



Natural England and Environment Agency timeline for consideration of Nitrogen Targets on the River Wye and Lugg SAC

Background

The Wye and Lugg SSSI (which underpins the Wye and Lugg SAC) has specific targets for Soluble Reactive Phosphorous, Dissolved Oxygen, Mean Biochemical Oxygen Demand (BOD), Total Ammonia, Suspended Solids, Diatoms, Water Flow and Siltation as well as targets around other features as detailed in the Monitoring Specification in Annex 1.

The river does not have a separate target for Nitrogen (N). This is in line with Common Standard Monitoring Guidance (CSMG) for rivers where Phosphorus is a mandatory attribute and therefore set as standard for all site designated for their river habitat. Whilst not mandatory or therefore currently standard practice, the river CSMG does indicate a target for N to be applied where there is site-specific evidence for N-mediated eutrophication that is not amenable to control by applying phosphorus targets in isolation.

The Nutrient Management Board (Oct 2024) has raised the question of whether there should be a separate N target, especially in light of research from Cardiff University indicating nitrates could be a contributing factor in algal blooms together with other factors such as low flows, increased temperature, and sunlight exposure.

Process & timeline

Evidence of need to N target

The first stage of considering adopting an N target would be to review the evidence on whether a target is required and would contribute to improving the condition of the river.

There is a current and ongoing condition assessment of the Wye and Lugg SSSI. This condition assessment will provide current and detailed information on the condition of the river. The analysis of this evidence will be used to determine if an N target is required.

In addition, Natural England continues to work closely with the Environment Agency in understanding the ongoing PhD algal research study from Cardiff University and what this means for the river.

The condition assessment will not be completed for both rivers until late in 2025.

Setting a target

If the above evidence led to the conclusion that a N target would be beneficial in improving the condition the next stage would be to determine what the target should be. This would have 2 parts:

- What type of N target e.g. Total Oxidised Nitrogen (TON), Total Nitrogen (TN), Total Inorganic Nitrogen (TIN), or Nitrate etc. The Environment Agency currently collect data for TON and Nitrate.
- What should the target be set at.

Given the limited application of N targets for rivers in England to date these questions and the local data would need consideration by specialists in Natural England and the Environment Agency. We would also want to agree any new target with Natural Resources Wales as this is a cross-border site.

Annex 1

*[Note: Annex 1 cannot be opened here;
the document is included in supplement 1]*



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