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Implementing the Water Environment and Water Services
(Scotland) Act 2003:

Development of environmental standards and condition limits – phase II

Scottish Environment LINK (Freshwater Taskforce) response to the
Scottish Government consultation

*Scottish Environment LINK is the forum for Scotland's voluntary environment
organisations representing a broad spectrum of environmental interests with the
common goal of contributing to a more environmentally sustainable society.*

1. Summary

Thank you for the opportunity to comment on the second tranche of environmental standards and conditions for surface waters and groundwater. As with the previous consultations by the UK TAG (UK Technical Advisory group) on WFD, the UK Environment LINK organisations (Wildlife and Countryside Link, Scottish Environment LINK, Northern Ireland Environment Link and Wales Environment Link) responded jointly to the Phase 2 report on UK Environmental Standards and Conditions.

The Standards and Conditions that will be required to meet Good Ecological Status (GES) are an essential part of the Water Framework Directive (WFD). We welcome the effort that has been put into developing these standards, and recognise the difficulties in developing new environmental standards from scratch across the UK. Scottish Environment LINK responded to both the Phase 1 and Phase 2 consultations and raised a number of concerns. The summary of phase 2 comments from LINK organisations can be summarised as:

- We expressed concerns that some of the standards **were not based on ecology**, but rather a set of chemical parameters with no apparent links to biological impacts.

A response by Scottish Environment LINK

- We were disappointed that a list of reference sites has not yet been published, and **asked that the list of all reference sites should be made public.**
- The UK TAG papers **failed to explain the concept of good ecological status**, and the meaning of 'slight' deviation in relation to WFD normative definitions leading to uncertainty in understanding how the UK has transposed the concept of high, good and moderate status.
- We highlighted that there was a need to further explain the links between the existing **imperative and guideline** standards under other Directives and the WFD standards.
- There was a need for further development of standards for **Nitrogen in rivers and lakes.**
- We argued that temperature standards should have been cross-checked with **temperature** requirements for macroinvertebrates and that **temperature** standards should have been brought in line with the imperative standards under the Freshwater Fish Directive.
- We highlighted the wealth of scientific evidence on the impacts of **suspended solids, turbidity and deposited solids** on fish and invertebrates. We were extremely concerned over the lack of proposals for a new standard and argued that there are reliable ways of monitoring suspended solids and setting new standards.
- We argued that a wide range of impacts needs to be considered when assessing the impacts of **managed flows** and this should involve a multi-disciplinary team of experts.
- **We strongly supported the principle of revising and reviewing standards on a continuous basis**, and in relation to further work on Intercalibration. All WFD standards should be reviewed on regular basis and updated, where it becomes obvious that the given standard is not achieving good ecological status.
- We also recommended that a further consultation process should be undertaken to review the entirety of the WFD classification process. Without being able to see the whole picture, it would be difficult to link WFD classification and the individual standards which are supposed to represent ecological classes.

Detailed comments are available on request. Many of these concerns have not yet been resolved to the satisfaction of LINK members - for example, the list of reference sites has not yet been published. Furthermore, even given this late stage, certain standards have not yet been developed – including those for water dependant wetlands, groundwater dependant wetlands and the SAC/SPA water dependant features. We also have some general concerns over the use of the proposed standards, and the slow development of WFD compliant morphological standards. We would welcome further clarification of these important issues.

2. General comments

2.1 The use of condition limits for assessing damage to Natura sites

Special considerations need to be given to the consideration of consents using the proposed approach of condition limits that may affect, directly or indirectly, a Natura 2000 Protected area. We strongly recommend the use of the precautionary principle when assessing such applications, which should be treated as 'plans and projects' under Article 6 of the Habitats Directive, and subjected to an appropriate assessment. All activities, including those currently authorised by General Binding Rules are 'plans and projects' and must therefore be subjected to appropriate assessment. SEPA must seek advice from SNH on all aspects related to Natura 2000 Protected sites and SSSIs.

2.2 Supplementary data

It is clear that not all standards and conditions will be developed in time for the first RBMP cycle. Therefore, it is likely that SEPA will have an incomplete picture of the status of water bodies. Where this is the case, we recommend that additional information could be used where it exists (for example RSPB reserve management plans, which often contain detail biological and hydrological data) to supplement SEPA data.

2.3 Proposals not to use of biological standards as condition limits

We are concerned by the proposals not to use biological standards in determining the level of action required. We believe that biology provides crucial information for determining condition limits, making decisions about improving the status of the aquatic environments, and licensing potentially damaging activities. This is particularly of concerns in water bodies with sensitive species, including BAP target species and those designated under domestic and European law. We are concerned that these species will not be offered adequate protection. This issue requires further attention.

