

Scale terminology and other problem areas

COST 626 Ghent
11-15 December 2002

Scale terminology

Classification of terms

- Definition of hydromorphological units
- Definition of classification systems of intermediate sizes
- Order of scales
- Sampling methods and statistics
- Habitat related project purposes

Problem areas

- Database needs, requirement & access
- Data collection needs

Definition of hydromorphological units

Run – pool – riffle – glide – run – chute –
etc.

Habitat = structure + scale + dynamics

Ref.: Rosgen

e.g. riffle-pool sequence (combination, linking)

Definition of classification systems of intermediate sizes

- Hydromorphological unit ? Mesohabitat class
depth, velocity, shape & other non flow or biology related parameters; e.g. sediment (as in WFD) define only hydromorphology (ref. to geomorphology, fluvial morphology)
- Intermediate units
Anything between micro and macro, a sequence of intermediate classes
- Ecosystem units
Normally don't change (reposition) with flow, only shrink or may disappear

Order of scales

Region

can be any scale, use geographic regions for general cases

1. Basin / Catchment (US Watershed) / Macro
2. Subcatchment
3. Reach
4. Sector / Segment / Section / Management unit
5. Site / Intermediate / Meso-
6. Micro

Species level refers to sampling (not micro-)

Sampling methods and statistics

- Irregular, structured
 - Irregular non-structured
 - Regular, structured
 - Cross sectional
 - Triangular
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- Weighting, stratification, averaged standard deviation

Purposes of habitat related projects

- Restoration / rehabilitation projects
- Canalized / channelized / engineered rivers

Database and collection needs, application & access

- Metadata
- Data scale & spatial units / application scale
- Commercial / free access
- Regionalization (spatial extrapolation) / classification
- Scaling up (e.g. adding processes too) down (sampling from larger extent)