

Follow-up question arising from 16 April 2025 meeting

Questioner: Nick Day, The Friends of the Lower Wye**Initial question:**

The Nutrient Management Plan published by NRW et al in November 2021 included an ambition to "target work by sub catchments based on P evidence report but also taking into account other relevant evidence" (P46). In the River Trothy sub-catchment, Citizen Scientists have recorded persistent high levels of phosphorus and other pollutants over the past several years.

What steps have NRW taken to reduce the nutrient load in the Trothy,

What further actions are planned, and

What and by when are the expected outcomes of current and planned actions?

Response from Ann Weedy, Natural Resources Wales (NRW)

NRW's Central Monmouthshire Opportunity Catchment project 2022-2025 involved working with farmers in the Central Monmouthshire area to deliver on-the-ground interventions that benefit water quality and WFD status, and improve wider biodiversity and resilience.

During this period the project worked on four farms within the Trothy sub-catchment. Intervention outputs were:

1.65 km riparian fencing (preventing livestock access to watercourses), 1 new bridge (replacing a ford type crossing for cattle); 9 drinking troughs and associated infrastructure; 500+ new trees. Another approximately 2500 trees were planted at two of the project farms by Stump Up for Trees following collaboration with this charity.

A further phase of the project with similar objectives is proposed for 2025 – 2030.

In addition 24 farms were visited between 21 and 24 resulting in two enforcement notices, 2 formal cautions, 7 warning letters and a potential enforcement case.

Follow-up question:

Thanks for this response, it's good to see NRW have been active in the catchment - could they advise whether any of the enforcement action was informed by data generated by FORW Citizen Scientists, and will they be using such data to target their inspections in the next phase of the project?

Response from Ann Weedy, Natural Resources Wales (NRW) 30 July 2025

Citizen Science data is generally used as intelligence to support how we target our work/ priority areas.

Any enforcement response made by NRW would be based on evidence from a warranted officer (which could include monitoring data/ visual observations/ photographs etc.) Enforcement notices are generally used to require improvements to be made to farm infrastructure following observations made by officers during a farm visit. Prosecutions and formal cautions are generally based on warranted officer evidence- in order to be admissible but can include witness statements which could come from anyone who witnessed alleged offences.

Questions received for the 16 July 2025 meeting

Questioner: Friends of the River Wye

Friends of the River Wye would like to submit the following questions for discussion at the Wye Nutrient Management Board meeting next week:

1. The Wye Catchment Partnership (the formal Catchment-Based Approach or CaBA for the Wye Catchment) is now no longer hosted by the Wye and Usk Foundation, and we understand the partnership currently has no host or secretariat at all. We also understand it has been granted £150,000 by Welsh Government for developing a Catchment Management Plan. Following the success of the merging of the Usk Catchment Partnership and Usk Nutrient Management Board (hosted by Bannau Breichyniog), which allowed for a) a single set of well-organised meetings and workshops for partnership members and key catchment stakeholders to attend, with a single set of task & finish groups etc to execute actions and b) a sensible budget allowing for both the hiring of a highly competent and dedicated coordinator plus the payment of stipends to key partnership attendees, particularly in the farming community. Is it not now urgent for this approach to be taken forward in the Wye catchment and bring together the key advantages of having a single, well-funded public body responsible for catchment health, managed under the Nolan principles and responsible for developing a single plan that encompasses all aspects of river health (a Wye Catchment Plan that formally incorporates the Nutrient Management Plan and the Diffuse Water Pollution plan)?

Responses to date:

- **Martin Quine, Environment Agency (15 July 2025)**

Any decision to merge the Nutrient Management Board and Wye Catchment Partnership will need to be considered by the Nutrient Management Board Chair and Wye Catchment Partnership Steering Group. A task and finish group has been established to review and appoint a new host body of the Wye Catchment Partnership.

- **Ann Weedy, Natural Resources Wales (NRW) 30 July 2025**

In addition to the comments from EA above I would recommend that we would also need to consult Welsh Government (who have provided grants to LAs to support the running of NMBs) on any proposed merger of these 2 groups.

Wye Catchment Nutrient Management Board, 16 July 2025**Item 3, Questions**

[v2.2, 30 July 2025]

2. The recent revelations by Environment Agency staff regarding a "deliberate and ongoing cover-up of the public health and environmental dangers of spreading sewage sludge on farmland" (The Guardian, 9th July 2025) are deeply concerning. Combined with the findings by the University of York at the Warren bathing place last year (The Times, 14th December 2024) and the recent report from the Rivers Trust revealing the Lugg as one of the worst rivers in the country for biocides (The I, 4th July 2025), can the Statutory Officers at this meeting, including the EA, NRW, Natural England and Welsh Water/Dŵr Cymru, provide written detail about:
- a) what is known internally at their organisations about the contents of sewage sludge and the associated risk to public and ecological health;
 - b) if there is a low understanding in these organisations of these risks, what is being done to improve this understanding and on what timeframe;
 - c) exactly how much sewage sludge has been spread in this catchment and where in the last 12 months;
 - d) what if any measure are being taken right now to address these extremely worrying developments; and
 - e) if an immediate moratorium on the spreading of sewage sludge to land is not being put in place, clear written justification to this meeting as to why it is not.

