

Classification 2009: Explanatory illustration

What pressures are currently impacting on the biology of our rivers and lakes?

Classification is a way of reporting the health of a river or lake. It can indicate where the quality of the environment is good and where it may need improvement. This illustration shows one of the challenges facing our water environment, and can help give an idea of how to protect it.

Biology affected by river conditions



fish



macro-invertebrates (small insects)

Acidification

Acid rain is formed when industrial emissions of gases including sulphur dioxide, nitrogen oxides and hydrogen chloride combine with water droplets in the atmosphere. This chemical reaction forms weak sulphuric and nitric acids that cause acid rain. It can upset the chemical balance in rivers, killing fish and other organisms. It can also damage plants, trees and buildings.

Pressure Acidification



Effect

Composition of the fish and invertebrate communities will change. Species sensitive to acidification will disappear and the number of fish and invertebrates in the water may reduce.



Cause

Industrial emissions of gases including sulphur dioxide

