and Cache la Poudre River. These three watersheds cover a land area of almost 6,000 square miles! South Platte water is diverted north of Denver and stored in a network of reservoirs before treatment. Most of the Clear Creek water is stored in Standley Lake, while a smaller portion is diverted into the reservoirs in Thornton. Water from the Cache la Poudre River is currently planned to be diverted by existing irrigation ditches to reservoirs near Ft. Collins. It will then be pumped through a 70-mile pipeline to Thornton's treatment plants. The city continues working hard to deliver this water to its customers in 2028.



# SWAP: Source Water Assessment and Protection Report

In 2002, the Colorado Department of Public Health and Environment (CDPHE) conducted a statewide Source Water Assessment for all municipal drinking water providers. The report identified potential sources of contaminants, such as gasoline storage tanks, wastewater plant discharges, mine drainages and others. These sites do not necessarily pose a threat but were identified only as potential sources of contamination. Thornton uses this information to ensure all routine monitoring includes these potential contaminants. [View the report at ThorntonCO.gov/SWAP.](http://ThorntonCO.gov/SWAP)



## Health Information

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 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.\*\*](tel:1-800-426-4791)

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the [\*\*Safe Drinking Water Hotline; 1-800-426-4791.\*\*](tel:1-800-426-4791)

To ensure that tap water is safe to drink, CDPHE prescribes regulations that limit the number 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.

The sources of drinking water (both tap water and bottled water) such as rivers, lakes and streams, contain naturally occurring minerals, including radioactive material, that are not completely removed at the water treatment plant and can pose a human health risk if present at a concentration above the safe levels set by the EPA. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewer treatment plants, septic systems, agricultural livestock operations, and wildlife. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the ***Safe Drinking Water Hotline (1-800-426-4791)***.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Lead** if present at elevated levels, 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. Thornton is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking.

**Thornton does not allow the installation of lead service lines, and elevated lead levels are not of concern in the city.** This was again verified by tests performed in 2025. However, you may wish to have your water tested if you are concerned about lead in your water. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the ***Safe Drinking Water Hotline (1-800-426-4791)*** or at **<http://www.epa.gov/safewater/lead>**.

- **Pesticides and herbicides** that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- **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 stormwater runoff, and septic systems.
- **Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the ***EPA Safe Drinking Water Hotline at 1-800-426-4791***.



Reservoir interconnection gates at a raw water pump station

## For Water Quality Information

Please share this information with others who drink Thornton water, especially those who may not receive this notice directly, such as people in apartments, nursing homes, schools, and businesses.

# Thornton Water

There were no health-based state or federal drinking water standards exceeded in 2025.

Primary Standards – Inorganic Chemicals						
Contaminant	MCL	MCLG	Range of Results (min-max)	Units	Typical Sources	Violation?
Barium	2,000	2,000	50 - 54	ppb	Discharge of oil drilling wastes and from metal refineries, erosion of natural deposits	No
Nickel	N/A	N/A	2	ppb	Erosion of natural deposits, discharge from metal factories	No
Selenium	50	50	0.8 - 1.7	ppb	Discharge from petroleum, glass and metal refineries, erosion of natural deposits, discharge from mines and chemical manufacturers, runoff from livestock lots (feed additive)	No
Fluoride	4	4	0.6 - 0.9	ppm	Erosion of natural deposits; Thornton does not fluoridate	No
Nitrate	10	10	0.1 - 0.8	ppm	Fertilizer, septic tanks, sewer plant discharges, naturally occurring deposits	No
Nitrite	1	1	0 - 0.08	ppm	Fertilizer, septic tanks, sewer plant discharges, naturally occurring deposits	No
Lead	AL > 15 90% samples ≤ 15	0	0 - 5.7 90% samples ≤ 2.4 No sites >15 Sample size = 52	ppb	Household plumbing, battery manufacturing, erosion of natural deposits	No
Copper	AL > 1,300 90% samples ≤ 1,300	1,300	25 - 544 90% samples ≤ 473 No sites >1,300 Sample size = 52	ppb	Household plumbing, wood preservatives, erosion of natural deposits	No

Primary Standards – Disinfectants						
Contaminant	MCL	MCLG	Range of Results (min-max)	Units	Typical Sources	Violation?
Chlorine (as Chloramine)	RAA ≤ 4	4	0.8 - 3.9 RAA = 2.6	ppm	Added in the water treatment process	No

