

Implementing the Water Environment and Water Services (Scotland) Act 2003: Updating environmental standards for the water environment

Summary and analysis of consultation responses

October 2021

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1. Introduction

In 2014, prior to the publication of the second River Basin Management Plans, Scottish Ministers directed SEPA to apply a range of environmental standards in protecting and improving the water environment. They also directed SEPA on the use of the standards in assessing the status of the water environment.

We are now proposing to update the 2014 Directions to reflect the latest scientific understanding of the standards needed for a healthy water environment. Our proposals are primarily based on recommendations from UK Technical Advisory Group on the Water Framework Directive (“UKTAG”), a partnership of the UK environment and conservation agencies. UKTAG consulted on the scientific basis underpinning its recommendations during 2019/20¹.

Our consultation “Implementing the Water Environment and Water Services (Scotland) Act 2003: Updating environmental standards for the water environment” proposed a small number of changes to standards and assessment methods for Scotland’s water environment. The consultation ran from October until December 2020. We received 14 responses in total; a list of respondents is attached below.

Confor - promoting forestry and wood	Scottish Anglers National Association
Fisheries Management Scotland	Scottish and Southern Energy Plc
Forth District Salmon Fishery Board	Scottish Environment LINK
Individual - anonymous	Scottish Land and Estates
Individual - anonymous	Scottish Water
Individual - Delfin Ramirez Ruiz	Tay District Salmond Fisheries Board
NatureScot	The Law Society of Scotland

This document contains a summary of the responses received. Full responses (other than those marked as confidential) have been published on the Scottish Government’s Citizen Space consultation web page.

2. Overview of responses

Overall, respondents were supportive of the proposals, although there were some concerns raised about the proposed updates for certain environmental standards. A number of respondents offered recommendations for additional work to further develop these standards. Some asked for greater clarification about the process of deriving the standards, their implications and/or how they will be applied in practice.

¹ [UKTAG Standards Consultation May 2019 | wfd uktag](#)
[UKTAG Standards Consultation January 2020 | wfd uktag](#)

3. Summary of responses and Scottish Government response

This section summarises the responses received regarding each group of standards, and our response, including where further work is planned.

3.1 River fish statistical methodology update

The majority of responses were supportive of the proposed minor change to the statistical methodology, which will now be adopted. In general, responses that were not supportive made suggestions or comments that were outwith the scope of the consultation about other aspects of river fish monitoring and classification.

In particular, three responses suggested using the Marine Scotland salmon assessment approach for river fish classification, which, unfortunately, isn't currently feasible. SEPA and Marine Scotland will continue to work closely as salmon conservation work develops and this will be integrated with the river fish standards where possible.

3.2 River phytobenthos assessment method update

The proposal to update the river phytobenthos assessment method was supported by almost all respondents. As proposed, the updated UKTAG method statement² will now be adopted.

3.3 Loch fish (eDNA) assessment method

The proposed use of a new loch fish standard was supported by most respondents as a new and innovative approach. There were some queries from responders about how it will be applied. The UKTAG method statement described in the UKTAG consultation³, which will now be adopted, provides detailed information on how this will be applied for classification.

3.4 Loch morphology: Bank protection assessment method update

The loch morphology: bank protection assessment method refinement proposal was supported by almost all respondents and will now be taken forwards.

3.5 Introduction of spatial standards for fish barrier assessment

The responses to the proposal to introduce spatial standards for fish barrier assessment was balanced between those in support and those in disagreement.

The proposed spatial approach is consistent with that used for classifying a wide range of other elements, where it has been successfully adopted at an earlier stage in the RBMP process to provide a proportionate assessment of impact. The responses disagreeing with the proposal do not explain why a different approach

² [River Phytobenthos UKTAG Method Statement Sep2020.pdf \(wfd.uk.org\)](#)

³ [UKTAG Standards Consultation January 2020 | wfd.uktag](#)

should be taken for barriers, and why these impacts should be treated in a different way to, for example, those from abstraction or water quality.

Five responses disagreeing with the proposal expressed concern that the proposed approach to spatial assessment risks disregarding areas of habitat which are significant for fish. The intention of the proposed change is to ensure that the impact of the most important barriers is recognised in classification, and that restoration effort is targeted and prioritised in the most appropriate places. Without such a spatial test, there is a risk that effort is not focussed on the areas where the greatest gains for fish can be made.

The proposal to introduce spatial standards for fish barriers will be now taken forwards during the 3rd RBMP period. If evidence emerges that a revised approach to the spatial test for fish barriers would be of benefit, a change to the spatial standards will be considered at the end of the 3rd RBMP period.

3.6 River flow standards update: artificially increased flows in high hydrological status waterbodies

The responses to the proposal to update river flow standards to include artificially increased flows in high hydrological status waterbodies was balanced between those in support and those in disagreement.

