

[Ffynnone Resilience Save the Teifi Q&A for Dwr Cymru Welsh Water](#)

***We would like to thank the Ffynnone Resilience Group for giving us the opportunity to present at the Save the Teifi meeting on Thursday, 29<sup>th</sup> September 2022. Ahead of this meeting we were sent a number of questions which were answered during our presentation on the evening, but we have included our answers in writing below as requested. We have also included some additional information to provide some context to these questions and answers.***

Welsh Water fully understand the importance of river water quality to our customers, and we are committed to continuous improvement in this key area and take our environmental responsibilities very seriously.

In the decade to 2025, we will have invested approximately £1.5 billion in improving and maintaining our wastewater network and this has helped ensure that 44.5% of our rivers in Wales are in good ecological status compared to 14% in England.

Wales has more Blue Flag Beaches per mile than other part of the UK. We have over a third of the total number of Blue Flag Beaches in the UK with only 15% of the overall coastline. The Blue Flag scheme awards beaches for their water cleanliness and quality.

Welsh Water has also been rated as a 3-star environmental company under the Environmental Performance assessment, which has rated the company's environmental performance as 'good'.

It should be noted that there are a number of factors which contribute to pollution levels in rivers which are not in the control of the water industry. These other factors include urban surface water drainage, misconnected drains, agricultural run-off and animal faeces as well as private septic tanks.

Our approach to investing is evidence-led so that we improve our assets in a prioritised way which focusses on tackling those which cause the most adverse impact on our environment. We have and will continue to work collaboratively with our environmental regulators on our plans.

Our key priorities for improving river water quality include:

- At least 420km of rivers in Wales and Herefordshire improved towards 'good ecological' status by 2025
- £836 million investment in our wastewater infrastructure by 2025
- Including almost £100 million invested in improving Combined Storm Overflows (CSO), delivered as part of the Wales Storm Overflow Roadmap programme
- £20 million investment added to our current investment programme - targeted at further CSO improvement to 2025
- By April 2023 we will share our National Environmental Programme investment proposals for 2025-2030 with key river user groups such as Rivers Trusts and Angling Associations across our operating area
- Providing £250,000 funding and expertise to the Welsh Government 'Four Rivers for Life' programme, on the river's Cleddau, Teifi, Tywi and Usk

**Q1. Can DC advise us of practices and products we can use to reduce the impact on the environment when the CSOs are used?**

*Dwr Cymru Welsh Water has a 'Stop the Block' campaign, which encourages customers and businesses to consider how they can protect their sewers from blockages. This includes only flushing the 3 Ps (pee, poo and paper) and keeping fats, oils and greases away from the kitchen sink. By doing this we can reduce the chances of blockages, which can result in a pollution event and/or flooding. Every month, we deal with 2,000 blockages which cost us over £3 million pounds a year to clear.*

*We would also ask that our customers spread the word if you see anyone misusing their sewer system. Welsh Water work with local authorities and developers to reduce the amount of surface water being added to combined systems (which contain rainwater, surface water and sewage). This is essential to stop the volume of water in these systems increasing. If we were to build a sewerage system now, we would not include CSOs. These are legacy assets inherited from the Victoria era.*

*More information on Stop the Block can be found here: <https://www.dwrcymru.com/en/stop-the-block>*

**Q2. Do they have records of what typically enters the river when the CSOs are active, samples taken and the common contaminates? I think we all need to know what's going in.**

*Standard sewage contents include BOD (biochemical oxygen demand; the amount of oxygen needed to 'break down' organic matter in a given sample), suspended solids and ammonia (a type of nitrogen). We regularly monitor and measure this at the treatment works. The organic content of sewage is diluted during normal CSO operation as it contains a high volume of surface and rainwater. This dilution is considered as high as 90%. Some treatment works also have nutrients levels monitored, such as phosphorus. The monitored and measured aspects are dependent on a permit assigned to the works by our regulators (in Wales this is Natural Resources Wales). We do not sample for the same criteria at CSOs. These are measured using quantity (frequency, for example) as they are unplanned events. We have monitors on 99% of overflows and these are openly reported on our website (the remaining 1% are currently inaccessible due to accessibility safety constraints but we are still targeting 100%). We launched our interactive web-based overflow map covering our operating area in July 2022 up to 2021 data and our aim is to be able to report all CSO within an hour of them operating by 2025.*

**Q3. Can we have sight of DC's risk assessments for the use of CSOs for discharge? This is quite important, as people who live alongside the river and enjoy using it for leisure we should be allowed to see this information and contribute to these RA's.**