Primary Standards – Organic Chemicals						
Contaminant	MCL	MCLG	Range of Results (min-max)	Units	Typical Sources	Violation?
Total Organic Carbon (TOC)	Removal Ratio RAA ≥ 1	N/A	Removal Ratio = 1.5 - 2.2 RAA = 1.9	N/A	Naturally occurring in the environment, sewer treatment plant discharges	No
Haloacetic Acids	LRAA ≤ 60	0	2.6 - 16.4 LRAA = 7.1 - 11.3	ppb	Produced as a byproduct of chlorination at the water treatment plant	No
Trihalomethanes	LRAA ≤ 80	0	19.6 - 61.1 LRAA = 24.6 - 35.8	ppb	Produced as a byproduct of chlorination at the water treatment plant	No
Bromate	LRAA ≤ 10	0	0 - 6 LRAA = 0 - 1.2	ppb	By-product of drinking water disinfection	No

Primary Standards – Micro Organisms						
Contaminant	MCL	MCLG	Range of Results [min-max]	Units	Typical Sources	Violation?
Coliform Bacteria	95% samples free of coliform bacteria	0	99.9% free of coliform One positive in 1,942 samples	%	Human and animal waste, stormwater run-off, sewer plant discharges	No

Primary Standards – Turbidity						
Contaminant	MCL	MCLG	Range of Results [min-max]	Units	Typical Sources	Violation?
Turbidity, Thornton Treatment Plant	95% samples < 0.3 No samples > 1.0	0	100% samples < 0.3 No samples > 1.0	NTU	Particles and sediment present in natural water sources and storm run-off	No
Turbidity, Wes Brown Treatment Plant	95% samples < 0.1 No samples > 0.5	0	99.9% samples < 0.1 No samples > 0.5	NTU	Particles and sediment present in natural water sources and storm run-off	No

PFAS Sampling Results						
Contaminant	MCL (effective 2029)	MCLG	Range of Results [min-max]	Units	Typical Sources	Violation?
PFOS	RAA < 4	0	0 - 4.7 Thornton Plant RAA = 2.7 Wes Brown Plant RAA = 0	ppt	Consumer products, firefighting foam	N/A
PFOA	RAA < 4	0	0 - 6.4 Thornton Plant RAA = 3.6 Wes Brown Plant RAA = 1.5	ppt	Consumer products, firefighting foam	N/A
PFBS	Hazard Index < 1.0 (unitless)		0.0 - 0.5	N/A	Consumer products, firefighting foam	N/A
PFHxS	Hazard Index < 1.0 (unitless)		0.0 - 0.5	N/A	Consumer products, firefighting foam	N/A
PFNA	Hazard Index < 1.0 (unitless)		0.0 - 0.5	N/A	Consumer products, firefighting foam	N/A
GenX	Hazard Index < 1.0 (unitless)		0.0 - 0.5	N/A	Consumer products, firefighting foam	N/A

Secondary Standards [Non-health based]						
Contaminant/Parameter	SMCL	Range of Results [min-max]	Units	Typical Sources	Violation?	
Chloride	250	47 - 173	ppm	Erosion of natural deposits	N/A	
Sulfate	250	70 - 187	ppm	Erosion of natural deposits	N/A	
Calcium	N/A	50 - 73	ppm	Erosion of natural deposits	N/A	
Potassium	N/A	4 - 10	ppm	Erosion of natural deposits	N/A	
Magnesium	N/A	12 - 18	ppm	Erosion of natural deposits	N/A	
Sodium	N/A	63 - 100	ppm	Erosion of natural deposits	N/A	
pH	6.5 - 8.5	7.4 - 9.0 Average = 8.1	N/A	Corrosion control	N/A	
Iron	300	0 - 60	ppb	Erosion of natural deposits, industrial wastes, used in water treatment	N/A	
Manganese	50	0 - 34	ppb	Erosion of natural deposits	N/A	
Total Dissolved Solids (TDS)	500	195 - 679	ppm	Runoff/Erosion of natural deposits	N/A	

# Definitions

**Primary Standards:** EPA has established National Primary Drinking Water Regulations (NPDWRs.) Legally enforceable standards that apply to public water systems. These standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and which are known or anticipated to occur in public water supplies.

**Secondary Standards:** EPA has established National Secondary Drinking Water Regulations (NSDWRs) that set non-mandatory water quality standards for 15 contaminants. EPA does not enforce these “secondary maximum contaminant levels” (SMCLs). They are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.

**MCL:** Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available water treatment technology.

**MCLG:** Maximum Contaminant Level Goal. 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.

**SMCL:** Secondary Maximum Contaminant Level. These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

**Removal Ratio:** A value greater than or equal to one indicates that the required amount of TOC is being removed.

**AL:** Action Level. The concentration of a contaminant, which if exceeded, triggers treatment or other requirements a water system must follow.



