

# FOAM

## Appearance

You may have noticed foam formations in waterways, particularly below structures such as weirs; they usually look like someone has emptied a container of detergent into the water. You can usually distinguish between a natural foam formation and one caused by a pollutant based on the texture and smell of the foam. Foam caused by the presence of a pollutant (such as detergent) will have a slimy feel to the touch and smell aromatic. Natural foam on the other hand can have a slightly fishy or earthy scent, will be found downstream of a turbulent site such as a weir, is usually persistent and is light; not slimy. Foam can take on a dirty appearance if the water is turbid.



Foam in the Avoca River at Yawong weir

## Causes

Foam is commonly formed after a river has been dry or stagnant for an extended period and a large flow disturbs and washes out the organic matter (leaves, twigs, bark) from deep pools.



Foam in the Avoca River at Charlton weir

As organic matter breaks down, oily chemicals are produced and enter the water column. These oils are buoyant and float to the water surface, changing the physical characteristics of the water and facilitating foam formation. Wind action and water flow introduce air into the organically enriched water, producing the foam. Even though it may appear undesirable a certain amount of organic matter – and the foam it may produce - is essential for healthy rivers due to the energy, nutrient, food, habitat, refuge areas, structure and complexity it adds to a stream system.