*It should be noted that the operation of CSOs are unplanned events, these operate in heavy storm conditions to ensure the system does not become overwhelmed so we can protect homes and businesses being flooded. Welsh Water do not assess the risk of using waterbodies for leisure. Bathing waters (such as Blue Flag Beaches) are applied for and managed by local authorities and Natural Resources Wales.*

**Q4. How do we find out who else is polluting the river?**

*It is correct in that there are other inputs into the river that can cause pollution. It is for our environmental regulators to understand other sectors and polluters. However, Welsh Water is taking active steps to understand our impact on this river from CSOs and main treatment works discharges. Welsh Water has recently undertaken phosphorus source apportionment modelling for all Welsh SAC rivers. This uses data from multiple sources to identify the contribution of phosphorus loading into SAC rivers in Wales.*

*This modelling is awaiting final audit by a third party and subsequent sign off from NRW. In the meantime, reports are available on our website. This will inform our next investment planning period.*

**Q5. Is there scope for a River Watch group purely to monitor the health of the river and its environment without stepping on any other groups toes?**

*Welsh Water is involved with Opportunity Catchment working groups (lead by Natural Resources Wales). West Wales Rivers Trust already has a programme in the main Teifi. We would be interested in working with such groups. Welsh Water support the Catchment Monitoring Co-operative which is looking to develop a standardised approach for projects of this kind. This began in September 2022 and will run for 2 years. See Q&A no. 11.*

**Q6. What are the criteria for discharging sewage into the river? Why is it so high/frequent? Who decides/authorises discharges?**

*This is a very broad question of which the presentation aimed to give an overview. Further comment below:*

*As previously mentioned, CSOs are legacy assets which have several functions including reducing flooding to communities and homes. Combined systems (containing rainwater, surface water and sewage) can become overwhelmed with sheer volume in storm conditions and need to 'release' to prevent backing up and flooding elsewhere, i.e. customers' homes. These are permitted discharges but Welsh Water agrees that more needs to be done to improve the systems and reduce the reliance on these assets. Welsh Water monitor 99% of CSOs and report their usage to our regulators.*

*In order to assess and prioritise investment in CSOs, the Storm Overflow Assessment Framework has been developed in collaboration with our environmental regulators. In the immediate short term, this programme is the mechanism we utilise for determining the environmental impact of our storm discharges and where applicable, opportunities for investment. We have to work in a priority order as this requires high cost investment into our infrastructure. Welsh Water will focus on assets that are causing harm.*

*We fully understand the importance of river water quality to our customers, and we are committed to continuous improvement in this key area and take our environmental responsibilities very seriously.*

*Welsh Water is investing an additional £20 million to improving our CSOs (having already committed £83 million between 2020 and 2025). Having led the industry in installing monitoring on our assets and making that data openly available on our website, we want to build on this progress to make best use*

*of the £836 million investment we are making in wastewater assets between 2020 and 2025. This amount is an increase on the £783 million originally agreed with Ofwat at the last price review.*

**Q7. Can you inform communities along the river of discharges in advance? If not, why not. It is done for seaside communities.**

*We cannot inform of discharges in advance, as the operation of CSOs are unplanned events in storm conditions and are crucial to help stop homes, businesses and communities from flooding. There are alerts to seaside locations due to the 'designated bathing water' status which are reported via Rivers Trust and Surfers Against Sewage (SAS), but again we are not able to notify SAS in advance. It should be noted that SAS maintain their alert for 48 hours following our update the spill has stopped. CSO discharges are not a manual operation and are unplanned events – they function as an overflow relief point when the network is overwhelmed. This can be very localised. CSOs should only function in periods of wet weather and storm conditions (although yes, things do go unintentionally wrong at times and we work hard to identify, fix and monitor our assets). Challenges of an aging network, urban creep, growth of population and climate change magnify these challenges. Our commitment is to have CSO spills reportable within 1 hour by 2025 and bring that forward to the end of 2023 for bathing waters. We have been working hard to install these monitors since 2015, even before it was a regulatory requirement.*

**Q8. What are the alternatives to discharging sewage into rivers and why aren't they used more widely?**

*Final effluent from treatment works is very unlikely to be removed from discharging to rivers. These Wastewater Treatment Works serve thousands of people who rely on a main sewerage network to manage their wastewater.*

