

## 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



macrophytes  
(water plants)



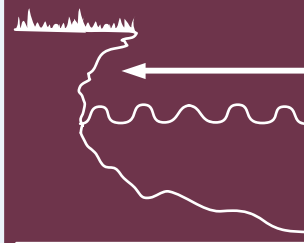
macro-invertebrates  
(small insects)

### Morphological alterations

Physical alteration to a river can cause habitat damage resulting in loss or decline of species. It can also change the way water flows through a river. Land reclamation, shoreline reinforcement or physical barriers (such as flood defences) can affect all surface waters. Weirs, dams and barrages can alter water and sediment movements. Erosion can increase the number or amount of sediments in the water. This blocks out light, preventing plants from growing and it can also clog gills of some fish. Using water for transport and recreation often requires physical alteration to habitats and affects the flow of water. This may impede the passage of migratory fish and cause reductions in the number of fish living in the water.

### Pressure

Morphological alterations



### Effect

Fish and macrophytes communities change. Some migratory fish species may no longer be present.



### Cause

Erosion breaks down the river bed

