

Iron-Oxidising Bacteria

The bacterial breakdown of iron in water produces an iron oxide deposit; a bright orange, fuzzy or slimy-looking growth. Iron oxide bacteria are found in iron-rich water from groundwater seepage and during low water flows. It is very common in the summer months.

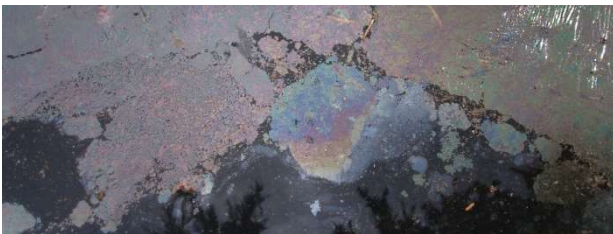
- Iron oxide deposits are non-toxic and are generally not associated with pollution
- A rainbow or blue oily sheen can be associated



Natural Sheens

To differentiate an oil sheen from a sheen produced from iron-oxidizing bacteria or natural biodegradation:

- Break the sheen up with a stick
- An oil sheen will swirl and reform
- A natural sheen will break up into small separate platelets



Natural Phenomena and Events

Wonders of Nature

Nature has helped produce stunning wonders around the world.

Some of these natural phenomena are so bizarre that it can be tough to believe they exist, but the breathtaking and eerie wonders reveal nature's immense power. From the northern lights to bioluminescence, the natural world provides for us some of the most stunning spectacles on the planet.



The Natural World Gets Ugly

Sometimes, the natural world produces sights that some may consider unsightly. Sometimes these events can even appear to be pollution caused by careless humans.

These are a few of these natural phenomena and events that we commonly see in the Auckland region, and can be mistaken for pollution. In the same vein, sometimes pollution can resemble natural phenomena!

If you are in doubt, don't hesitate to report it to the Pollution Response Hotline so it can be investigated by one of our trained, professional responders.

Report all spills immediately to the Pollution Response Hotline on 09 377 3107

Phone 09 301 0101 or visit
aucklandcouncil.govt.nz



Natural Phenomena

Preventing Pollution in Our Waterways



Phone 09 301 0101 or visit
aucklandcouncil.govt.nz



Where the Water Meets the Land

Algal and Plankton Blooms

Blooms are caused by sudden, massive growths of naturally occurring, microscopic plant and animal life (algae and plankton). They can result in the discoloration of fresh and salt water bodies. They occur extensively over summer periods and come in many different colours.

- They can be mistaken for oil slicks, sewer overflows or paint spills
- They can affect water quality and can sometimes be toxic



Odorous Marine Mud

Odorous marine mud is a natural and non-toxic occurrence. It is found in and across mud flats. Odorous mud gets trapped below a very thin brownish layer of sediment and warmer weather can enhance its odour.



Rotting Seaweed and Vegetation

Seaweed is deposited along the shoreline during storms and extreme tides and will decompose if not washed away. Deposited seaweed and other vegetation can degrade naturally, producing a pungent smell, an oily sheen, or appear black and slimy.



Sea Foam

Sea foam occurs around mangroves, in surf and during rough weather conditions. Sea foam is generally a light brown / creamy colour and can look similar to a diesel scum or a layer of oil.



Natural Scum

A natural scum is an oily, brown film that can accumulate in streams, normally behind obstructing material. The scum is mostly organics and can be indicative of poor water quality.

Stagnant Streams

Stagnant streams are frequent occurrences in the summer. They develop during periods of low rainfall and often when normal stream flow has been disrupted. They can result in micro-organisms in the water body using up all the oxygen in the water.

- Stagnant streams appear black and can smell
- A stagnant stream is regularly mistaken as a sewer overflow



Avian Botulism

Avian botulism is a natural phenomenon in wetlands that happens mostly in mid-to-late summer. It causes progressive paralysis, which leaves birds with the inability to hold their heads out of the water.

- There is no current method of preventing an outbreak; however, food waste left in park areas may cultivate the bacteria.
- It is important that all dead birds are removed from the water body as this will help contain the toxin.
- Report any sick or dead ducks to the SPCA, bird rescue or Auckland Council.