Responses to date:

- **Martin Quine, Environment Agency (15 July 2025)**

The Environment Agency currently regulates sludge under the Sludge (Use in Agriculture) Regulations 1989. Our officers inspect the application of nutrients during as part of our farm inspection work.

This question requires further consideration and would come under a Freedom of Information / Environment Information Regulations request, which can be submitted through Enquiries_Westmids@environment-agency.gov.uk.

- **Ann Weedy, Natural Resources Wales (NRW) 30 July 2025**

The Sludge use in Agriculture Regulations 1989 also apply in Wales and NRW regulates this activity as part of its remit in Wales. Further information on the controls these regulations impose can be found below.

[Sewage sludge in agriculture: code of practice for England, Wales and Northern Ireland - GOV.UK](#)

If you still require information from NRW on these regulations please submit your request using accesstoinformationteam@naturalresourceswales.gov.uk

- **Daniel Humphreys, Dŵr Cymru/Welsh Water (15 July 2025)**

- a) *what is known internally at their organisations about the contents of sewage sludge and the associated risk to public and ecological health;*

Not all Biosolids in the Wye catchment will necessarily come from Dŵr Cymru Welsh Water. Different water companies have differing approaches to how they process sewage sludge.

All sewage sludge produced in Wales is processed in one of four Advance Anaerobic Digestion (AAD) treatment facilities. What makes the anaerobic digestion advanced compared to conventional digestion is that prior to being fed into the anaerobic digester the sludge is treated in a thermal hydrolysis process (THP). To undergo THP all sludges are first thickened, to approximately 22% dry solids (DS) which makes the process more efficient in terms of energy and the time taken to process.

THP itself involves heating the sludge to a temperature of between 140-165°C (under a pressure of 2.6-6 bar) and holding it at the temperature for 20-30 minutes. During the THP treatment the sludge is made more biodegradable by releasing intracellular material and by breaking down large organic compounds into smaller more bioavailable organic compounds. This process also completely sterilises the sewage sludge, removing all pathogens including *E. coli* and *Salmonella*.

Once the sludge has been through the THP it is cooled and fed to the anaerobic digesters. During anaerobic digestion microorganisms break down the biodegradable matter into two main products, methane and carbon dioxide, the sludge is held in the digester for on average 12-18 days after which it is dewatered, and the resultant product is known as **biosolids**.

The green energy generated by this process is used for generating energy to run our plants and the remainder is returned to the grid.

The application of biosolids is regulated by the UKAS accredited Biosolids Assurance Scheme (BAS) which sets minimum standards for the quality of the biosolids going to land. To reach enhanced standard the biosolids must contain no more than 1,000 CFU*/gram DS for *E. coli* and it must be free of *Salmonella*, typically Welsh Water's biosolid *E.coli* levels are at <100 CFU/g DS.

In addition to Maximum Allowable Concentrations (MAC) of *E. coli* and *Salmonella spp.*, biosolids produced by Dŵr Cymru Welsh Water is also tested in accordance with the '*Sludge (Use in Agriculture) Regulations – Schedule 1 – Testing of Sludge*' and the '*Department for the Environment Code of Practice for Agriculture Use of Sewage Sludge*'.

There are also limits set on the quantity of certain metals and other substances including fluoride, magnesium, arsenic, selenium, molybdenum, sulphur, cadmium, chromium, copper, mercury, nickel, lead and zinc. Nutrient levels in terms of NPK are also closely monitored. Making sure that compliant biosolids being applied to land is of paramount importance at Dŵr Cymru Welsh Water. Samples are taken at least every three months to ensure that the bacterial, metal and nutrient composition is safe and in accordance with the regulations.

