



*Iron-oxide deposits (as shown above in Sturtevant Creek) occur naturally in streams and lakes and are not harmful to fish or people.*

## Why is the water orange?

***I've noticed an orange, slimy substance in a stream near my home. What is it?***

The orange, fuzzy deposits in this photo are called iron-oxide deposits. When iron bacteria (*Sphaerotilus-Leptothrix*) “feed” on iron in water, the dissolved iron reacts with oxygen in the air and forms rust-colored iron oxides. Iron-oxide deposits can be found in lakes and streams and often occur on hot, dry days when the water is sluggish. You may also notice an unpleasant odor.

### ***Are iron bacterial harmful?***

Although water with iron-oxide deposits looks strange, this process occurs naturally, is not toxic to fish and aquatic life, and does not pose an environmental health risk.

### ***Where does this type of bacteria come from?***

Iron is a common element found in water and soils. A small movement of earth into a creek can set off the process of iron bacteria forming iron-oxide deposits. Iron-fixing bacteria are not new. They have probably existed in streams for over a million years!

### ***I also noticed an oily sheen in the stream. What is that?***

Oily sheens often indicate that iron bacteria are present. These sheens are different from those caused by petroleum products, because they break apart when disturbed. Throw a stick into the water. If the sheen breaks apart into pieces, it is probably a result of iron bacteria. If the sheen just ripples but stays together, it may be due to a petroleum product, which can be harmful to fish.

### ***What can we do about iron-oxide deposits?***

Because iron bacterial is not harmful, the best thing to do is wait for the water to clear. Dissipation often occurs after a rain shower. If you see something that could be water pollution in Bellevue, please call the City of Bellevue Utilities Department any time at 425-452-7840, and we will investigate.



**City of Bellevue Utilities**  
**425-452-7840**