Two responses questioned the basis for applying a flow standard to elevated flows, stating that hydrology was only a supporting element to indicate ecological status. Whilst this is the case for good ecological status and lower classes, deviation from the natural flow regime is a determinant in its own right for the classification of high ecological status.

Other responses in disagreement with the proposal questioned whether 5% was too small a deviation to warrant a deviation from high status. In terms of flows, high status is defined as no or only very minor anthropogenic alterations to the flow regime of the surface water body type from those normally associated with that type under undisturbed conditions. As with the standards that apply to flow reductions, the evidence presented by the UKTAG is that 5% at low flows and 10% at all other flows is consistent with this definition.

One response stated a desire to see further alignment between standards for Special Areas of Consultation and coincident WFD waterbodies. The UKTAG has been taking this process forward through the work in reviewing and amending the environmental standards and this work is ongoing through the next River Basin Management Plan cycle. In terms of the proposed changes to the environmental standards for flows presented here and in section 3.7, as the UKTAG points out⁴, they bring greater alignment with the Common Standards Monitoring Guidance (CSMG) used for condition assessment of river sites with conservation designations. This guidance specifies flow targets in the form of percent deviations from natural flow, which includes artificial increases along with the inclusion of a temporal element to account for the duration of anthropogenic flow alterations.

⁴ [May 2019 UK TAG Standards Consultation Document 0.pdf \(wfduk.org\)](#)

The proposal to update river flow standards to include artificially increased flows in high hydrological status waterbodies will now be taken forwards.

3.7 River flow standards update: hydrological status and short term abstractions

The responses to the proposal to update river flow standards to include hydrological status for short term abstractions were marginally towards those in disagreement of the proposal rather than those in support.

A number of responses in disagreement with the proposal questioned the biological evidence supporting this change in the standards. The scientific evidence basis for these changes were presented by UKTAG in 2019 and consulted upon at that time⁵.

Further responses indicated a preference for a site specific assessment rather than a set of standards. The standards presented here apply to flow evidence available at the site level and vary according to the ecological sensitivity typology assigned to the particular river. The flow evidence, incorporating water use data submitted by operators and underpinned by SEPA flow monitoring, accounts for the cumulative impact of abstractions and discharges. In essence by incorporating a consideration of the duration of flow deviation, they are bringing in more site specific evidence than the previous standards allowed. There will be no change to the process of using ecological indicators, collected at the site level, to assess whether major or severe impacts are occurring as a result of flow impacts.

Several responses both in support and disagreement with the proposal indicated a requirement for further clarification of how the revised standards would apply. For example, some responses expressed concern about the impact these changes would have by allowing greater abstraction during drought. This issue was recognised by UKTAG and the standards proposed here stipulate that the allowance of short duration exceedances of existing flow standards will not apply during such conditions, that is, when natural flows are below the 98th exceedance percentile (Qn98). The clarification of this and other conditions relating to the standards were referenced in our consultation and can be found, along with examples of how the conditions will apply, in sections A2 and A3 in the UKTAG standards consultation annexes⁶.

In light of the above information, the proposal to update river flow standards to include a temporal element, such that, depending upon frequency and duration, short-term abstraction exceedances might not result in a deterioration in class will now be taken forwards.

3.8 New nitrogen standard for lochs

The proposed new nitrogen standard for lochs was supported by almost all respondents. There were some comments around future monitoring and analysis to

⁵ [UKTAG Standards Consultation May 2019 | wfd uktag](#)

⁶ [May 2019 UK TAG Standards Consultation Annexes 0.pdf \(wfd.uk.org\)](#)

ensure that standards are meaningful and effective in supporting improvements to ecological status. These standards will be kept under review and updated should evidence become available suggesting that they can be improved. The UKTAG method statement for Loch nitrogen standards⁷ will now be adopted.

3.9 Invasive Non-native species list update

Overall respondents were supportive of the proposed Invasive Non-native species list update with only one responder disagreeing with the proposed changes. The proposals to update the Invasive Non-native species list update will now be taken forwards.

Irrespective of whether a non-native species is listed as high impact, there are strict controls designed to prevent introductions into the wild. Further information is available from the [Scottish Government](#). Any further proposals to revise the list will continue to be based on the results of risk assessments undertaken by the Great Britain Non-Native Species Secretariat ("[GBNNS](#)").

4. Conclusion and next steps

The majority of responses were in favour of the proposals for new and revised environmental standards set out in our recent consultation. Together these changes should enable a more accurate assessment of the condition of Scotland's water environment and we propose to introduce these standards as outlined in the consultation. However, in consideration of the useful feedback received we will continue to monitor, assess and review standards to ensure they are fit for purpose.

We now propose to introduce the standards by means of Directions to SEPA. These standards will be used to inform the development of the 3rd round of river basin management plans.

⁷ [Lake Nitrogen UKTAG Method Statement Sep 2020.pdf \(wfduk.org\)](#)



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