

## Frequently Asked Questions

### Why is the water in a drinking glass sometimes white?

The cold water being pumped up by the well pumps holds more dissolved oxygen than the warmer water being pumped into our distribution system. Pressurized water holds more oxygen than non-pressurized water. When the warmer, non-pressurized water is released into the atmosphere, the dissolved oxygen comes out of solution in the form of bubbles.

If you have good hearing, you can put your ear to a full glass of water that has a white appearance, and hear the bubbles popping; otherwise, you can feel a gentle spray. The glass of water soon clears as the bubbles dissipate.

### What are the white deposits on shower doors and plumbing fixtures?

The white deposits are caused by calcium carbonate. Water with calcium dissolved in it is referred to as “hard water”. This hardness does not have any bad health effects. Calcium is an important element in the diet.

By comparison, Hetch Hetchy water, which serves neighboring communities such as East Palo Alto, other parts of Menlo Park, and Palo Alto, is “soft,” meaning it has minimal dissolved calcium.

	Dissolved Calcium	
O’Connor Water <sup>a</sup>	53 part per million (Well #1, used most often)	64 parts per million (Well #2)
City of Palo Alto Water (Hetch Hetchy) <sup>b</sup>	12 parts per million (average)	

<sup>a</sup> 2020 Consumer Confidence Report <sup>b</sup> 2019 Consumer Confidence Report

In a comparative taste test of O’Connor water (groundwater, coming from wells) and Hetch Hetchy water (surface water, coming mostly from snowmelt), two different tasters (a board member and an employee) remarked that the O’Connor water is “smoother, rounder, mellower”; and has “a medium earthy taste”; while the Hetch Hetchy water is “sharper, brighter”; and has a “mildly crisp mineral taste.” Both tasted good, but subtly different.

It is impractical to remove calcium from the source water from the wells, although some owners have installed water softeners. The water softeners will greatly reduce calcium buildup, but if your water softener uses added salt, you might not want to drink this

water. One technique used in the neighborhood is to have a faucet connected directly to the water supply to be used for drinking and cooking, bypassing the softener.

Other neighbors connect the water softener only to the hot water and use the cold water for drinking and cooking. In fact, it is a good idea, whether you have a water softener or not, to use only the cold water for drinking and cooking, as the hot water can dissolve substances from your hot-water heater.

### **Does O'Connor Water recommend water softeners?**

No, O'Connor Water does not give recommendations for water softener brands, nor does it recommend whether to use a water softener or not. It's your choice.

### **I am installing a softener. What is the hardness of the water?**

The total hardness in Well #1 is 182 ppm (10.6 grains per gallon). In Well #2 it is 218 ppm (12.7 grains per gallon). Most of the water is drawn from Well #1.

If you do not use a water softener, there are some easy remedies to prevent or remove calcium deposits around fixtures, shower doors, and in your teakettle. The simplest is to have a spray bottle of white vinegar handy during cleaning. The acid dissolves the calcium. For especially thick deposits, you might want to try a stronger acid solution such as Lime-A-Way. Use with extreme care, as this solution is harmful to the eyes, to the skin, and harmful if swallowed. *Keep out of reach of children.*

Another less-common problem caused by hard water is calcium (lime) buildup in water pipes. If your pipes are very old and you are experiencing a gradual decrease in water pressure, you might want to check the pipes within your property to see if they need replacing.

### **Is O'Connor Water safe to drink?**

Yes! It is not only safe to drink but is periodically tested for contaminants, as required by State and Federal regulations. The Annual Water Quality Report (Consumer Confidence Report) detailing the findings of these tests are included on the home page of this website. Nonetheless, you may still ask....

### **Should I buy bottled water to drink?**

O'Connor Water consumers are fortunate to have access to high quality water. The water that flows from your faucet comes from the deep aquifers that feed our wells, and it is tested frequently for purity. Avoid the high cost, lower quality, and environmental impact of buying bottled water, and enjoy a glass of tap water today.

## What do you test the water for?

Many of the substances tested for appear in the Annual Water Quality Report (see the home page of this website). Substances that are detected appear in the tables for primary and secondary standards. Except for manganese, none of the detected substances triggered an action level, which means that no treatment is necessary. Many other substances were tested for to assure the safety of the water, but were not detected and, for the sake of brevity, are not listed on the Water Quality Report.

## What is manganese?

Historically, O'Connor Water has contained levels of manganese that exceed the secondary standard for this mineral (see below).

Manganese is a naturally occurring element found in rock formations, soil, and water, and it dissolves into our water by eroding from the ground from our deep-water wells. It is a required nutrient. The primary source of manganese for most people is the food they eat. Nuts, grains, fruits, legumes, tea, leafy vegetables, infant formula, and some meats and fish contain substantial amounts of manganese. It is even included in your multivitamin, with 2.3 mg listed as 100% of daily requirement in one common brand.

Manganese has no taste or odor. It cannot be seen when dissolved in the water but when it comes out of solution (precipitates out) and separates from the water, it can cause a gray or black deposit that you might see in your toilet tank, and may appear as dark color in the water.

## Is manganese harmful?

**Manganese has no bad health effects** except in much higher concentrations than is found in the O'Connor Water wells. The State Water Board Division of Drinking Water would require additional notification for potential health concerns (neurological effects) if the manganese level were 500 parts per billion (ppb) or higher. O'Connor water has never come close to that level. Our untreated water contains 62 ppb in Well #1 and 145 ppb in Well #2. (2020 CCR)

Manganese is regulated by a 0.05-mg/L (50 ppb) secondary maximum contaminant level, a standard established to address esthetics (such as discoloration), but not health concerns.

Because O'Connor Water's wells exceed this 0.05-mg/L secondary standard, the Company is working on a treatment system to remove the manganese contained in our water.

## **When will the treatment plant be ready?**

This project is scheduled to be completed in early 2022.

## **Will the treatment plant treat the hardness?**

No, it is impractical to remove calcium from the source water from the wells.

## **What should I do if I have black water after the mains are flushed or the water was turned off for repairs?**

For a few minutes following flushing, some sediments might get into your homes plumbing. If this happens, please be patient and allow your **cold** water to run for a few minutes at full velocity. During this time, you should **avoid using hot water to prevent sediment accumulation in your hot-water tank.**

Remember that flushing is aimed at maintaining *long-term* water quality, but it could result in some *short-term* effects (in case all of the sediment is not removed). Signs are posted advising when flushing operations are scheduled on your street. **If possible, try not to use water during the flushing period.**

The installation of our treatment plant will eliminate the problems with dark water.