Dŵr Cymru Welsh Water Biosolids Team carry out soil sampling, to assess land suitability and offer ongoing support and guidance to ensure efficient utilisation of nutrients. When identifying suitable fields for spreading, the following factors are considered and areas selected or rejected based on findings -

- 50 metres of an identified spring, well or borehole.
- 10 metres of a surface water course
- An Environment Agency or Natural Resources Wales identified Groundwater Source Protection Zone 1
- If the proposed spreading area is within a designated Nitrate Vulnerable Zone
- Do not apply on land with a slope greater than 12° if there is a significant risk of nitrogen getting into surface waters

Fields that receive Biosolids are sampled and analysed for the following determinands prior to any application:

- pH
- Fluoride
- Cadmium
- Arsenic
- Chromium
- Selenium
- Copper
- Molybdenum
- Mercury
- Nickel
- Phosphate
- Lead

- Potassium
- Zinc
- Magnesium
- Organic Matter(England and SAC catchments only)

No Biosolids are applied to Agricultural land if any of the above results are above applicable thresholds. To meet the requirements for safety, quality and environmental management, the process must meet strict audit requirements that have been set out within the Biosolids Assurance Scheme Standard (BAS). The BAS Scheme has been developed to provide reassurance to the food chain stakeholders that the recycling of biosolids to agricultural land is a safe and sustainable practice. Within the BAS, Regulations are supported by Codes of Practice, to ensure that best practice methods are applied throughout the treatment and recycling process.

b) if there is a low understanding in these organisations of these risks, what is being done to improve this understanding and on what timeframe;

A national research project is well underway and will help us better understand any potential risks that may exist. This programme, named the 'Chemical Investigation Programme' or CIP, is in its 4th programme having started in 2010. The programme requires water and sewerage companies across the UK, environmental regulators and industry experts to contribute to the collaborative approach to this research. Each tranche of work is informed by the results of the last. CIP3 had and CIP4 will have, a higher focus on PFAS and other chemicals of emerging concern. The data, once collected and analysed, is freely available from UKWIR as well as associated reports.

More information is available on our website here: <https://www.dwrcymru.com/en/help-advice/river-pollution/chemical-investigation-programme>

Dŵr Cymru Welsh Water spent more than £2m in 2020 – 2025 on the CIP(3) and an estimated £4 million will go towards the programme running 2025-2030.

c) exactly how much sewage sludge has been spread in this catchment and where in the last 12 months;

We are able to confirm that Dŵr Cymru Welsh Water Biosolids Team delivered circa 10,105 tonnes.

d) what if any measure are being taken right now to address these extremely worrying developments;

See answer to 'b' above re the Chemical Investigation Programme

e) if an immediate moratorium on the spreading of sewage sludge to land is not being put in place, clear written justification to this meeting as to why it is not.

Not for Dŵr Cymru Welsh Water to answer.

Questioner: Tom Tibbits, Chair, Friends of the Upper Wye

- A. Following the announcement that the Wye Catchment Partnership's host and secretariat function has entered hiatus, and citing the example of the Usk catchment where the CaBA and Nutrient Management Board have merged and are one body (with considerable success), what is stopping the host(s) of the Wye Nutrient Management Board (namely Herefordshire Council and Powys Council) from proposing a similar merger with the Wye Catchment Partnership? There is significant funding at risk if nothing is done, not to mention yet another stall in much needed progress to a healthier catchment, which is currently unsatisfactory and declining.

Were a merger to happen what steps would be taken to ensure both the English and Welsh parts of the catchment would be given fair representation?

Responses to date:

- **Martin Quine, Environment Agency (15 July 2025)**

Any decision to merge the Nutrient Management Board and Wye Catchment Partnership will need to be considered by the Nutrient Management Board Chair and Wye Catchment Partnership Steering Group. A task and finish group has been established to appoint a new host body of the Wye Catchment Partnership.

- B. within the updated guidance for FRfW published 18th June, section 2.2 deals with land managers' plans.

Section 2.2 starts with "Land managers must plan to avoid significant risk of agricultural diffuse pollution. This includes not exceeding the needs of the soil and crop on the land. The needs of the crop and soil and the risk of diffuse pollution will depend on individual circumstances. The Environment Agency should take these into account when assessing plans."

How will the EA interpret the meaning of the words 'significant risk' when taking into account the needs of the crop and soil and the risk of diffuse pollution when assessing plans? What steps will be taken to ensure that land managers are able to supply up to date soil tests and analyses so that an adequate assessment of the risk of diffuse pollution can be made? How will different land management techniques (such as direct drilling, ploughing, permanent pasture etc) be taken into account in this process?

Section 1 of the same regulations state "The Environment Agency may still escalate and impose civil or criminal sanctions if appropriate, in particular if advice, guidance and warning letters do not achieve the necessary changes in behaviours." How much guidance and how many warning letters will need to be issued before the EA is prepared to escalate to civil or criminal sanctions? What is the length of time-period between issuing of guidance and/or warning letters and a follow up inspection to assess the required behavioural changes by land managers? How quickly does the EA think that this approach will encourage community wide behavioural change in farming to protect the catchment? Does

the EA operate any kind of hierarchy of risk with farms that operate intensive poultry operations (and therefore have an abundance of nutrient rich waste to dispose of) compared with other farming operations when assessing where inspections need to take place?

