WATER QUALITY
FACT SHEET

Discolored Water

Cloudy Water

Cloudy or milky water may be caused by harmless, tiny air bubbles in the water. Let the water sit for 5-10 minutes; the bubbles will gradually rise to the top, and the water will clear up on its own. These tiny bubbles are more common in winter because air is more soluble in colder water. If your water does not clear up on its own, or white particles settle to the bottom, please call customer service at 843-987-9200.

Mineral Discoloration

As is common in water systems across the country, mineral sediment and even rust in pipes can be disturbed by water main breaks, pressure or velocity changes, construction activity, fire hydrant use or other events which may result in discolored water at your tap. The discoloration from mineral deposits caused by naturally occurring minerals like iron and manganese can range from the appearance of light beer to iced tea or, in extreme cases, black coffee.

Discoloration from rust resulting from legacy galvanized pipes usually appears as burnt orange or red. When these sediments in the distribution pipes are disturbed, water discoloration may reach your faucets.

Discoloration from both pipe corrosion and mineral deposits has the ability to stain laundry, especially light-colored fabrics. Avoid washing laundry if you notice discolored water. If you notice orange, red or brown staining after laundering clothes you may have success removing stains with a 1:1 mixture of white vinegar and clean water or commercial stain removers designed to remove rust or minerals.

What to do if you notice discolored water at your tap

Run your cold faucet (not hot) close to where the water line enters your home. The water should run clear within 5-10 minutes. If it does not clear, call Customer Service at 843-987-9200 or email info@bjwsa.org. BJWSA crews will respond to the affected area and flush the hydrants to let the discolored water flow out of the system. Please note that flushing can, and will, disturb mineral deposits and cause short-term discoloration.

It is important to not run your hot water to clear discolored water so that the minerals aren't drawn into your hot water heater. Minerals drawn into your hot water heater can cause the discoloration to last longer.

Even if you are in an apartment or don't pay your water bill directly, it's important to alert BJWSA to discolored water events if running cold water for 5-10 minutes does not resolve the issue.

Should I use water that is noticeably discolored?

Minerals such as iron and manganese are important to human health. However, since discolored water is not aesthetically pleasing and the mineral content is visible, avoid using noticeably discolored water for drinking or cooking. It can also cause laundry stains, especially in light-colored fabrics. Wait for water to run clear before such uses.

Recurring, sporadic discolored water incidents south of the Broad River

BJWSA is aware of the recurring discolored water events in several neighborhoods, especially south of the Broad River. We are working to address the issue and have hired industry experts to study the issue and recommend solutions.

The main problem in these specific areas is an accumulation of manganese in the water mains. Manganese is one of the most abundant minerals on the Earth's surface and can be found in air, water and soil. Most people ingest this important mineral by eating foods like grains, spinach, nuts and shellfish.

Levels of manganese in the water leaving our treatment plants are low (average .04mg/L). However, over the years, small amounts were able to settle and

accumulate inside the pipes. Now, when the water in those pipes changes pressure, flow direction or velocity as the result of things like higher water demands, water main breaks, construction activities or hydrant testing, the manganese can be disturbed and cause yellow, brown or even black discoloration.

What we're doing to address the acute discolored water along problematic water mains

Solutions Currently Underway:

- **Tracking locations of discolored water** and pinpointing problematic mains.
- **Reducing already low levels of manganese** (average 0.04mg/L) in treated water leaving our water plant to decrease future sediment buildup.
- **Minimizing the number of mineral-disturbance events and encouraging participation in our Irrigation Management Plan** to help prevent pressure, velocity and directional flow changes.
- **Improving communication to let you know when we can predict disturbances**, so that customers have fewer surprises.
- **Undertaking strategic, directional water main flushing** to help scour and eliminate accumulated minerals in problem areas.

Long-Term Actions:

- **Doubling treatment capacity of the Purrysburg water plant.**
    - Project is underway and expected to be complete in 2025.
    - Will help prevent low pressure, water turbulence & changes in flow direction by providing a more consistent supply of treated water.
- **Investing in additional system storage and water main replacements.**
- **Considering alternatives** from expert consultants which may include more advanced pipe-scouring techniques.

Thank you for your patience as we work to reduce the appearance of discolored water in the system.