

Supporting document

Proposal to adopt revised Water Resource Standards in the 3rd River Basin Planning Cycle for Water Framework Directive classification of river water bodies

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Annex V of the Water Framework Directive (WFD) refers to ‘quantity and dynamics of flow’ as one of the hydro-morphological elements supporting the biological quality elements.

Environmental standards for river flow, developed through the UK Technical Advisory Group (UKTAG), are enshrined in The Water Framework Directive (Classification, Priority Substances and Shellfish Waters) Regulations (Northern Ireland) 2015.

These environmental standards were applied in the 2nd River Basin Planning cycle to classify river water bodies based on the variance from natural flow conditions due to anthropogenic influences such as abstractions, discharges and impoundment.

However, the environmental standards, as expressed, accounted for the degree of abstraction (reduction in flow) only and did not consider the potential environmental impact of augmentation (increase in flow).

As the WFD defines high status hydrological regime as when “*the quantity and dynamics of flow.....reflect totally or nearly totally undisturbed conditions*”, UKTAG developed evidence-based proposals to revise high status river flow standards ¹to offer more ecologically relevant classification for the 3rd River Basin Cycle. These were consulted on in 2019.

In addition to the high environmental standards for river flows in *Table 6* of The Water Framework Directive (Classification, Priority Substances and Shellfish Waters) Regulations (Northern Ireland) 2015, the additional high environmental standards for river flows, as proposed by UKTAG, are recommended to classify river water bodies in the 3rd River Basin Planning Cycle, following the adoption in Northern Ireland regulations. The additional standards are shown in Table 1.

Table 1: Additional river flow standards for high status as proposed by UKTAG

Permitted increase in flow as a percentage of the natural daily flow (Q) ⁽¹⁾		
High		
All river types	Maximum permitted % increase in flow at Q exceeding Q ₉₅ ⁽²⁾	Maximum permitted % increase in flow at Q not exceeding Q ₉₅
		10

(1) 'Q' is the mean daily flow for a specified time period

(2) 'Q_n' is the Q is that expected to be exceeded by 'n' percent for a specified time period

¹ http://wfduk.org/sites/default/files/May%202019%20UK%20TAG%20Standards%20Consultation%20Document_0.pdf

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Application of the additional environmental river flow standards for high status will afford alignment with the Common Standards Monitoring Guidance for freshwater flows published by the Joint Nature Conservation Committee (JNCC) in 2016².

² <https://data.jncc.gov.uk/data/1b15dd18-48e3-4479-a168-79789216bc3d/CSM-Rivers-2016-r.pdf>



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