Thornton Water Treatment staff monitoring water quality



State of the industry water treatment at Thornton Facility

**N/A:** Not Applicable

**NTU:** Nephelometric Turbidity Units, used in the measurement of clarity.

**pCi/L:** Picocuries per Liter, used to measure radioactivity. A picocurie is one ten-thousandth the energy emitted from one gram of radium.

**ppm:** Parts per Million (also known as mg/L). A unit used to express the concentration of an element or compound in a liquid. One part per million is equivalent to one teaspoon of salt in 2,000 gallons of water.

**ppb:** Parts per Billion. A unit used to express the concentration of an element or compound in a liquid. One part per billion is equivalent to one teaspoon of salt in 2,000,000 gallons of water (more than three Olympic-sized swimming pools).

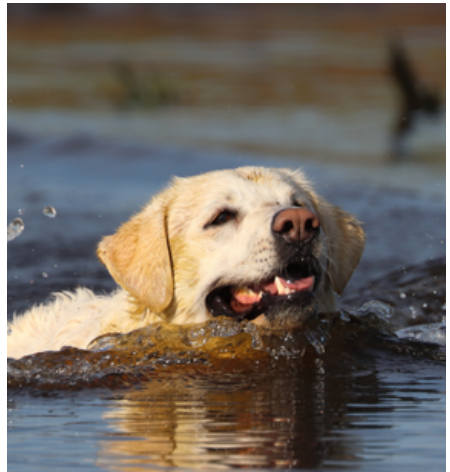
**ppt:** Parts per Trillion. A unit used to express the concentration of an element or compound in a liquid. One part per trillion is equivalent to one drop in over 10 million gallons of water.

**RAA:** Running Annual Average. The average value over the last 12 months.

**LRAA:** Locational Running Annual Average. The average value over the last 12 months taken at one specific site.

**PFAS:** Per- and Polyfluoroalkyl Substances. A group of synthetic compounds used in many consumer goods and manufacturing processes. They can accumulate in the environment and human body due to their extreme resistance to natural degradation.

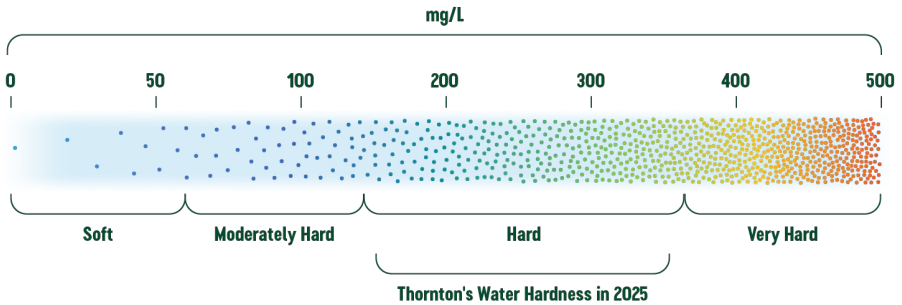
**Health Index:** EPA tool to understand the health risk from chemical mixtures.



# Hardness of Thornton Water

Hardness is a measure of calcium and magnesium minerals in the water. Water naturally dissolves minerals as it comes into contact with rocks and soil. While not harmful to health, hard water can cause aesthetic problems like mineral build-up on dishes, fixtures, and in pipes. Thornton's water hardness can vary greatly during the year and by location within the city. **Hardness varied between 152 mg/L and 356 mg/L in 2025, averaging around 230 mg/L or 13.5 grains per gallon.** These values are typical of water systems in the western United States, which tend to have higher hardness than other parts of the country.


Thornton's water treatment plants do not remove hardness. Homeowners and businesses may reduce the hardness by installing systems like softeners and reverse osmosis units. Please contact the city's Water Quality Laboratory if you would like to know the hardness at your specific location or have any questions on the treatment systems.



# Steps of Progress

Thornton continues to make investments in water treatment infrastructure to provide residents with the best possible water.

The city continues to move forward with efforts to reduce PFAS in its drinking water while holding manufacturers of the chemicals financially accountable. PFAS are persistent industrial and consumer product chemicals linked to health risks. In 2025, the U.S. EPA signaled it may extend the PFAS National Primary Drinking Water Regulation compliance deadline to 2031, but Thornton is maintaining its original timeline to meet the April 2029 deadline. The city has been working with engineering consultants to design and build new treatment technologies to remove PFAS at its Thornton Water Treatment Plant on Thornton Parkway. Construction is expected to begin by June and overall completion anticipated in late 2028. In the meantime, source water blending techniques at the water treatment plants keep PFAS levels below the EPA's Maximum Contaminant Levels.



