### ENIVIRONMENTAL SERVICES FACTSHEET



## Water Pollution

# Do you suspect pollution? What might look like "pollution" in our waterways is sometimes the result of natural processes.

Have you ever been down to your local creek and seen a reddish-brown or even orange coloured material in the creek?

You may also have noticed something that looks like oil on top of the water in the same location.

Sometimes you may see the same things where water is seeping out of the ground.

Chances are, what you are seeing is natural.

#### What is it?

**Oily Film** - Bacteria that live in waterlogged places get their energy from iron and manganese. As the bacteria grows and decomposes it may appear oily or form red or orange films.

**Brown or reddish water** - Dissolved organic material from the breakdown of plants and animals can leach into slow moving water staining it brown or reddish brown.

**Orange crust or rusty colour** – As water seeps towards the ground surface it brings iron with it and as it becomes exposed to air it turns a rusty looking colour.



**Green algae** – Algae is a microscopic plant that occurs naturally in water with high nutrients. It may not indicate the water is polluted, though it can be an indication of wastewater or fertiliser is entering the water.

**Foam** - As leaves decay, dissolved organic carbon is released into the water which floats to the surface as tiny clumps of white foam. Natural foam may smell fishy or earthy, and may be white, off-white, or brownish. It also breaks apart easily when disturbed. If the foam smells of effluent or fragrance, it may be from a near by spill or waste discharge pipe and you should contact Council.

#### Why is it happening?

Surface water and groundwater in the Shoalhaven is naturally high in dissolved iron because of the types of rocks found in some areas in which we live.

Our waters are also generally high in dissolved oxygen - perfect conditions for the iron bacteria to thrive in.

#### Is it natural?

#### 1. It should not smell toxic

It is possible that you might smell something that you might associate with decaying matter in a swamp. This is OK, as it is likely that the bacteria are dying (especially if they are being dried out in the sun). You should not be smelling things like petrol, oil, chemicals or sewage.

#### 2. The stick test

Sometimes oily sheens can come from spilled petrol, oils or other pollutants. A minor spill is usually enough to form a film across the surface of a large waterway.

Poke the sheen with a stick. If the sheen swirls back together immediately, it's probably pollution. If the sheen breaks apart and does not flow back together quickly, it is most likely from bacteria or another natural source.



If you suspect it is water pollution call Council's Environmental Health Team immediately on 4429 3610 between 9am and 5pm weekdays or 4429 3100 after hours.