2.4 General assessment of morphological features

We are extremely concerned by the lack of adequate assessment for morphological features of water bodies (freshwater and coastal habitats). Hydro-morphological quality elements of a water body (including the condition of riparian, shore and intertidal zones) are ecologically inseparable from the water body itself, and in many cases will be directly relevant to achieving the WFD objectives. Water body modifications, including changes to floodplain condition and connectivity alter the composition and abundance of macrophytes, invertebrates and fish. We are concerned that hydro morphological elements have not been assessed properly, and recommend further development of these standards. Morphology is an extremely important element of ecological functioning. We do not believe that ecological status can be assessed accurately without reliable morphological tools.

2.5 Stakeholder engagement

Once again we express disappointment over the lack of stakeholder engagement in the UK TAG process. We hope that in future, the work of the UK TAG can be open to scrutiny by external experts.

2.6 Setting standards for water dependant wetlands, groundwater dependant wetlands and the SAC/SPA qualifying interests

No standards have yet been developed for wetlands, groundwater dependant wetlands and Natura water dependant features (SAC/SPA qualifying interests).

We seek clarification when this work is likely to be done. Currently, a lack of clear approach to water dependant Natura features (whether identified as water bodies or not) is creating problems in setting targets for restoration projects. Further clarification is needed on the relationship between WFD standards and Ramsar features.

2.7 Non-native species

Whilst we welcome that non-native species have been considered in the assessment of good ecological status, we are concerned over the approach and the selection of species for which this assessment has been made. First of all, the presence of non-native species can cause downgrading of river and loch systems to less than good ecological status. The consultation does not appear to deal with this problem. A typical example of such species would include the American signal crayfish and Chinese mitten crab but also Ruffe in Loch Lomond, Pike in Scottish Highland lochs, and Barbel in the Clyde. The proposed list of non-native species does not deal with the issue of 'translocated' species, which we believe needs to be fully considered in the first RBMP. Furthermore, the list of non-native plant species being assessed as part of the first RBMP does not include some very damaging bankside plants such as Himalayan balsam, which can impact on the morphology of the watercourse.

2.8 Reviewing and updating the standards – mid term review

We strongly recommend that **SEPA undertakes a mid term review (in 2012) of WFD standards, with the aim of identifying gaps, problems, and determining the causes of any such problems.** This would be beneficial, especially when it becomes obvious that a given standard is not achieving the intended outcome of good ecological status.

3. Comments on detailed proposals

3.1 Surface water quality standards

Nitrogen in coastal areas and estuaries

We are concerned over the initial estimates that no coastal waters, and only a few estuaries are likely to fail the good status standard for Nitrogen. This is especially concerning since many areas in Scotland have been identified under the Urban Wastewater Treatment Directive as well as Nitrate Vulnerable Zones because of high N-inputs.

We are further concerned by the lack of standards for Nitrogen in rivers and lochs. Nitrogen is the main source of nutrient enrichment in coastal waters and a major cause of downgrading. There is a clear link between Nitrogen loading in rivers and its effects in coastal waters and estuaries. Assessment of Nitrogen loads in rivers and loch would help to identify the source of the problem.

Suspended solids

In our LINK response to the UK Tag Phase 2 standards we argued that there is considerable evidence that sedimentation and turbidity are significant contributors to declines in populations of aquatic organisms. Sometimes, the effect on the habitat is direct, especially where there is a sudden and catastrophic release of material, resulting in fish and invertebrate mortalities. We also argued that there are reliable methods for monitoring suspended sediment, and a number of ways by which a relevant standard could be developed. Whilst we understand the difficulties in setting standards, we believe that further effort is required to develop these in time for 2 river basin planning cycle.

3.2 Morphological and hydrological standards and condition limits

Condition limits for river flows

We are confused over the statement that 'rivers affected by changes in river flows downstream of dams will be designated as heavily modified'. HMWB should only include those water bodies that are in themselves directly impacted by physical modifications to their morphology. We do not believe that water bodies downstream of dams should qualify as HMWBs (i.e. they are not modified themselves). These water bodies should be given an alternative objective for water flows, but morphology should remain unaffected.

Morphological conditions for lochs

Alterations to the loch's morphological condition also include the drainage of land (e.g. for agricultural purpose) in the loch's catchment area. This can impact on the nutrient inputs to the loch and sedimentation. The new morphological conditions must take drainage into consideration, as it is one of the important factors in determining the overall ecological status.

3.3 Biological standards for surface waters

As stated in the general comments, we are concerned over the proposals not to use biological data to identify the level of action required, as we believe that some species are important in guiding such action and in setting limits to licensing of potentially damaging activities. The presence or absence of sensitive species will be site specific, and it will be important to take into consideration site-specific information when setting condition limits.

A response by Scottish Environment LINK

We are also concerned that biological standards are perhaps the least developed standards of WFD related standards. The intercalibration exercise has not delivered all the relevant standards required to set an accurate picture of the status of water environments, and large gaps exist in our biological data. Again, we stress that developing new tools will be essential to improve the data and the knowledge base.

Should you have any questions about this submission, please do not hesitate to contact me.

A handwritten signature in black ink, appearing to read "Andrea Johnstonova", with a stylized flourish at the end.

Andrea Johnstonova, Convener of the Freshwater Taskforce of the Scottish Environment LINK