

CHATFIELD EAST WATER HISTORY

Our community was formed in 1978. We did not have city water or sewer. All lot owners had to apply for well permits and drill a well for water. Fortunately, there are 3 aquifers (Denver, Arapahoe, and Larimer/Fox Hills) under our lots. The original wells were drilled into the Denver aquifer. Because there were so many wells in this aquifer, the State required Chatfield East Property Owners Association (CEPOA) to replace the water withdrawn from the Denver aquifer by drilling a deep well into the Larimer Fox Hills aquifer and pumping that water into Plum Creek so that it would go downstream to other users. Our pumping requirements were based on 100 homes at maximum use equal to 9.5 million gallons of water per year.

Eventually (around 1990) the Denver wells started drying up. Some homeowners wanted to drill a new well into the next deeper aquifer (Arapahoe) but the Developer claimed he owned that water and homeowners would need to pay another fee to drill into that aquifer. In 1995, CEPOA sued the Developer and won the right to drill into the Arapahoe aquifer. 21 homeowners drilled wells into the Arapahoe aquifer.

For 20 years, CEPOA realized the need for a sustainable source of water (stream water that is replenished with rain and snow) that would be administered by a governmental agency. Many CEPOA members worked hard trying to find a sustainable source of water. Finally, in 2017, Douglas County offered us a sustainable source of water through Roxborough Water District. Our community voted to accept the terms which included a property tax increase (about \$1,000 per year), purchase of a residential water tap (\$18,000), and commitment to buy household water from Roxborough. All homeowners also paid a small monthly fee (\$26) for 5 years for the development of the water plant. Having a sustainable source of water that is managed by a governmental agency is a huge advantage for CEPOA homeowners, property values have increased and potential home buyers no longer shy away from our community because of well water issues. CEPOA homeowners were allowed to keep their wells, the Denver wells can only be used for irrigation and livestock while the Arapahoe wells can be used for domestic, irrigation and livestock purposes.

However, the court order for CEPOA to provide 9.5 million gallons of augmentation water each year was a significant problem. The deep augmentation well, when operable, cost us approximately \$10,000 per year to operate. In 2020, the deep well failed. The cost to fix the well was estimated at \$400,000 which would have required a special assessment from each lot owner. Members voted to buy augmentation water from the Town of Castle Rock via the Substitute Water Supply Plan (SWSP) while we pursued efforts to modify the Water Decree to eliminate the need for pumped or supplemental augmentation water while allowing a small percentage of lot owners to continue using their Denver wells for stock and agricultural purposes. The Water Decree was finalized and filed May 18, 2023 and complete when filed in the Douglas County Real Property Records.

The Water Decree requires the 22 lot owners listed in the decree who wish to continue using their Denver aquifer well to file an application for a new well permit with the State Engineer via the Colorado Division of Water Resources. The application must be filed within six months of the decree filing date and include an affidavit confirming ownership of the water and decree compliance. A template for the affidavit is attached to the decree.

Well requirements are summarized in Table 1.

Table 1. Chatfield East Denver and Arapahoe Aquifer Well Requirements

	Denver Aquifer	Arapahoe Aquifer
Does an existing well still in use require a new permit?	Yes, deadline to file is Nov 18, 2023. Only the 22 lots listed in the decree are allowed to use their wells.	No
How were the 22 lots in the Water Decree determined?	From those who answered NO to question in Sept 2021 Well Report that they would be willing to discontinue use of their well	NA
How much is a new well permit?	\$100, see CO Div of Water Resources for fee schedule and payment options	NA
Does an existing well no longer in use need to be capped?	No	No
Can a new well be drilled?	Yes, only by the 22 lots listed in the decree to replace an existing well for stock and irrigation purposes only. Requires approved well permit.	Yes, new wells may be drilled by any lot owner for interior domestic, stock and irrigation use. Requires approved well permit.
Does a well in use need to be metered?	No	Yes
How are wells monitored?	Annual reporting by 22 lot owners on number of horses and irrigation area submitted to CEPOA to compile in annual report.	Annual reporting by 21 lot owners by reading water meter and submitting to CEPOA to compile in annual report.
How is well water use augmented?	By 5.4 acre-ft Guiraud 3T Ditch water rights owned by CEPOA for May-Sept, by SWSP leased water from Castle Rock for Oct-April	By well return flows when pumping and by 0.53 acre-ft Guiraud 3T Ditch water rights owned by CEPOA for post pumping

Note that a new well may cost \$30,000 - \$50,000 and requires an approved well permit. Since another water supply is available, a lot owner will need to prove need for the well to obtain a permit.

Since pumped augmentation is no longer required, CEPOA water rights could be sold like any other real property. The approximate amount of water rights owned by CEPOA and the estimated values are summarized in Table 2.

Table 2. CEPOA Water Right Amounts and 2023 Estimated Value

Source	Amount	Estimated Value
Arapahoe Aquifer	65.81 acre-ft	\$1k-\$2k/acre-ft
Denver Aquifer	~30 acre-ft	\$0.5k-\$1k/acre-ft
Laramie Fox Hills Aquifer	25 acre-ft	\$2k/acre-ft
G3T Ditch	8.43 acre-ft less transit loss leaves 8.055 acre-ft for use by CEPOA; 2.125 acre-ft not used for augmentation (1)	\$35k/acre-ft

(1) Sell or use could require leasing additional water from Castle Rock

Note the Arapahoe and Denver water rights are not as valuable as or of as much interest as others due to the augmentation requirements to use the water. Accessing any water sold in aquifers below the open spaces would probably require pump stations, pipelines and access roads in the open spaces. A property adjoining the open space might be able to access the water from their property.