



Stormwater Management

Fact Sheet

Iron Bacteria

Red stains, oily films, and foam are commonly observed in Cobb County waterways. Often, these are not a sign of pollution, but are naturally occurring phenomena due to the presence of iron or organic substances.

Iron bacteria are typically rust colored, slimy, and have an oily appearance on the water's surface. The bacteria can be found in standing water, on the ground's surface, or in slow moving creeks and streams. These harmless bacteria bloom when oxygen, water, and iron combine.



Often, an oily, rainbow colored sheen can be observed on the surface of the water. This can be caused by iron bacteria, or by petroleum runoff from impervious surfaces. Iron bacteria can be distinguished from petroleum pollution by breaking the surface film on the water. A bacteria film will fragment and break up if disturbed. A petroleum-based substance will flow back into place after being disturbed.

The presence of foam is usually harmless. Naturally-occurring foam is released from algae and plants when they die and begin to decompose. Foam is often seen accumulating against logs or on the banks of streams. When it first appears, naturally-occurring foam can be white, but generally turns brown over time as sediment particles build up in the foam. Foam is produced as air, introduced in the turbulence of stream riffles, bubbles to the water surface.



Synthetic foam can be distinguished from naturally-occurring foam by size, color, and scent. It will be white and often "fresh and clean" smelling, and will dissipate quickly once the source is removed. Synthetic foaming agents include household products such as detergents, shampoos, toothpaste, and cosmetics. Foam from detergents and other synthetic sources will generally accumulate near the source and should not occur over long distances.

To learn more about stormwater issues in Cobb County, please call 770-419-6435 or visit www.cobbwater.org.

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