

Small Stream Risk Score

Fresh Water Monitoring

Development of SSRS

- ④ Developed by the WRBD Project in Conjunction with EPA
- ④ Presented to the RBDs and Practitioners in December 2005
- ④ Preliminary results presented to the EPA Water Conference in 2006
- ④ Incorporated into National WFD Monitoring programme as an investigative monitoring tool

What is SSRS?

- ④ A Risk Assessment Tool – Based solely on Macro invertebrates
- ④ A Rapid Field Method
- ④ Used on first and second order streams – these are the feeder streams that make up our larger rivers
- ④ Not a Q Value

SSRS Sampling

- ④ Riffles and/or glides
- ④ Sample Net
- ④ Good pair of waders
- ④ Kick for 2 minutes Zig Zagging against the flow of the stream
- ④ Stone wash for 30 seconds



SSRS – analysis of sample

- ④ Place the contents of the net into white tray
- ④ Allow to settle for a couple of minutes
- ④ Remove large stones and leaf litter – checking for invertebrates



SSRS – analysis of sample

- ④ Identify the invertebrates – with the aid of the manual
- ④ Record each species onto the field sheet
- ④ Record their abundance
- ④ Calculate the risk score
- ④ Fill other relevant details onto the field sheet

Invertebrates

In sites with good water quality you will find Macro - invertebrates such as Ephemeropteran (Mayfly - 3 tails) in the picture and Plecopteran (Stonefly - 2 tails).



Invertebrates

In poor water quality streams you will find Macro invertebrates such as asellus (water louse) and species from the GOLD category. This category includes fly larvae as seen in the photo.



Advantages of SSRS compared to Chemical Analysis

- ④ Rapid

- ④ Economical

- ④ Indicates the effects of pollution

- ④ Provides broader picture