

Questions from the public, NMP Board 4th October 2016

Serious phosphate pollution in the River Lugg

Please see attached below in an excel spreadsheet some recent phosphate pollution data for the upper River Lugg, ie the water body which the EA describes as "River Lugg - conf Norton Bk to conf R Arrow".

The phosphate limit for this water body is set by Natural England and the EA at 0.025 mg / l.

The Phosphate target for the Lugg part of the Wye SAC is 0.05 mg/l

The data covers the three EA monitoring points for this water body, ie:

PTCODE 50039 - Mortimers Cross Bridge

PTCODE 50041 - Cheaton Brook

PTCODE 50833 - C/W River Arrow

I am concerned that:

1. Phosphate levels at C/W River Arrow have been very high for at least the five months from February to June 2016 - over 20 times the limit in February, over 13 times in April and c. 9 times in June.
2. The EA took nine phosphate readings at C/W River Arrow over the year from 1st July 2015 to 30th June 2016, with an average value of 0.166, ie over 6.6 times the limit.
3. Levels at all three monitoring points in late April 2016 were very high - > 13 X the limit at c/w River Arrow (22 April 2016), 6 X at Mortimers Cross Bridge (20 April 2016) and > 16 X at Cheaton Brook (20 April 2016).

My questions for the NMP Board on 4 October 2016 are:

- a. What ecological damage to the Lugg will be caused by these sustained high levels of phosphate over such a long period?

Elevated Phosphate levels in rivers are a causal factor of eutrophication. Eutrophication results in increased algal growth which can adversely impact on dissolved oxygen concentrations and can impact on fish and invertebrate populations/diversity.

Invertebrate and fish surveys are carried out by the Environment Agency, the results of this year's surveys are not yet available.

- b. What specific and immediate action and investigations did the EA take to establish the causes of these huge spikes in levels across the whole water body (especially 20 - 22 April 2016)?

Phosphate concentrations in rivers are naturally variable throughout the year. This variability is further enhanced as a result of anthropogenic activity in the catchment. As a result of the "spikes" of Phosphate seen within the Lugg this year a desk-top review is being carried out to look for patterns and trends that will inform future work within the catchment.

The Environment Agency collates information on high risk agricultural land with high risk crops. When a wet weather event is forecasted/occurs these sites are visited and evidence is collected when issues are evident. The land manager responsible is then required to undertake remedial work and to develop, a plan to ensure further such incidents don't arise.

- c. What was the contribution to these high phosphate levels and the huge phosphate spikes from diffuse agricultural pollution, especially poultry manure?

Diffuse inputs are highly likely to be the cause of the "spikes", the work outlined above will provide further analysis. It is impossible to determine what contribution the use of poultry manure makes.

- d. What follow up actions did the EA carry out to ensure that this serious phosphate pollution is addressed?

Activity to address the diffuse contribution falls into 3 work-streams:

1. Advice and Guidance – delivered via the **Farm Herefordshire** initiative.
2. Incentives – delivered through Countryside Stewardship, Catchment Sensitive Farming and **Farm Herefordshire**
3. Regulation & Enforcement – arising from targeted high risk farm inspections in sub-catchments, and from reactive work during rainfall events/incident response.

- e. With this evidence of massive phosphate spikes, and 12-month average well above P limits, will DEFRA now apply for the Lugg to be designated as a Water Protection Zone, under s 93 of the Water Resources Act 1991?

A national project is reviewing delivery in failing SACs, the Lugg is being considered as part of this project. This will consider whether what is currently being done in the catchment is sufficient to deliver compliance with SAC targets, if not what else needs to be done and whether a WPZ would assist in securing compliance.

- f. How much additional phosphate pollution and ecological damage is required before the Lugg is designated a WPZ?

See above.

1. Why has the NMP Board and its partners not publicised the implications of proposed mandatory WPZs on the River Lugg to residents, farmers and growers in Herefordshire?

There is currently no proposal to implement a WPZ in the Lugg catchment (see “e” above). The Board has received briefings on the “WPZ project”. Consultation on this project is being facilitated by the Wye Catchment Partnership, link below:

<http://www.wyecatchment.org/>

2. Why has Herefordshire Council not published a review of the Core Strategy housing targets (the CS was adopted only 1 month before the High Court Ruling concerning mandatory WPZs) which models the impact of a mandatory WPZ on the Lugg? [Background: This is absolutely necessary because it would impact development in Leominster (>2,300 houses), Bromyard (>500 houses) and Kington (>200 houses) plus many rural settlements north of Hereford (est. >1500) houses) which feed the Lugg Catchment - <http://environment.data.gov.uk/catchment-planning/OperationalCatchment/3014>. That is more than 4,500 houses in total, i.e. over 25% of the Core Strategy housing target. There is already a failure to meet the 5 Year Housing Land Supply in Herefordshire, and the introduction of mandatory WPZs will make a bad situation even worse.]

There has been no High Court ruling on mandatory WPZs. As a result of a judicial review Defra & the Environment Agency entered into an agreement with the petitioning parties to undertake the project outlined in “e” above. There is no resulting requirement for Herefordshire Council to review the County’s Core Strategy, delivery of which is intrinsically linked to the Nutrient Management Plan (NMP). Should the project determine a WPZ is appropriate for the Lugg, there would need to be a consultation on the draft WPZ and assuming that consultation was favourable it would then require Ministerial approval to be implemented. Should all of this occur, the NMP would then need to be reviewed in light of the WPZ.