

Summer sometimes brings a change of odor and flavor in the public water supply. This is not a health hazard.

This fact sheet has been developed to answer questions in regards to the taste and odor changes of the drinking water supply during the hot summer months.

- Is the water safe to drink?

Yes. The taste and odor is a palatability issue. There are no health hazards created regardless of the taste and odor.

- What causes the taste and odor changes?

A natural occurrence in all surface water supplies, an “algal bloom”, is responsible for the taste and odor changes in the water supply. Algal blooms usually occur in late July and into August each year.

- What are the conditions for an algal bloom to occur in Trinidad Lake?

1. Nutrients must be present – such as nitrogen, phosphorous and calcium, which are derived from decaying vegetation in the lake.
2. Turbidity has lessened – the turbidity or cloudiness of the lake water has cleared up, allowing the penetration of the sunlight. This occurs due to lack of rainfall.
3. Temperature increase – the optimum temperature range of the lake water for an algal bloom to occur is between 80 - 85. This is provided through many hot summer days.

When all conditions are met, photosynthesis will take place and the algae will grow or proliferate. Algal species, such as anabaena, secrete an “oily” substance from their cells that causes an odor in the water supply. Aquatic fungi, actinomycetes, grow on dead and decaying algae and cause an earthy taste in the water.

4. What steps are being taken to control the taste and odor?

The City of Trinidad utilizes several steps to control the taste and odor produced by the algal blooms. Gene Burns, water plant operator, through daily analysis, performs algal counts and can determine the onset of an algal bloom. With the onset of an algal bloom, additional chemicals are added to the treatment process.