

## Turbidity Information Sheet

### ***Background***

Turbidity is the cloudiness of water and is the result of suspended material in the water. This suspended material decreases the ability of light to pass through and this can limit plant growth. This in turn affects the fish and invertebrate communities which feed on and live in the plants. Turbidity may be caused by silt, micro-organisms, plant material and chemicals. However, the most frequent causes of turbidity in rivers and other water bodies are algae and inorganic material from soil weathering and erosion.

### ***Effects of Turbidity***

High levels of turbidity have a two-fold effect on water:-

- a) It loses its ability to support a large variety and number of aquatic organisms. Where there is less light penetrating the water, there will be less photosynthesis occurring and this reduces the level of oxygen in the water.
- b) The water becomes warmer because any suspended material absorbs heat from the sun. This also decreases the amount of oxygen dissolved in water.

### ***Controlling Turbidity***

Certain catchment management practices such as the retention of vegetation along streams, farming practices such as contouring and stubble retention and the effective treatment of effluent from sewage works can reduce turbidity levels.

### ***Measuring Turbidity***

Turbidity is normally measured by an instrument called a Nephelometer. This instrument determines the scattering of light and is measured in standard Nephelometric Turbidity Units (NTU). Normal levels of turbidity can vary from less than 1 in clear pristine streams to very much greater than 200 NTU in murky rivers after flood events.