

## **Implementing the Water Environment and Water Services (Scotland) Act 2003: Environmental standards for the water environment**

### **A consultation response by Scottish Environment LINK 31<sup>st</sup> January 2014**

LINK supports a revision of standards on the basis of sound scientific evidence. However, we are concerned that the revision will distort overall trends of ecological status and mask whether a change in water body classification is due to underlying ecology or simply due to reclassification according to revised standards. Therefore, it is crucial that Scottish Government and SEPA ensure clarity and transparency about how baselines have shifted so there is a representative picture of water body health over time.

LINK has endeavoured to comment on these proposals but we have found it difficult to fully understand the detail, which has been presented in an extremely technical manner. Unfortunately, this means that the purpose and consequence of proposed revisions is not clear to all stakeholders. We would welcome a meeting with SEPA and/ or Scottish Government to gain a better understanding of why particular standards were selected.

#### **Summary of this response**

- We have concerns about how well the proposed standards will detect ecological impacts of nutrients in rivers and lochs.
- We are not clear how the revised phosphorus standard will be applied in practice and how well SEPA will be resourced to gather the necessary ecological evidence relating to this.
- We are concerned by the proposed standards for river flows and loch levels.
- LINK welcomes the new proposals in relation to bankside vegetation.
- We are disappointed by the proposals for straightened rivers and are concerned by the proposals on sediment removal.
- We have a number of queries relating to the coastal waters standards for which we would welcome clarification.
- We urge a more precautionary approach is taken with regard to impacts of invasive non-natives species.
- We welcome that SEPA and SNH are working on setting appropriate objectives and standards for water bodies within Natura sites and urge that this is ambitious.
- It is crucial that any reclassification of water bodies as a result of new standards is presented in a transparent manner that allows the public to understand whether changes have resulted from ecological change or simply from a change in standards.
- LINK would welcome a meeting with Scottish Government and SEPA to get clarification on the points of detail in this response.

## **Biological standards**

We are worried that revised standards for rivers and lochs would reduce the detection of nutrient enrichment on aquatic plant and invertebrate communities. Nutrient run-off has a significant impact on freshwater ecosystems and it is widely acknowledged that diffuse pollution from agriculture continues to be a significant pressure on the water environment in Scotland. It is not clear whether the purpose of the revised standards is solely to seek to harmonise standards across Europe? If so, we are extremely disappointed that Scotland is effectively weakening its environmental standards.

## **Water quality standards - phosphorus**

UKTAG found the existing phosphorus standards to be insufficiently stringent and therefore, we welcome any revision to make them more robust (page 12). Table 6.1a shows that the proposed new P standard is stronger and would result in *more* water bodies being classified as less than good than is currently the case. However, we are unclear whether it is the intention to combine the new P standard with the standards for water plants (Table 6.1b)? If so, this would result in 15% *fewer* water bodies being classed as worse than good. We seek clarification as to how the data will actually be used eg the P standard alone or in combination. We are concerned that use of the latter could mask the status of water bodies with regard to problems caused by excessive phosphorus.

Furthermore, the consultation states that SEPA will not seek costly action to reduce phosphorus at individual sites without appropriate ecological evidence of nutrient-related impacts. This alarms us and we seek assurance that SEPA will be directed and adequately resourced to gather such ecological evidence at sites across Scotland.

## **River flow and loch level standards**

LINK is concerned by the proposed revisions in relation to river flows. The consultation document (page 24) states that the revised standards would result in fewer hydropower and water storage schemes being assessed as likely to cause deterioration. We are worried that this weakens the safeguard for freshwater ecosystems. There will be circumstances where other pressures acting on a water body will mean that this change in flow brings a significant 'combination' impact causing a water body to deteriorate. In this circumstance, flow on its own will not have caused deterioration but, conversely, deterioration would never have occurred without a change in flow. The standards must be more precautionary to allow for this issue.

Furthermore, the consultation notes that the UKTAG review confirmed uncertainty in the relationship between flow changes and good ecological quality and recommends that supporting evidence of adverse ecological impacts is needed. These consultation proposals do not indicate how SEPA will assess such evidence and, crucially, whether SEPA will be adequately resourced to do so. We would welcome clarity as we are extremely concerned that unnecessary adverse ecological impacts will result from this change in standard.

p27 states "*As improved ecological assessment methods become available, water bodies classed as moderate in relation to abstraction pressures are either confirmed as worse than good and taken into account when improvement priorities are*

*reviewed, or re-classed as good. When the cumulative impact of mitigation on the benefits provided by a use reaches a point beyond which it would become significant, any water bodies still classed as worse than good and for which no further mitigation can be put in place without an impact on use are re-classed as good”.*

The WFD allows mitigation measures to be discounted if they have a significant adverse impact on HMWB use. This means there is scope for mitigation measures, intended to improve and protect the freshwater environment, to have some impact on use. LINK seeks information as to how the proposed revised approach will consider the following factors (listed in UKTAG guidance<sup>1</sup> on Heavily Modified Water Bodies):

- impacts on the movement of salmon and sea trout;
- impacts on downstream river flows necessary to maintain river habitats and their associated aquatic plants or animals;
- impacts on the morphological characteristics of the downstream river;
- impacts on the level regime necessary to maintain habitats and their associated aquatic plants and animals.

