

# Help improve water quality in the River Usk by upgrading sewage systems in the Usk valley

Y Pwyllgor Deisebau | 09 Ionawr 2023  
Petitions Committee | 09 January 2023

Reference: SR22/4475-3

Petition Number: P-06-1312

Petition title: To help improve water quality in the River Usk by upgrading sewage systems in the Usk valley

Text of petition:

The River Usk is a Site of Special Scientific Interest and a Special Area of Conservation. Yet water quality in the River Usk is such that 88% of its water bodies are failing to meet their targets. Improvement targets could be set. (For example: 50% by the end of 2023, 25% by 2024 & so on). Salmon, sea trout and eels are all seriously on the decline. Ranunculus weed growth in the river has virtually disappeared. People who wild swim in the river are at risk of picking up infections.

Yet what is happening to help prevent this decline? Welsh Water is a not for profit organization and has been for 20 years. Without the need to pay dividends to shareholders, such funds could have been invested into upgrading sewage systems throughout Wales. It is ironic that water from the River Usk is pumped from Prioress Mill to Llandegfedd Reservoir for consumption in South Wales. Natural Resources Wales is meant to enforce water quality standards, but it is widely perceived as ineffective. Agricultural pollution and soil run off are also significant parts of the problem. Climate change with increased droughts and flooding also causes complications. The Well-being of Future Generations Wales Act 2015 is meant to help the natural environment for future generations, but this is clearly not happening. We call



on the Senedd to ensure that Welsh Water invests sufficient funds to upgrade sewage treatment systems in the Usk valley to help the River Usk to return to its former glory.

## Background

The River Usk is one of seven Rivers in Wales designated as a Special Area of Conservation (SAC) where key species are protected under the [Habitats Regulations](#). It is designated for [seven key feature](#).

### 1.1. Assessing water quality

The [Water Framework Directive \(England and Wales\) Regulations 2017](#) (WFD) are the primary mechanism for assessing and managing the water environment. They place a statutory duty on the Welsh Ministers to prevent deterioration and improve all water bodies to good status by 2027.

‘All water bodies’ refers to all surface waters - rivers, lakes, transitional and coastal waters - as well as groundwater. The WFD aims to:

- reduce pollution and improve the condition of aquatic ecosystems;
- promote the sustainable use of water; and
- reduce the effects of floods and droughts.

The WFD is implemented in stages based on river basins, rather than national or political boundaries, through [River Basin Management Plans](#) (RBMPs), developed for each River Basin District (RBD). The River Usk is featured in the [Severn RBMP](#), which the Environment Agency leads on due to the cross-border geography of this river basin.

The RBMPs describe the challenges that threaten the water environment and how these can be managed and funded. There is a separate [Welsh part of the Severn RBMP](#), which contains information on the River Usk.

Natural Resources Wales (NRW) runs a [network of water quality monitoring](#) points across the River Usk catchment. In the response to this petition, the Minister for

Climate Change, Julie James MS, highlights that NRW “has numerous proactive projects and programmes” designed to achieve the aims set out in the RBMPs to improve water quality.

## 1.2. Pollutants

The Minister identifies numerous pollution sources in the Usk, including private sewage treatment systems, urban run-off, agriculture, and water company discharges.

### Water company discharges

The pressures facing Wales’ sewage infrastructure include pressure from climate change, changes in population density and distribution, and new development, all of which can increase the number of spills from storm overflows. This [Senedd Research briefing](#) provides information on the management, level of understanding and water quality impact of Welsh storm overflows.

### Agricultural pollution

[Diffuse pollution](#) from agriculture is one of the main reasons Welsh waterbodies [fail to achieve ‘good status’](#) under the WFD, with the dairy sector responsible for most agricultural pollution incidents. This is being tackled through [agricultural pollution regulations](#), which are discussed further in this [Senedd Research article](#).

[NRW data from 2021](#) identifies agriculture as the most frequent cause of WFD failures in Wales, being linked to 21% of all failures to reach good status. The water industry is linked to 15%.

### Phosphate pollution

Phosphorus is an essential element for plant life, but too much of it can speed up [eutrophication](#) in rivers, causing excessive growth of plants and algae leading to depletion of oxygen available for other organisms.

NRW has undertaken a [compliance assessment](#) of Welsh river SACs against phosphate targets which found “the Usk to be in poor condition with respect to phosphorus targets, with widespread failures often of large magnitude”.

[Updated phosphorous targets](#) have since been set.

The Minister highlights that:

Coordinated action across organisations is essential if we are to achieve a change and improvement to the management and environmental regulation of overflows in Wales.

## 2. Welsh Government action

In the response to this petition, the Minister said that addressing “the intractable and multi-faceted issue of pollution entering our rivers is a Welsh Government priority”.

