



Turbidity

What's the issue?

Turbidity is a scientific principle for recording the concentration of sediment particles in a water sample according to their scatter of light. Suspended sediments are caused by soil erosion in the fields or of the river banks. It becomes much worse in heavy rain or snow melt. High suspended sediment loads damage ecosystems by covering the river bed in fine sediment, stopping light penetration into the water and carrying contaminants such as nutrients and pathogens.

Taking the measurement



Who? Registered users with a Palintest turbidity tube issued by the iDee program.



Your safety Remember DO NOT go alongside the river or loch if: you can't swim, the water is too deep or fast moving, or if you are alone.



How long does it take? 10 minutes



Equipment needed Turbidity tube range 0-500 NTUs, a container to sample the water, then fill the turbidity tube



How to measure Dip the container into the water avoiding disturbing the bed material. Fill the tube with water until the mark at the base is obscured by the suspended particles in the water. Record the NTU value from the scale.



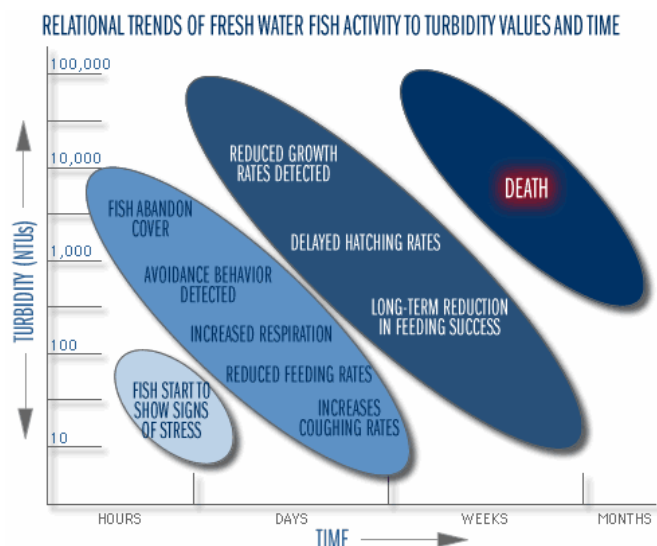
Tips If you are aiming to return to one place to make repeat measurements the data is more useful if you can sample from exactly the same spot each time.

Definitions

NTUs: Nephelometric Turbidity Units.

Suspended sediments: fine particles which stay entrained in the flowing water.

Erosion: the action of soil and other materials washing (or being blown) off fields and other surfaces such as roads.



Taken from: Williams, 2007. Review of UKTAG proposed standards for suspended solids. Report by APEM for WWF