Proposed new standards for loch levels are based on the UKTAG recommendations regarding the effect of water level changes on loch surface area (pages 28-29). The peer review of the UKTAG recommendations suggested that standards should ideally take account of factors such as differences in the sensitivity of species (including within-year sensitivity); the rate of level changes; finer-scale differences in the sensitivities of habitats within lakes; and connectivity between the lake and its shore. No mention has been made of how these expert views will be taken into account in Scotland. We are concerned there is no mention in this consultation of taking wider factors into consideration, such as the impact of fluctuating water levels on priority species of loch systems eg black throated diver and common scoter.

### **Standards for bed, bank and shore habitats**

#### *Standards for rivers*

It is proposed (page 30) that SEPA could attribute lower hazard values to straightened rivers with fast flows on the basis that such rivers can still support a range of invertebrate species and juvenile salmon and trout. This would result in some water bodies being reclassified as having better morphological condition than they are currently. We disagree with this because while it is true that some straightened rivers will support a healthier ecology than others, they are all still at poorer status than they ought to be. LINK does not think that the proposed approach is in the spirit of the Water Framework Directive to protect and improve the water environment.

It is also proposed (page 30) to extend the range of ‘hazard values’ for sediment removal so that risk is not overestimated when sediment is removed from beds of rivers that SEPA already consider to be highly impacted. LINK is extremely concerned by this proposal and we seek further information as to how this will work in practice as there is no detail in the consultation. We do not agree in lowering hazard values for sediment removal in straightened or degraded rivers. Sediment removal could still impact on the ecology of a river regardless of whether it is heavily

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<sup>1</sup>UKTAG Guidance (2008) *Guidance on the Classification of Ecological Potential for Heavily Modified Water Bodies and Artificial Water Bodies*. Report by Royal Haskoning.

modified. It is important that improvements to HMWB are not undervalued within WFD delivery.

LINK welcomes the proposals in relation to bankside vegetation (pp30-31). We were shocked to learn that current condition assessments do not detect that clearing vegetation from banks along 75% of a river's length would risk the water body being at worse than good status. We are pleased that steps are being taken to address this.

#### *Standards for coastal waters and estuaries*

LINK welcomes the proposed new standards for coastal waters relevant to assessing the impact of nutrient enrichment, oxygen depletion, toxic pollution and some forms of habitat damage resulting from alterations to the sea bed or sea shore. However, we have a number of queries and concerns relating to the detail of these standards and would welcome clarification on these.

We are concerned that the consultation proposes to reduce hazard values based on previous development and use of a water body with no appreciation of habitat type. Modifications to structures and deposition of dredging material should not be broadly encompassed as a lower hazard rating. It is these very structures that could have damaged habitat in the first place. We think this approach is contrary to any ambition of WFD to restore or remediate habitat damage.

We welcome the proposal to include tidal stream devices, cables and pipelines, but again would be concerned that the hazard value seems to be only concerned with the type and number of devices rather than the impact of the location of the device in the water body.

Given that tidal power devices fixed to the seabed have considerable scope to alter hydrography, we are unclear why they score so low with respect to tidal flow in coastal/transitional waters and estuaries and comparatively low for transitional lagoons with respect to the sea bed. We would welcome further detail on this.

LINK would like to know what consideration has been given to wave devices. Even when these devices are floating, there is potential for the hydrographic conditions of intertidal habitats to be altered in the wave shadow of such devices.

We seek an explanation of the rationale for the 'n/a' categories in Tables 8.2(a) and 8.2(b). For example, why would installation of high voltage cables and/or pipelines only affect tidal flow at '<50% exposed bedrock and wave fetch <10km' but not the other habitats? Also, why are tidal power devices fixed to the bed considered 'n/a' for all intertidal habitats (8.2(a)) and estuaries/lagoons (8.2(b))? The hazard could be substantial if those devices were barrages that substantially reduced the tidal prism, flooding some intertidal areas and substantially altering semi-enclosed lagoon systems.

#### **Invasive non-native species**

LINK agrees that it is right to take an approach that considers Risk Assessments (RA) carried out by the GBNNSS. However, we note that Himalayan balsam, Giant hogweed and American skunk cabbage are not on the list and we query whether their omission is simply because they have not yet been risk assessed by GBNNSS? There needs to be a strategic overview of which species have been risk assessed. The impact that these three species have had on the water environment to date

warrants their inclusion on this list, regardless of whether they have yet had a formal risk assessment. Furthermore, we remind Government that it is not possible to predict with accuracy which alien species will become invasive, and where or when. No RA process for INNS will ever approach perfection and RA should, as is explicitly recommended, be applied and utilised with caution.

We question the rationale for removing 'moderate impact' species from the list. We suggest it would be more sensible to take a precautionary approach and remove only low impact species from the list. There must be due regard to the levels of 'uncertainty' in the RAs. If a species is deemed low impact but with high uncertainty then it should not be discounted.

### **Standards for water bodies important for nature conservation**

We welcome that SEPA and SNH are working together to plan the appropriate objectives and standards for water bodies within Natura sites because it is crucial that progress is made in this area. It is stated that the results of this exercise will be consulted on in the draft RBMP but we would welcome discussion with SNH and SEPA and an update before then, particularly to see if we might be able to contribute site-specific knowledge from areas managed by LINK member bodies.

It is critically important that SEPA and SNH are ambitious with the conservation objectives for these sites. These are internationally important sites and it is vital that sufficient action is taken to ensure Scotland is fulfilling its legal and moral obligations to protect these areas.

### **This response was compiled on behalf of the Freshwater Taskforce and is supported by:**

- RSPB Scotland
- Wildfowl & Wetlands Trust
- Marine Conservation Society
- The Scottish Wildlife Trust

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