

#### **HISTORY**

Oscar Arnold sold the land for the Water Treatment Facility and Northwest Open Space to Northglenn with the caveat that his farming equipment would be kept on display permanently.



#### INTRODUCTION

## Northglenn's Water Treatment Facility operates 24 hours a day, 7 days a week, 365 days a year.

We are a conventional water treatment plant, rated for 14 Million Gallons per Day (MGD) and serve around 39,000 residents. The facility treats approximately 2.5MGD in the winter and up to 10MGD in the summer.

The operators responsible for producing your great tasting water are certified and licensed by the State of Colorado. Your water is carefully monitored, from the source water to the finished product. So when you turn on your faucet at home, you can trust your tap!



## WATER TREATMENT FACILITY

#### **OUR MISSION**







Our mission is to provide you and your family with safe and reliable drinking water. Your high quality water starts with snowmelt sourced from the top of Berthoud Pass and concludes when it reaches your tap.

Through hard work and dedication, state licensed operators ensure your drinking water meets or exceeds all state and federal drinking water standards. Investing in plant upgrades, new treatment technologies and operator continuing education ensures that the highest quality water is delivered to your home.

Staff performs over 70,000 analysis each year. Water samples are collected and analyzed starting at the source water, through canals, rivers and lakes feeding into the treatment plant. Samples are also collected outside your home at the meter.

#### **CONTACT INFORMATION**

| 303.451.1289 | Plant 24-Hour Line                    |
|--------------|---------------------------------------|
| 720.879.2697 | Shaun Hollstrom, Chief Plant Operator |
| 303.450.4050 | Jason Hensel, Utilities Manager       |
| 303.280.7803 | Water/Sewer Line Issues               |
| 303.451.1289 | After Hour Water/Sewer Line Issues    |
| 303.450.8700 | Utility Billing                       |

# WATER TREATMENT PROCESS 1 RAW WATER STORAGE

Water from Standley Lake is conveyed through a 48" pipeline to our Terminal Reservoir (TR). The TR has the capacity to hold 40 million gallons of water, roughly a four day water supply in the summer. In addition to water storage, the TR allows for the settling of particles.



## 2 RAPID MIX

Water flows by gravity from the TR into the Rapid Mix. Raw water is dosed with a primary coagulant and a coagulant aid then is immediately mixed in a matter of seconds in the rapid mixer also known as a flash mixer.



After the Rapid Mix, partially treated water flows into Flocculation basins where water is slowed down allowing the coagulants sufficient time to blend with free floating particles found in raw water, bonding together forming what is known as floc.





## SEDIMENTATION

After the floc is formed, water flows into the clarifiers. Sedimentation takes place here as water is slowed even more allowing the floc, which is strong and dense to settle out. Clarified water, called supernatant, flows over the weir and is dosed with a disinfectant. Treated water then gravity flows to the filters. The floc that settled, now known as sludge, is collected at the bottom of the clarifiers, where it is removed for further processing with our residuals management.



## FILTRATION 5

Clarified water, although cleaner, still needs to be purified through filtration. Water flows through several layers of multimedia at a rapid rate using a Leopold Underdrain System. Treated water's pH is then adjusted for corrosion control and flows into the clearwells.

Resulting in a trusted source of safe drinking water.

## TREATED WATER STORAGE

Treated water is stored onsite in clearwells before being sent to the distribution system, storage tanks and ultimately ending up at your home.

### LOW ZONE TANKS

Three Low Zone Tanks are located next to the Justice Center. These tanks hold a combined total of 7 million gallons of treated water ready for delivery to your home.







# Nörthglenn



# **ADDITIONAL STORAGE**

HIGH ZONE TANK Located near 104th and Ura Lane, holds 750,000 gallons

Lane, holds 750,000 gallon of treated water.

