



NORTH  
TEXAS  
MUNICIPAL  
WATER  
DISTRICT

North Texas Municipal Water District

# TASTE AND ODOR

REGIONAL SERVICE THROUGH UNITY...MEETING OUR REGION'S NEEDS TODAY AND TOMORROW

## North Texas Municipal Water District

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### FAST FACTS:

80  
COMMUNITIES  
SERVED

SERVICE AREA:  
2,220  
SQUARE MILES IN  
10 COUNTIES

1.7 MILLION  
POPULATION  
SERVED



WATER



WASTEWATER



SOLID WASTE

## FREQUENTLY ASKED QUESTIONS (FAQ) ABOUT DRINKING WATER TASTE AND ODOR

Throughout the year, environmental factors such as hot and cold weather may create conditions in our lakes that cause the taste and odor of the water to change. Upgrades in our treatment process have proven very effective at minimizing those changes, but people who are sensitive to tastes and odors may notice a slight difference.

### What causes taste and odor changes in my water?

Most taste and odor changes are the result of naturally occurring algal blooms during certain times of the year. Algal blooms usually occur in Lavon Lake in late July and into August each year, but can occur at any time if the right conditions exist in the reservoir.

- **Summer Algal Blooms**

During extended periods of high temperatures, conditions become ideal for an "algal bloom." Summer algal blooms occur when high temperatures warm the reservoirs, little or no rainfall has occurred, and sunlight penetrates the water allowing photosynthesis to occur. When these conditions are present, the blue-green algae species Nostoc and Anabaena will reproduce or "bloom." Summer algal blooms can cause the water to take on a grassy or earthy taste and/or odor.

- **Winter Algal Blooms**

While mid-summer algal blooms are more common, infrequently a winter algal bloom can create taste and odor changes in the water supply during cooler weather patterns. Winter algal blooms can cause the water to take on an earthy, musty or metallic taste and/or odor.

- **Annual Temporary Change in Disinfectant (also known as chlorine maintenance)**

Each spring for one month, NTMWD temporarily suspends the use of ammonia and uses free chlorine as the secondary disinfectant to maintain water quality year-round. Some people may notice a stronger smell or taste of chlorine during this time. While chlorine levels are consistent with the rest of the year, the temporary suspension of ammonia can make the smell or taste more noticeable. The water remains safe to drink and use. Learn more about the temporary change in disinfectant on our website - [NTMWD.com/SafeWater](http://NTMWD.com/SafeWater).

### Is the water safe to drink and use?

Yes. Taste and odor is just a palatability issue and does not indicate that anything is wrong with the water. It does not alter the quality of the water, and the water supply remains safe for use with no health risks created by either the algal blooms or annual temporary change in disinfectant.



## WATER TASTE AND ODOR FAQ

(CONTINUED)

### What are the conditions for an algal bloom to occur in Lavon Lake?

In general, algae prefers stable conditions with low winds, warm temperatures, plenty of light and lots of nutrients. When all of these conditions are met, photosynthesis takes place and the algae begins to “bloom.” The three major factors for algal blooms are:

- **Nutrients**

Nutrients such as nitrogen, phosphorus and calcium promote and support the growth of algae, most of which come from landscape, runoff and soil erosion or decaying vegetation in the lake.

- **Temperature**

Blue-green algae thrive in lake water between 80°F - 85°F, which is common during extended periods of long, hot summer days.

- **Turbidity**

Turbidity refers to water cloudiness caused by the presence of stirred up particles and organic matter. When the lake is turbid, or cloudy, algae growth is slowed because less light penetrates the water’s surface. When the lake is clear with low turbidity, more light can penetrate the water’s surface and spur algal growth. Turbidity is most affected by rain events, or the lack of rain.

### How does NTMWD manage taste and odor issues?

Our laboratory conducts water quality tests on more than 250,000 water samples per year. These tests include the detection of any pathogens or bacteria as well as algal counts to confirm the occurrence of an algal bloom and the species that are responsible for any changes in taste and odor. Current treatment processes allow us to reduce, but not eliminate entirely, taste and odor issues.

The most powerful tool in our arsenal against taste and odor related to algal blooms issues is the conversion to ozone as the primary disinfectant in our water treatment process. Completed in 2015, ozone disinfection is a specialized and complex process that is 100 times more powerful than chlorine disinfection and has the added benefit of greatly reducing most taste and odor issues.

**QUICK TIP: Try a slice of fruit in your water, like lemons, limes or oranges to brighten the taste.**

For additional tips on taste and odor related to our annual temporary change in disinfectant, visit [NTMWD.com/SafeWater](http://NTMWD.com/SafeWater).

