

Consultation on Directions to the Environment Agency on Classification of Water Bodies

Water UK welcomes the opportunity to contribute to Defra and WAG's consultation on Directions to the EA on Classification of Water Bodies.

Water UK represents water and waste water service providers at UK and European level. Our members provide the UK with safe, clean water and contribute to the protection and enhancement of public health and the environment.

We are pleased the Defra Future Water Strategy considers the Water Framework Directive as a means to achieve the Government's vision of improving water quality. We are keen to see more attention given to land management and its impact on water quality and ecology. We believe the land impacts remain a major gap and without focussed efforts for change, policy and practice in this area will continue with the use of existing ineffective control.

We comment on the consultation document as follows:

1. Overall, Water UK broadly support the aims of the Direction, although we do have some notable concerns which we will draw your attention to in this response. We have also suggested how these concerns may be addressed.
2. This Direction is the final opportunity for Defra to provide clear guidance to the EA and other environment regulators not to adopt overly stringent standards that will drive unnecessary costs to UK Plc where the evidence base is weak or doubtful. For example there is enough evidence to show that the proposed phosphorus standard is overly stringent and unnecessary in some cases as the biological benefits are hard to justify. We think it will be wrong particularly in the current economic climate, to allow such standards to drive capital investment. We would suggest the use of a two tier approach that reflects the conventional mandatory/guideline approach.
3. This Direction is particularly important as it will be key in shaping the scale and nature of the measures required to meet the Directive's aims.

There is a significant risk that if we (UK plc) classify our waterbodies inappropriately we could incur unnecessary expenditure or face non-compliance.

4. ***Reference condition sites*** – We think the use of reference conditions and related Class need improvement. We do not believe that there are any waterbodies of any significance in lowland England and Wales that could reasonably be considered free from human influence, making it difficult to determine what the ecology of such a site would be. For example, the latest draft Thames River Basin Management Plan shows no rivers at high ecological status, yet some of these rivers support thriving ecologies and would be judged by all reasonable standards as requiring no further improvement. This suggests that basing a classification system around such reference condition sites will have limited reliability for setting representative classes, increasing the risk of requiring inappropriate measures.
5. ***One out, all out policy*** - We have reservations about the application of a “one-out, all-out” policy for classification, although we note this is a requirement of the Directive. For many waterbodies, this policy will make classification a poor representation of the actual ecological quality, potentially grossly understating the real quality and contrary to the aims of paragraph 56 in the consultation – i.e. "*WFD classification schemes provide a more wide ranging and detailed assessment which reflects the overall ecological health of surface waters, the chemical quality of surface waters and groundwater and the impact that groundwater has on surface water and terrestrial ecosystems*". This will be particularly relevant where compliance data is not sufficiently robust or is absent.
6. ***Need for Defra/WAG Guidance to the EA on Use of Data*** – The above leads us to the absence of guidance to the Environment Agency on the use of data for classification. We recognise that resources have not allowed for full monitoring of all the waterbodies in advance of the classification and River Basin Planning process and note that some waterbodies either have missing data or very simple modelling applied. Furthermore, in some instances only one sample point exists for the waterbody, introducing a risk that the sampling does not reasonably represent the quality of the waterbody. We suggest that data of limited quality should not be subject to the one-out, all-out rule.

7. ***Indirect Standard should be used for Phosphorus*** – We have a serious concern about the apparent move away from the pragmatic indirect standard previously proposed for phosphorus in the water environment, back to the fixed concentration based compliance approach. The indirect standard rationale of testing the ecological quality for non-compliance first before classifying the chemical concentrations is highly desirable for a number of reasons. Most importantly, this approach fits best with the goal of representing the true ecological status, reducing the risk of fixed numeric chemical standards incorrectly representing ecological classes. For phosphorus, it is particularly improbable that the chemical limits set will be representative of an ecological class, as attested by the lack of ecological response in rivers following phosphorus reduction at Sewage Treatment Works.
8. While we appreciate that classification does not necessarily determine measures, use of indirect standards reduces the risk of unnecessary expenditure and encourage a more sustainable implementation of the Directive. We therefore strongly recommend that, if indeed this pragmatic approach has been abandoned, this decision should be reviewed.
9. ***Extend Groundwater threshold values for all waters used or have potential for drinking water*** - With regards to the groundwater threshold values, we note you propose that drinking water standards are used as threshold values for drinking water protected areas. While we agree with the application of the standards proposed, we suggest that they are extended to all groundwaters either used or having potential for drinking water rather than just drinking water protected areas.
10. We have concerns about some of the environmental standards in Annex A, Part II. Accepting that the principle of the approach may be derived from the EU process, it is highly unlikely that such precise values can be attributed to specific ecological classes. It is therefore questionable how useful it is to classify ecological status and establish compliance against them. This proposed approach increases the risk that waterbody quality is misrepresented, which in turn increases the risk of inappropriate measures being employed.