The Minister highlights the First Minister’s River Pollution Summit on 18 July at the Royal Welsh Show. Senior representatives from regulators, water companies, developers, local government, farming unions, academia and environmental bodies, agreed eight areas of intervention, for which the Welsh Government will be providing support. Further details on the development of solutions to address phosphorus pollution have since been shared with the Senedd, including that:

...nutrient management boards have been established, for which [the Welsh Government has] been providing funding support of up to £415,000. A database of mitigation measures has been produced and is currently being considered...

... A catchment consenting proposal has been developed and is being considered by Natural Resources Wales. A catchment market model project has been established and is working on a pilot trial in the Usk.

The Minister highlighted further areas where the Welsh Government is providing support:

- The Four Rivers for LIFE project, which includes the Usk in its remit, is backed with £9 million of EU funding over four years with part-funding from the Welsh Government (£3.4 million) and Dŵr Cymru. The project is being delivered as a partnership between NRW, Brecon Beacons National Park Authority, River Restoration Centre, Coleg Sir Gâr, and the Woodland Trust.
- Funding via the Brecon Beacons National Park Authority for the Usk Catchment Management Partnership. The partnership is a responsible body for ensuring the delivery of the Conservation Objectives for the

River Usk SAC. It will provide oversight and direction to all involved in delivering their nutrient management plan, which is principally concerned with tackling the intractable issue of phosphorous pollution.

The Minister also draws attention to the [Better River Quality Taskforce](#) (the taskforce), which is evaluating the current approach to management and regulation of overflows in Wales, and developing detailed plans to drive rapid change and improvement. [The taskforce](#) comprises NRW, the Welsh Government, Ofwat, both Welsh water companies, [Afonydd Cymru](#) and [Consumer Council for Water](#).

It has identified [five areas for change and improvement](#) requiring additional action. It published an action plan for each area in July 2022:

- [Reducing visual impact: installation of screens: action plan](#);
- [Capacity of the network \(drainage and wastewater management plan\): action plan](#);
- [Improving effluent quality and river quality: action plan](#);
- [Environmental regulation of overflows: action plan](#); and
- [Public understanding and engagement: action plan](#)

However the Minister acknowledges that overflows are only one of many elements that need to be addressed to improve river quality in Wales.

The [Programme for Government makes further commitments](#) to improving water quality by beginning to designate inland waters for recreation and strengthening water quality monitoring. [The Minister recently told the Senedd](#) that this work is being progressed through a survey an pilot approach next year.

The Minister says the Welsh Government has “made provision for a multi-year multi-million-pound programme of works to improve water quality totalling over £40 million over the next 3 years.”

### 3. Dŵr Cymru (Welsh Water) action

The Minister sets out work Dŵr Cymru is undertaking to improve poorly performing assets in the Usk. This includes investing over £10 million in three years to “improve the way their treatment works operates and reduce the number of spills that come from CSOs at the Mill Street sewage pumping station”.

Between now and 2025, the work will be undertaken in three phases, as set out by the Minister:

Phase 1 – Work at Usk Sewer Pumping Station Upgrading the assets at the local sewage pumping station to install a screening chamber and a 6mm screen that will remove large solids such as rags, wet wipes etc. from any CSO discharge. This work is underway and will be completed by the middle of December.

Phase 2 – Work to transfer more waste to the wastewater treatment works. Making improvements to the network that runs between the sewage pumping station and the wastewater treatment works, increasing its capacity so more diluted wastewater and stormwater can be treated instead of using the CSO.

Phase 3 – Building new assets at Usk Wastewater Treatment Works. Transferring more waste to the wastewater treatment works, to ensure that it has the capacity to treat the waste. Installing brand new assets and storage tanks.

## 4. Welsh Parliament action

The [Climate Change, Environment, and Infrastructure Committee](#) has undertaken a [short piece of work on water quality and sewage discharges](#).

The Committee published its [Report on storm overflows in Wales](#) on 15 March 2022, which made a number of recommendations to the Welsh Government, water companies and NRW. The Welsh Government [responded](#) on 9 May 2022. Responses have also been received from [Hafren Dyfrdwy](#) and [Dŵr Cymru](#).

A [debate](#) was held in Plenary on 15 June 2022 on the Committee's report.

A previous [Plenary debate took place in March 2022](#) on a Member's legislative proposal on the impact of storm overflows. The motion was agreed.

The Economy, Trade and Rural Affairs Committee undertook an [inquiry into the Welsh Government's regulations to control agricultural pollution](#). The Committee published its report [Review of The Water Resources \(Control of Agricultural Pollution\) \(Wales\) Regulations 2021](#) on 8 June 2022. The [Welsh Government responded](#) on 5 October and a [Plenary](#) debate took place on [12 October 2022](#).

The following petitions on the subject of agricultural pollution have been considered:

- P-06-1263 Control pollution from agriculture in the parts of the Wye and Severn River located in Wales
- P-06-1232 Stop the proliferation of intensive poultry units (IPUs) by legislating and introduce a moratorium until this can be achieved

Every effort is made to ensure that the information contained in this briefing is correct at the time of publication. Readers should be aware that these briefings are not necessarily updated or otherwise amended to reflect subsequent changes.