Partnership Meeting

Supplement 3.2 to the agenda for

Wye Catchment Nutrient Management Board

Wednesday 16 October 2024

2.00 pm

Conference Room 1 - Herefordshire Council, Plough Lane Offices, Hereford, HR4 0LE

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3.	**QUESTIONS FROM MEMBERS OF THE PUBLIC** Updated with agency responses; 12 November 2024, includes further update from the Environment Agency.	3 - 4

Questioner: Helen Hamilton, Marches Planning & Environment

Question 1:

For Environment Agency:

Will the Environment Agency commission Rephokus 3 research in the light of newly available data that fills gaps in Rephokus 2?

New data includes:

- APHA figures showing poultry numbers in the Wye catchment of c.30m. Rephokus 2 modelling was based on 20m birds.
- The Wye Viz database of citizen science river testing results that would fill the gaps in testing data referenced in Rephokus 2.
- CPRW GIS mapping of Intensive Poultry Units across the catchment, which would enable the sub catchment analyses to include P production data omitted from the phase 2 report.

Updated research could address concerns over assumptions made in Rephokus 2, for example about historic land use, and provide clarity about the use of industry figures, which are not in the public domain.

Should the research be extended to other nutrients in the light of the Cardiff University research into the causes of algal blooms in the Wye?

Response by Martin Quine, Place Manager - Gloucestershire and Herefordshire, Environment Agency (updated 11 November 2024):

The Environment Agency continue to work with the RePhoKUs team at Lancaster University, but at this stage we do not plan on commissioning an updated report for the Wye.

Lancaster University are currently updating the Phosphorus Material Flow Analysis (P-MFA) for the Wye. This is used as a modelling approach to understand nutrient use in food systems at various scales, as part of an EU New-Harmonica project (Harmonised Nutrient Load Reduction Approaches within Ecological Boundaries in Catchments). The P-MFA modelling approach (also known as System Flow Analysis) provides a visual representation of nutrient imports, exports, internal movements, stores, and losses within geographically defined areas as a starting point for improved nutrient stewardship. We understand that the Lancaster University RePhoKUs team are hoping to present the project at a stakeholder workshop in Spring 2025.

Lancaster University have informed us that they do not plan on using citizen science river P data as they cannot directly relate this to P surpluses without accompanying flow data. This should not be taken as citizen science river testing is not valuable, but it is not at a point that can be used for modelling.

The Environment Agency agree that there are many factors influencing land use change, and the RePhoKUs report highlighted those that would have a direct impact on P inputs and surplus. It was never intended in the remit of the report to be a comprehensive analysis of how

land use has changed or of any erosion risk that is associated with such change. The main focus of the historic analysis was to provide an approximate estimate of legacy soil P reserves. We expect some tweaks may be made to the historic P surplus calculation as part of the New-Harmonica project, but this will not be looking at further and different land use scenarios.

The historical census data was used in RePhoKUs as it is the only data on poultry numbers in earlier years that we are aware of. We kept to census data throughout the historical analysis to be consistent. There are a few assumptions in the estimates which were acknowledged in the report.

We believe that RePhoKUs has advanced our understanding of P within the Wye catchment in England. The purpose of the report was to better establish the problem, using what we learned in our partnership work to help prevent and reduce pollution.

Question 2:

For Natural England / Natural Resources Wales:

Will Natural England and Natural Resources Wales revisit their nutrient neutrality advice for the River Wye in the light of the research from Cardiff University showing that Phosphate is not the sole or main cause of algal blooms in the catchment?

Response by Claire Minett, Principal Manager – West Midlands Team, Natural England (updated 1 November 2024):

Natural England has no current plans to revise our Nutrient Neutrality Advice for the River Wye. We have been working with NRW and have looked to align our approaches as much as possible, taking account of any differences in England and Wales. Our advice currently remains that the River Lugg is under NN advice for Phosphorus and we continue to work closely with Herefordshire Council regarding Nutrient Neutrality mitigation in the Lugg catchment.

Natural England continues to assess relevant data as it becomes available, including the research from Cardiff University, and will always seek to use the best available evidence to provide advice. We are very aware that phosphate is not the only issue that impacts the health of the Wye and Lugg SAC and that a whole catchment approach, including a cross-border approach is required. We continue to both gather and review new evidence and work with partners to improve the health of the river. However, we do also understand that nutrient enrichment does impact the health of the river, so we do continue to focus our farm advice on encouraging those measures which reduce soil movement and reduce diffuse water and air pollution.

Response by Ann Weedy, Operations Manager – Mid Wales, Natural Resources Wales:

NRW will not be reviewing our nutrient neutrality advice for the River Wye in the light of the research from Cardiff University.

We are in the process of reassessing compliance against all the targets (not just Phosphate) used as part of the Conservation Objectives for the Wye which are based on the JNCC guidance on the requirements of the designated features.

Our nutrient neutrality advice will be reviewed following this reassessment.