Senedd Cymru Pwyllgor yr Economi, Masnach a Materion Gwledig	Welsh Parliament Economy, Trade, and Rural Affairs Committee
Rheoliadau Llygredd Amaethyddol	Agricultural Pollution Regulations
Economy(6) APR21 Ymateb gan: Ymateb unigol	Evidence from: Individual response

1. Personal background and scope of evidence

1.1 I live near Usk town in Monmouthshire and have a long personal and professional interest in the River Usk, one of Wales's principal rivers and designated a Special Area of Conservation. I am currently finalising a report on the state of the fauna and flora of the river, especially those which should receive special protection under environmental legislation.

1.2 I worked for the Environment Agency (EA) and its predecessors up to 2011, mostly at Head Office covering Wales and England, but previously in Wales. Since leaving the Agency in 2011, I have been a consultant, now retired. I have a doctorate in recreational economics, M.Sc in Applied Hydrobiology and a range of publications on fisheries management, economics and ecology. I am a Chartered Environmentalist and Fellow of the Institute of Fisheries Management. I have been a board member of the Angling Trust and a trustee of the Wye & Usk Foundation and still contribute occasionally on a voluntary basis to their work. I am a member of Natural Resources Wales's (NRW) Local Fisheries Group for the Usk and also represent the Usk on NRW's Wales Fisheries Forum.

1.3 The detail of my evidence relates primarily to the river Usk which may offer wider, national lessons.

2. Background - The state of rivers in Wales

2.1 NRW's State of Natural Resources Report, December 2020 paints a dire picture of Welsh rivers as a whole, including that:

- 66% of river water bodies fail to achieve 'good ecological status' under the Water Framework Directive.
- All Habitats Directive freshwater features are in 'unfavourable' status, with the exception of the otter.
- Continued widespread agricultural diffuse pollution resulting in elevated nutrient and sediment loadings into freshwaters.

Even when published, this assessment was out-of-date, being based, in some cases, on data six or more years old. Judging by the Usk, there has been further deterioration and not just, as noted by NRW, in the stocks of salmon and sea trout but of fauna and flora more widely. The status quo is not stasis but decline. Future targets for water quality under the Water Framework Directive, already postponed, have little prospect of being met. This is part of the 'Nature Emergency' declared by the Senedd in June this year. Agricultural pollution, exacerbated by climate change is a key driver and must be addressed promptly.

2.2 NRW's Diffuse Water Pollution Action Plan, from 2013, and the Welsh Government's Biodiversity Action Plan, from 2015, have failed. Effective regulations, widely promoted and enforced, are urgently needed to support awareness-raising and rural payments. They must address all the main forms of agricultural pollution. Failure to do so could leave Welsh Government or NRW open to legal challenge.

3. Positive aspects of the current all-Wales approach

3.1 The current regulations, when fully implemented, should provide a level playing field across Wales.

3.2 I am aware that locally they are already driving investment in better storage of slurry capacity. They should also address some of the worst excesses of slurry disposal, especially in winter.

3.3 They provide offences, enabling effective enforcement action, that can more easily be publicised across Wales, to the farming community and the wider public to draw attention to the problem and the need for change.

4. Negative aspects of the current all-Wales approach

4.1 The current all-Wales approach does not address major facets of diffuse agricultural pollution but are focussed on the dairy industry, especially in West Wales. Nutrient management aspects deal mainly with nitrate. They do not adequately address pollution by **phosphate** which is not always at a constant ratio to nitrate in other agricultural waste. Excessive phosphate, with associated damage to fauna and flora, is a major reason for failure to achieve 'Good Ecological Status', a minimal standard for river SACs . The river Wye gets most headlines in east Wales but the Usk is worse. NRW report that 88 percent of the River Usk SAC now fails the targets for phosphate, though sewage effluent is also a major source that has also not been addressed.

4.2 It may be worth noting that similar regulations have applied for years to much of the Olway Brook sub catchment as a Nitrate Vulnerable Zone (NVZ) but recent NRW data show that phosphate levels in this tributary are still some of the highest in the Usk catchment.

4.3 The Severn River Basin Management Plan covers parts of east Wales, including the upper Severn, Wye and Usk. As well as highlighting excessive nutrients as a problem, the consultation document, published by NRW and the Environment Agency, flags sedimentation from soil erosion as a key problem. Despite having been recognised for decades, local NRW staff say they can do little to prevent it. The problem is almost certainly getting worse due to changing agricultural practice and more intense rainfall. More fields are left bare during winter as farms switch from stock grazing to arable or forage crops, notably maize and stubble turnips. I understand that the latter is actively promoted by Welsh Government. Also, potato farmers from England have leased land in east Wales, reflecting the lack of relevant regulation and enforcement here.

4.3 In England, the Water Rules, i.e. The Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018, include measures in Section 10 to stop erosion both from bare fields and from poaching by stock of the banks of water courses. For east Wales at least, the lack of such measures is a major flaw in the Wales's new regulations. If the objective is to achieve Good (or better) Ecological Status in rivers, the regulations need to address all the key problems from agricultural pollution.

4.4 While staggered implementation of agricultural regulations may increase their political acceptability, they will not deliver the desired outcome i.e. good or better ecological status by the set date, now 2027 for most water bodies in the Usk catchment. It was initially 2015 then 2021 before being put back again.

5. The process for developing the current approach

5.1 The content of the regulations was driven by the report of **NRW's Land Management Forum** to the Minister in 2018. The composition and focus of that group was biased towards West Wales where pollution by the dairy industry is undoubtedly the overwhelming issue.

5.2 What lessons have been learned from equivalent rules in other UK countries, especially England? These have been in place since 2018, albeit with delayed implementation. For example, did they work effectively in addressing the problems on the River Axe SAC, as suggested by the Environment Agency? What have their drawbacks been? Take some benefits out of the delay in introducing regulations in Wales.

6. The alternatives to the current approach

Adapt aspects of the English Regulations to make good shortfalls in Wales Regulations: this has much to recommend it:

- A level playing field for Welsh and English farmers.
- Includes regulations to address pollution problems not covered yet in Wales.
- Much of the administrative spade work has already been done in England.
- Lessons, good and bad, can be learned from the English experience.

7. If an all-Wales approach were to be retained, how the current approach could be improved?

- Reduce the time to implement the new regulations to stop the decline in rural rivers which has been left unchecked for years.
- Include new regulations to make good shortfalls in the all-Wales Regulations.
- Increase the publicity about the state of our rivers and the impact of agricultural pollution.
- Expand the number of NRW enforcement officers to enforce the regulations effectively.

Thank you for the opportunity to contribute to your deliberations. Dr. Guy W. Mawle