11. *The Executive Summary of the Post-conciliatory RIA* identifies measures to address sewer leakage as the main target for compliance costs. The RIA fails to mention that this is based on research from only one city (Nottingham) and sewer leakage in this city "only" accounts for 13% of the non agricultural loads. The water industry is concerned that extrapolating this number to the whole of the industry will not be at all representative. Although the Draft Business Plans may give some kind of indications for network remediation, the costs associated with the transposed Groundwater Directive will not be included other than as a notified item. The priorities for the period 2010-2015 and associated costs will not therefore include the costs identified in the RIA for the Groundwater Directive.

Part II - Context

12. **Paragraph 32** - We also note the benefits on page 9 of the Directions to the Environment Agency on Classification of Water Bodies. The water industry hopes that, with the implementation of Article 7 of the WFD and the future Pesticides Directive, as well as the continuing efforts of national initiatives, these will become real and visible benefits and not drive costs to the water industry. The challenge we must address remains that we protect our resources in the first place and not be forced into having to treat raw waters to remove pollutants instead.

13. **Paragraph 33** – This paragraph mentions benefits to groundwater abstracted for drinking water etc, however these benefits may only be seen over a long period of time and this will vary depending on geology. This will also benefit with a reduced carbon footprint. We would suggest that these issues should be captured in the Impact Assessment.

14. **Paragraph 34** – We think the information referred to should now be available and therefore the impact should be appropriately reflected in the Directive and Impact Assessment.

Standards

15. **Paragraph 42** – Hydromorphology and Flows – We are aware that there is a significant lack of evidence base and understanding in this area. We therefore suggest that the Direction to the EA should reinforce the need for monitoring and investigation where the evidence base is weak.

16. We also consider that Direction is also needed if measures which are unbeneficial (and actually harmful in terms of increased greenhouse gases and carbon footprint) are to be avoided. We suggest Defra makes it clear that the appropriate approach on requirements for discharges to artificial and heavily modified water bodies is to consider the limitations imposed by the artificial or heavily modified conditions of the water body and treat discharges to a level suitable for the potential status of the body under those limitations i.e. to the level beyond which further treatment would make “only a slight contribution to ecological potential”.

Ecological Status

17. **Paragraph 62** – As noted earlier there are now very clear concerns about the “one out-all out principle” and the need for monitoring and investigations is fundamental to avoiding unnecessary investment as a result of this principle. A Direction to the EA mandating further investigation where the evidence base is not sound would be beneficial to all stakeholders and co-deliverers.

18. **Paragraph 64:** We think the current EA “No deterioration policy” is not compatible with the WFD and Sustainability principles. We therefore think that some policy guidance to the EA on how to deal with the following statement would be very helpful - ‘For the purposes of classification, the EA will discount monitoring results which reflect short term effects but may use these results to determine the appropriate management response to pollution incidents.’ It is unclear what short term mean; some guidance to the EA would be very helpful.

19. **Paragraph 80:** ‘Large water bodies that show a variation of two or more status classes between sampling sites may be split into two or more parts...’ It is unclear as to whether this is to be applied to all water body types as it is in the spatial rules section. If it is to be applied to surface water bodies then, when the wind changes, chemical quality will just be moved around the lake.

Comments on Annex A

Part VI

It is unclear why some Groundwater Bodies have many Threshold Values (TVs) and others only a few. Should there be consistency?

What are the LoDs for the Threshold Values monitored?

Should there be threshold values for all drinking water parameters?

The document would also benefit from a list of Groundwater Bodies and areas to give an idea of relative size, especially if the EA are quoting statistics in terms of numbers of Groundwater Bodies meeting certain criteria. This could be misleading as some Bodies are much greater than others and of greater strategic importance from the point of public water supply.

Comments on Annex B

In terms of the 'classification process for surface water bodies and groundwaters' - how does schedule 1 part IV fit in?

Schedule 1 part IV

How does the water level affect the morphological status for lakes? Should this be hydrological, rather than morphological?

In determining the hydrological status for water bodies, the effect of urbanisation has been noted in the urbanisation influence test. Should agriculture also be included? If the upstream catchment is heavily cultivated the run-off may be greater, due to pathway creation, and may be more affected by pesticides, for example.

Schedule 2

There is reference to the tests and triggers for applying the tests. Test 1 refers to salinity and threshold values. However, looking back at Annex

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A Part VI there is mention of electrical conductivity as an indicator parameter in a few of the Groundwater Bodies but not in others that you might expect (although it's not easy to check as the groundwater body names are a bit confusing).

Schedule 2 part 1

Test 4 references 'See Section 7 below' - where is section 7?

Test 4 refers to percentage abstraction against annual recharge. Does this tie up with the CAMS process?