**We manage PFAS levels through source water blending**

**We are maintaining our timeline to meet 2029 PFAS regulations**

**Our PFAS treatment upgrades are on schedule for 2028**



Calibrating instruments at the water treatment facility

To help offset treatment updates and costs, Thornton has pursued legal action against PFAS manufacturers. The city has received \$8.4 million from a settlement with 4M and \$1.28 million from DuPont, 1.4 million from TYCO, and \$600 thousand from BASF. An additional \$5.8 million from 3M will be paid in installments, and further settlements with several smaller manufacturers are expected in the coming years. These settlements are part of a broader legal and regulatory push, as the city joins multi-district litigation against chemical manufacturers alleging contamination of water supplies. All settlement funding helps offset the capital and operational costs of implementing the treatment systems.

Meanwhile, the city continues constructing the 70-mile pipeline to deliver water from the Cache la Poudre for use in Thornton. To date, the pipeline is over 50% constructed with over 45 miles completed in Weld and Adams counties. Other segments are undergoing active construction or design. The pipeline is scheduled for completion in 2028. Please check [thorntonwaterproject.com](http://thorntonwaterproject.com) for more information and updates on the project.



Construction of the Thornton Water Project pipeline



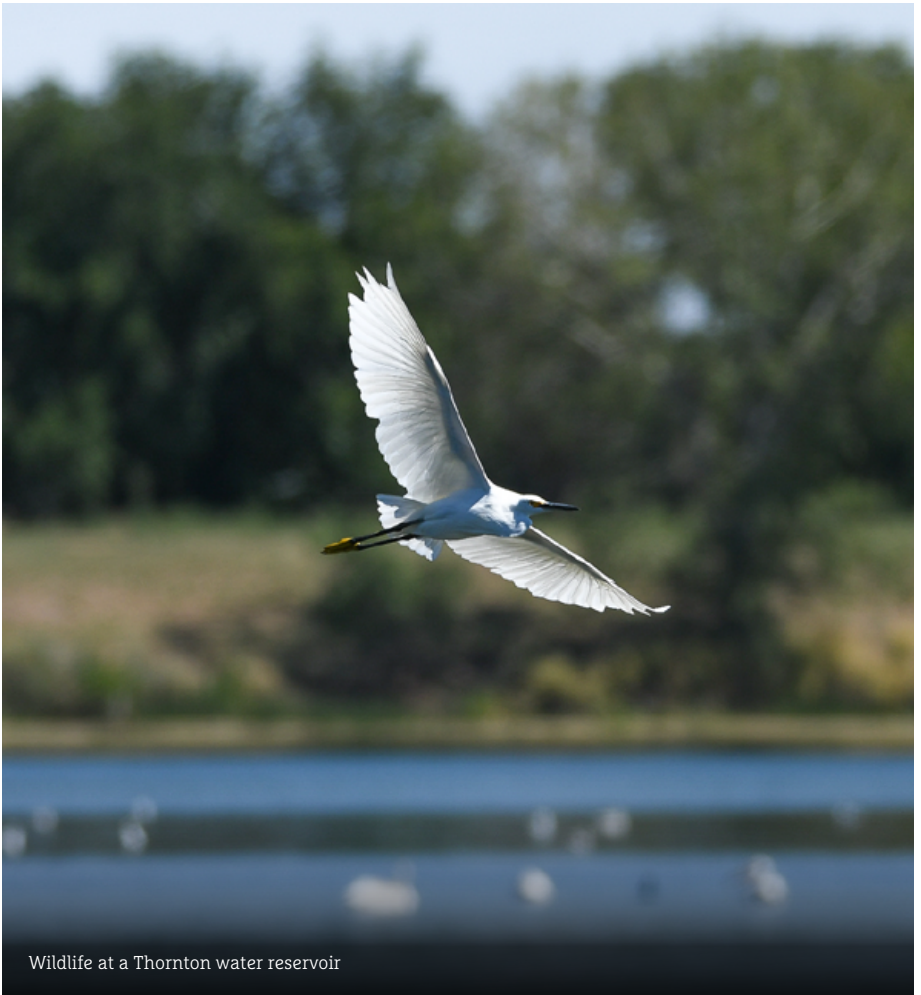
Collecting samples in the distribution system

## Water Sample Collection

Water Quality staff sample at nearly 40 sites within the service area each week, year-round. For the most recent test results in your area, please call the **Water Quality Information Line at 303-255-7770**.



Laboratory analysis for water hardness



Wildlife at a Thornton water reservoir

## For Water Quality Information

It is vitally important that our customers are aware of the quality and safety of the water they are drinking. Please contact Water Quality if you have further questions or concerns.



**Website** – [ThorntonCO.gov/waterinfo](https://ThorntonCO.gov/waterinfo)



**Email** – [waterquality@ThorntonCO.gov](mailto:waterquality@ThorntonCO.gov)



**Phone** – 303-255-7770

