Consultation on UKTAG Water Framework Directive: Phosphorous standards for Rivers - Anglian Water response

We welcome the opportunity to comment on the UKTAG stakeholder recommendations on Phosphorus (P) standards. The consultation document is highly technical in nature but we have provided general and specific comments where we felt able to do so.

Whilst we support the need to review and develop methodologies to ensure environmental quality standards are appropriate and that "expensive action to reduce phosphorous concentrations at a site should be considered only where there is supporting evidence of adverse biological impacts", we are concerned about the impact, timing and potential costs arising from the proposed change in methodology.

In contrast to the proposed change in biological classification methodology, it appears that intercalibration among member states has not been undertaken for the proposed change to phosphorous classification. We consider this necessary to ensure a consistent approach and level playing field across member states before approval and implementation. It may also help to address some of the uncertainties with the methodology highlighted in the consultation document.

It is important that the impact of the proposed changes on both regulators and stakeholders is assessed. We would expect a Regulatory Impact Assessment to be undertaken before any decision about adoption of the revised methodology is made.

In General

We are pleased to see that UKTAG is keen to explore why biological classification is often not aligned with phosphate classification, be that good biology and poor phosphate classification or vice versa, and support the move towards the creation of P Environmental Quality Ratios (EQRs) as set out in the supporting paper 'A revised approach for setting Water framework Directive phosphorus standards' sent with the consultation.

The consultation, however, refers to unexplained error and uncertainty in the model which may lead to site misclassification. These uncertainties should be explored further and satisfactorily addressed before the new method is approved or adopted.

For example, pilot studies could be undertaken to explore these errors and address the considerations detailed in i to iii of paragraph 4.4. Surveys to identify what other pressures maybe impacting on biology would be welcome. We would support the use of an assessment tool which looks at shading, substrate type and nitrogen etc as such factors can have a significant impact on macrophyte population structure and abundance.

Only when unexplained errors and uncertainty are sufficiently accounted for should the adoption of a revised methodology be considered for implementation across the UK.

Specific comments

1. Impact on 'No Deterioration' objective

The impact of a proposed change in classification methodology on 2009 baseline waterbody classifications is not clear. It is important that this is considered as it has an impact on how 'no deterioration' will be assessed.

Changes to methodologies made within a River Basin Planning cycle may give rise to uncertainty over outputs from measures currently being delivered and those being considered for future RBMPs (and associated NEP obligations). Measures identified may not have had sufficient time for planned outputs to be achieved and the level of success assessed. In this situation we must guard against the risk of abortive investment and ensure new methodologies can be compared with old.

2. Concerns about datasets

We would question how representative recent data sets collected during extreme climatic events (drought, flood) are if they have been used. Concerns have also been previously expressed about whether the biology dataset is statistically comprehensive enough to make conclusions from.

The altitude, alkalinity and P observed measures are subject to some degree of quality assurance, e.g. analysis undertaken by accredited labs. The inclusion of the biological standards offers an opportunity for error in these calculations to be introduced so similar quality assurance of data used is important.

Whilst acknowledging that the alkalinity and altitude are not the only influences on the P reference standards it is possible to measure it is agreed that these are a pragmatic solution to making the reference P value more site specific than the current typology approach used. However we are unable to support wholeheartedly the approach without further information as to impact, eg. some regional case / pilot studies being available which take into account not only the new P standards but also the biological standards out for consultation simultaneously would have been helpful. We feel that these consultations would have been better served if issued separately, if confidence in the biological standards proposed had already been established it would be easier to make a decision about the P proposals.

The paper 'A revised approach for setting Water Framework Directive phosphorus standards' sent with the consultation offers a useful explanation of the new methodology especially bullet point 4 reproduced below:

4. An innovative approach to standard setting has been developed. This first predicts the P concentration at reference/near reference conditions, using alkalinity and site altitude as variables, and then calculates an "P EQR" as the ratio between observed and expected P. Finally, a regression equation links the biological and P EQRs, allowing P concentrations associated with the mid point of each biological class to be determined

This describes what is actually being proposed concisely and it would have been useful to have this information in the main body of the consultation. This report makes it clear that there is a relationship between the reference P and the observed P and that relationship is a factor in the P level setting with the biological results taken into account. However it is not clear where the reference or observed P values would be taken. As this includes data on altitude and alkalinity this point could be better clarified. It would be beneficial to identify if the point of reference is at the point of discharge to the environment, upstream of this point, an arbitrary point on the waterbody, or a single point at the head of the watercourses.

Furthermore the intercalibration of the WFD "highly modified" classification, which in the UK is limited to water courses such as canals, should be assessed as it could have a significant impact on the number of improvements identified in future programmes of measures

3. Impact on monitoring programmes

A more comprehensive monitoring programme may be required to support the assessment methodology. If so, resource and cost implications on regulators and stakeholders needs to be considered.

4. Impact Assessment

A Regulatory Impact Assessment should be undertaken before the proposals are approved. It is important to understand what impact a change in classification methodology will have on the sectors expected to deliver RBMP measures and on those measures currently being delivered.

Summary

Whilst the new proposals may represent an improvement on previous methodology their impact (eg. cost, resource, alignment with other European member states) should be fully considered and any remaining uncertainty about the methodology addressed before approval and implementation.