ECOSTAT nutrient meeting (18.-19.11.2015)

Background and aims of the ECOSTAT nutrient work (JRC, UK, DE)

Nutrients in the WFD and associated CIS guidance – a reminder

Jo-Anne Pitt

Environment Agency(UK)

ECOSTAT nutrient meeting (18.-19.11.2015)

WFD Annex II

1.3 (i)For each WB type....physicochemical conditions shall be established representing the values of the physicochemical elements at high status

1.3 (iii) May be spatially based, or based on modelling, or a combination of methods.....where this is not possible may use expert judgement

ECOSTAT nutrient meeting (18.-19.11.2015)

WFD Annex V

- 1.4.2(i) Ecological status classification represented by the lower of values for biological and physicochemical elements
- Normative definitions:

  High status: nutrient conditions remain , the range normally associated with undisturbed conditions

  Good status: nutrient concentrations do not exceed the levels established so as to ensure the functioning of the ecosystem and the achievement of the values specified for the biological quality elements

ECOSTAT nutrient meeting (18.-19.11.2015)

CIS guidance No. 13 (Classification)

- Physicochemical elements should not be outside the range established to ensure *type specific* ecosystem functioning and achievement of values specified for BQEs
- Several types may share same ranges or levels
- If *one or more* physicochemical elements do not meet conditions required for GES but the BQEs do, overall status will be moderate

ECOSTAT nutrient meeting (18.-19.11.2015)

CIS guidance No. 13 (Classification)

- **Checking procedure:** type specific values are *no more or no less stringent than required* by the WFD and hence *do not cause a WB to be wrongly downgraded* to moderate status
- Apply when confident there is a real mis-match, not just resulting from uncertainties in monitoring
- Possible to apply checking procedure at type level or WB level
- Ranges or levels...should be as *ecologically relevant as current expert knowledge permits*

ECOSTAT nutrient meeting (18.-19.11.2015)

CIS guidance No. 23 (Eutrophication)

(6)Harmonisation of classification criteria

171. Use of nutrient standards and best practice in setting them – the process of deriving appropriate nutrient standards should ideally involve.....

ECOSTAT nutrient meeting (18.-19.11.2015)

- Having a clear view of what good status for biology/ecology looks like [✓ intercalibration]
- Having an understanding of the relationship between nutrients and the biology/ecology (and the variability in this) [✓? Pressure-response work]
- Deciding on the best available techniques for deriving the standards and on the appropriate level of precaution and summary statistic to be used in defining the standard [not yet....✓ after this workshop?]
- Having sufficient and reliable monitoring data for deriving and determining compliance with the standards [Do we need guidance?]

ECOSTAT nutrient meeting (18.-19.11.2015)

CIS guidance No. 23 (Eutrophication)

- Methodologies for setting nutrient standards

  ....there is a need for harmonisation *of methods and assumptions* at the European level.....*standards will not necessarily be the same in the different MS* because they depend on the functioning of the ecosystems and differences across ecoregions and types

ECOSTAT nutrient meeting (18.-19.11.2015)

CIS guidance No. 23 (Eutrophication)

- ....defining standards for nutrients is a real challenge where legal wordings are translated into numbers and, even more challenging, with uncertainties about dose-response relationships between biological and nutrient quality.