



Defining and Assessing Success

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Measuring success- once we've defined it

- **Ecological objective**
 - Uncertain, costly, slow response
- **Physicochemical target** ..(and side-effects?)
 - Response rate?
 - Detect against 'noise'?
 - At CATCHMENT level: SINGLE outcome – many causes
- **Activity** (Has anything changed?)
 - Field-level, with context
 - ideally – some with measured pollutant emissions

▪ **BASELINE – adequate?**

▪ **Cause-effect LINKAGE:** have we enough info to modify/improve the Action Programme (and/or defend it to EC)

DEFINING SUCCESS

▪ OBJECTIVE

- Need clarity (e.g. is target better fishing, TP load, MRP mg/l; siltation; or nitrate? How much change?)

▪ STAKEHOLDER INVOLVEMENT to reach consensus

▪ ..Quantify IMPACTS and COSTS of measures

- For this catchment
- Joined-up across all pollutants/ issues
- Prioritise, define practicable targets
- hence Action Programme, legal/financial underpinning

Assessing Impacts

- **DIRECT MEASUREMENT** of biota or chemistry–
 - May be: too slow response; too variable; too costly
- **INDICATORS?**
 - Define indicators
 - Chemical change e.g. P load, concentration
 - . . . Management change
 - Uptake of scheme
 - Research: Is the quantitative link between indicator and target **GOOD ENOUGH?**

Assessing Impacts

- **Pollutant measurement –**
 - **Measurement at catchment base: does not define causes**
 - **And many pollutants are not measured routinely**
 - **How can we identify whether/how action is taking effect? -**
 - **Can we use farm-level measurement linked to land use data to pin down cause and effect?**
- **Management (fastest response)**
 - **Do we understand CURRENT management? (surveys)**
 - **Can we quantify impacts on Water Quality adequately?**