

# WATER QUALITY: Discoloration

Managing water quality

The source of water discoloration is either the water distribution system or private plumbing.

Events that cause discoloration in our distribution system can range from dead-end mains, main breaks, valve work, the use of fire hydrants and construction. Most commonly, discoloration that occurs in the distribution main causes discoloration in private plumbing if a private service line is pulling in water from a stirred up main for 24 hours.

Events stemming from private plumbing that can cause water discoloration include corrosion, faulty plumbing, issues with the water heating system, air in the lines, and cross connections. If you are experiencing water discoloration, flushing your service line often helps alleviate the issue. Review our <u>Service Line Flushing</u> instructions to perform this.

# How to determine the source of discoloration:

Capture a sample of water in a clear, clean glass to inspect the color of your water.

- 1. Is the discoloration in the hot or cold water, or both? Try the cold tap first from a faucet that has separate hot and cold handles. If it is only in the hot water, it might be a water heater system issue. If hot and cold flow from the same faucet, try checking outside (see #2).
- 2. Check your outside spigot. Try running the water for a few minutes from the spigot to see if the discoloration occurs here by capturing it in a clear, clean glass. Your outside spigot on the front of your home is a good representation of your service line. If there is no discoloration here, the issue is likely in your internal plumbing, and it would be best to try flushing procedures. If the water is discolored, the distribution main may be stirred up.

# I followed flushing instructions, but my water is still discolored.

While flushing your service line usually alleviates discoloration, there are times it will not help. For example, if the water main is stirred up, flushing your line will not fix the issue. The water main needs time to settle, otherwise, your service line will continue pulling in discolored water. Once the main settles, flushing can help clear the service line.

# Why is my water red/brown?

Red or brown discoloration in water can often be a sign of corrosion.

Red can signify iron in the water. If the discoloration presents itself momentarily and then clears, it may be a sign of a corroded piece of plumbing that has broken loose. If a rusty color presents itself in only the hot water, your hot water heater may require maintenance.

If you experience this form of water discoloration in only your hot water, referring to your hot water heater's manufacturer for flushing instructions or consulting a plumber is suggested since there may be internal issues in the hot water tank and require maintenance.

If you see this kind of discoloration but are not experiencing any staining on areas like sinks, tubs, or toilet bowls, we recommend following the flushing instructions to clear your line. If the discoloration continues past 48 hours, call our Customer Service Center at 448-4800 and we will try flushing from a hydrant.

**NOTE:** recent construction or hydrant use in your area can stir up the water in the main line, resulting in discoloration. Once the water in the main line settles, follow flushing instructions to clear any discoloration that has entered your private line.

## Why is my water cloudy?

White or milky colored water is commonly caused by air in the water lines. The air may be present in the private plumbing of your home or building, or in the main lines of our system. This can be caused by construction work in the area, the system needing flushing, hot water heater temperatures, high points in internal plumbing, or temperature fluctuations from the main line into the lines within your private plumbing. White or milky discoloration that does not settle in a container after a few minutes could be the result of zinc or other minerals, galvanized plumbing, or the need for service on a in home treatment device.

## The solution:

Is the issue in the hot water, cold water, or both? If the color is in both the hot and cold water, but settles after a few minutes, then the cause is air in your water.

If you see white or milky color in only the hot water, we recommend checking the heat setting on your hot water heater to make sure it is not set too high. If the color does not settle after a few minutes, it's best to have a licensed professional check your plumbing for other issues.

If you are concerned that the cause may be zinc or other minerals, our <u>Water Quality Report</u> can provide more insight on the average levels of those minerals in our water.

# Why does the water in my bathtub look blue/green?

Treated drinking water appears almost colorless. At higher volumes of water – such as what a full bathtub can hold – it can appear to have a blue or green tint because of varying wavelengths of light that reflect off the water's surface. This can often be attributed to wavelengths emitted by lightbulbs in the bathroom.

If you experience blue/green *staining* on or around plumbing fixtures within your home, that is often a sign of corrosion in your internal plumbing. It could also indicate a need for maintenance on your water heater tank: the anode rod in your water heated is in place to protect your water heater from corroding and can require replacement every 3-5 years. It's also possible that the blue/green-tinted water is a result of naturally occurring sulfates in certain source waters interacting with pipe infrastructure materials. The continuous monitoring of our system includes metals testing, the results of which can be found in our <u>Water Quality Report</u>.

## The solution:

The best way to test the color of your water is to fill a clear glass and hold it up to natural lighting to analyze if there is any existing color in the water. If you suspect plumbing issues, please consult a licensed professional.

## Why do I sometimes see black particles in my tap water?

Black particles can appear in tap water from the disintegration of rubber materials used in plumbing fixtures. Plumbing gaskets and O-rings disintegrate over time and can collect in places like toilet tanks and faucets.

These particles can also result from the use of filters attached to plumbing systems or from water pitchers that utilize a carbon filter to remove contaminants. Small carbon particles can pass through the filters into the water. We recommend following the manufacturer's instructions on the rinsing and installation of these filters.

Black particles can also come from the presence of manganese in water. Manganese is a mineral found in water and can present itself as black deposits on fixtures.

## The solution:

Flushing your service line will likely solve the issue. If the problem continues after flushing and you have determined the source is not from a rubber gasket or filter, please contact us at **448-4800** or email <u>waterquality@csu.org</u> to help troubleshoot the problem.

# What is the pink/gray stuff growing in my toilet?

This is not a water quality issue. Airborne bacteria -- most commonly Serratia Marcescens -- thrives in moist environments with stagnant water or exposure to open air. These bacteria can present themselves in a relatively short amount of time after cleaning and require consistency to help combat bacterial growth.

## The solution:

- Dry wet surfaces when possible.
- Use a good cleaning product and gently scrub the impacted areas; continue routine cleaning to combat the issue from becoming more persistent.
- If the issue becomes persistent, bleach can be a good option for cleaning surfaces on which the bacteria appear.
- Avoid aggressive or abrasive cleaning, which can leave micro scratches on surfaces or cause damage to porous areas. leaving more places for the bacteria to grow.