Responses to date:

- **Martin Quine, Environment Agency (30 July 2025)**

Section 2.2 starts with "Land managers must plan to avoid significant risk of agricultural diffuse pollution. This includes not exceeding the needs of the soil and crop on the land. The needs of the crop and soil and the risk of diffuse pollution will depend on individual circumstances. The Environment Agency should take these into account when assessing plans."

How will the EA interpret the meaning of the words 'significant risk' when taking into account the needs of the crop and soil and the risk of diffuse pollution when assessing plans?

Significant risk is not defined in the Regulations. We will assess each farm on the individual circumstances, taking into account what reasonable precautions have been taken as well as physical factors such as soil type, soil condition, slope, rates of application, weather conditions etc

What steps will be taken to ensure that land managers are able to supply up to date soil tests and analyses so that an adequate assessment of the risk of diffuse pollution can be made?

The regulations require land managers to take account of up-to-date soil analyses when planning their spreading of manures and fertilisers; soil tests must be no more than 5 years old at the time of the application. When inspecting farms that apply materials to land, we will expect them to show how soil analyses have been used, and, if not available, require them to get soil tests done. Failure to take them into account means that planning has not been done properly and an offence may have been committed. We should also be asking for plans to be completed or updated in light of the soil results

How will different land management techniques (such as direct drilling, ploughing, permanent pasture etc) be taken into account in this process?

We wouldn't differentiate between various cultivation techniques. We will look to see whether land managers had planned their applications and taken reasonable precautions to prevent and reduce agricultural diffuse pollution, including whether cultivation practices had led to, or could lead to diffuse agricultural pollution e.g. direct drilling over already compacted soils may exacerbate run-off.

Section 1 of the SoS guidance states "The Environment Agency may still escalate and impose civil or criminal sanctions if appropriate, in particular if advice, guidance and warning letters do not achieve the necessary changes in behaviours."

How much guidance and how many warning letters will need to be issued before the EA is prepared to escalate to civil or criminal sanctions?

The nature and type of guidance will be based on the need for regulatory compliance and will vary between land managers. If formal warning letters do not achieve the required result, we will look at further options for enforcement and ensuring compliance in accordance with our enforcement and sanctions policy.

What is the length of time-period between issuing of guidance and/or warning letters and a follow up inspection to assess the required behavioural changes by land managers?

There are no set times Each case will be looked at individually and it will depend amongst other things on previous history, the nature of the compliance issues and work required, whether planning permission is required etc. We will escalate as appropriate in accordance with our enforcement and sanctions policy

How quickly does the EA think that this approach will encourage community wide behavioural change in farming to protect the catchment?

The answer to this question is complex, as it depends on land managers both understanding and adhering to the relevant legal requirements and guidance.

Does the EA operate any kind of hierarchy of risk with farms that operate intensive poultry operations (and therefore have an abundance of nutrient rich waste to dispose of) compared with other farming operations when assessing where inspections need to take place?

Operations that are over the threshold number of birds are already regulated in a more stringent way through the Environment Permitting Regulations. We target our enforcement effort at higher risk farming activities, including livestock, particularly dairy and beef farming and where farming is likely to impact protected areas.

- C. In the recent Whitwick Manor AD unit planning assessment, the EA were unable to identify that the proposed development at Whitwick Manor is in the Lugg catchment, one of the most severely polluted sub catchments in the Wye system.

Why was the EA unable to identify this basic geographical fact?

Did this failure have a bearing on the assessment outcome provided by the EA to the Herefordshire Planning department, given the severity of the pollution in this part of the SAC?

Responses to date:

- **Martin Quine, Environment Agency (15 July 2025)**

Our National Permitting Service, as a competent authority, carried out their own Habitats Regulations Assessment (HRA) screening prior to determination of the permit. Our determination process was reviewed by our technical water quality team and did take into consideration

the River Lugg SAC. This assessment and decision to grant the Environmental Permit was taken in accordance with our guidance, based on information and evidence at the time.

We advised the Local Planning Authority that the conclusion of ‘no significant adverse effects’ in the shadow HRA on the Lugg SAC should be considered through the planning process.

- D. This is a question for the statutory planning authorities that operate in the catchment: (Herefordshire, powys, monmouthshire etc) For intensive livestock farming developments that are exempt from Environmental permitting regulations (for example poultry units with fewer than 40,000 incarcerated birds), how do the planning authorities keep records about, and assess, the cumulative impacts of pollution from these developments within their own statutory areas? Are these records and assessments available for public inspection?

How do planning authorities keep records and assess the cumulative impacts from intensive livestock farming developments across the entire catchment, for example, how does Herefordshire assess the cumulative impact from any pollution arising further upstream, in this instance in Powys? How does Monmouthshire do the same for both Herefordshire and Powys, and so on? Please detail information for all impacts, ie both airborne and waterborne pollution.