*In Wales, the removal of CSOs from our network would cost up to £14bn, take decades to complete and make bills unaffordable. Welsh Water has a programme of work to learn more about of highest spilling assets, including identifying the root cause, understanding whether there is an impact to the waterbody, and if so – to what extent. We plan to learn more about CSO assets between 2020-2025, and which need improvement moving on to the latter stages of the programme. This ensures our investments are evidence-led and help to deliver and spend our customers money in a prioritised way. Between now and 2025, we're investing almost £100m on improving these CSOs to reflect our customers' changing expectations and priorities. This is part of a wider investment package of £836m to protect the environment.*

**Q9. Why does Welsh Water support planning applications for housing when the sewage system is already failing to cope with existing number of homes etc? An example of this is a recent application for an additional 24 houses in Cilgerran where the sewage system is regularly dumping excess sewage into the river. Wales water supported the plans. They were eventually overturned by the amount of phosphate levels in the Teifi.**

*Firstly, it may help to understand Welsh Water's role in this process in Wales. Welsh Water is a statutory consultee. We provide comments to Local Planning Authorities (LPA) on the ability of our assets to accommodate proposed developments. These are provided on an impartial basis and are informed by an assessment of capacity of our assets that would serve the development proposed. Whilst we seek to support new development wherever possible, our priority is on protecting our customers and the environment and therefore we would not support the communication of additional flows to our sewerage system through the planning process unless we were satisfied that capacity*

*existed. That said, whilst our comments will inform the determination of the planning application, they do not extend to the merits of the proposed development, and the decision to grant permission is ultimately a decision for the LPA.*

*In respect of the proposed development at Land to the South of Lon Cardi Bach, we acknowledge the latest planning application for 24 dwellings on the site. As part of our response to the LPA we offered no objection on the basis that we are satisfied sufficient hydraulic capacity (volume space in the network) is available in the local sewerage system to accommodate the flows proposed from the site. However, in order to ensure clarity from a drainage perspective we have recommended that any consent granted is conditional on the submission of a strategy demonstrating how the development will be effectively drained.*

*Turning to the operational performance of our sewerage system, we are aware of pollution instances that have been experienced in the area. We have previously carried out routine maintenance on the network and are committed to continuing to monitor the situation. If you experience any such operational issues within the public sewerage network, please contact us on 0800 085 3968 who will be able to assist.*

*At this juncture we should make the distinction that any operational or maintenance matters are for us to address as the statutory sewerage undertaker (even though this can be as a result of matters outside of our control) and this is separate to the assessment of hydraulic capacity on our systems to accommodate new development as part of our role within the planning process. In short it is not appropriate to use the planning system to prevent new development occurring where the issues with the sewerage system relate to operational or maintenance issues.*

*Finally, in respect of your point regarding the phosphate levels in the Teifi, it is worth providing some background. Natural Resources Wales published an evidence package in January 2021 outlining the impact of Phosphate on riverine Special Areas of Conservation (SAC), and along with this produced accompanying Planning Advice outlining what this matter means for new development proposals. This was following a revision of phosphorus levels in SACs by the Joint Nature Conservation Committee (JNCC).*

*The Planning Advice (now in its third iteration following an update in July 2022) establishes that all new development proposals must ensure no significant effect on river phosphate levels. However, this is a matter for the Local Planning Authority to consider through their assessment of a planning application and any subsequent Habitats Regulation Assessment (HRA), in consultation with Natural Resources Wales.*

**Q10. What are Welsh water's policies on the environment and pollution of rivers? Do their actions conflict with these? Can we see them and who monitors them? How do we call people out.**

*Welsh Water river quality commitments can be found on our [website](#). Welsh Water is measured against multiple criteria including pollution incident numbers and the quality of our final effluent discharges. We report information such as this to our regulators including Natural Resources Wales (in Wales) and OFWAT. Annually we are rated by OFWAT and have our performance compared against other water and sewerage companies in the UK. Welsh Water is committed to working with our river stakeholders as we understand how these 'high level' goals translate into real life issues for the environment and community. It is the responsibility of OFWAT and Natural Resources Wales to*



*regulate our performance, although Welsh Water takes pride in taking proactive steps in line with industry standards, environmental need and customer expectations - for example:*

- *Phosphorus modelling has been completed by Welsh Water on SAC waterbodies in Wales.*
- *An extra £100m is being invested between now and 2025 on CSOs and phosphorous removal.*

*We are committed to continuing our partnership working with the [Better River Water Quality Taskforce](#) which brings regulators, Welsh Government and water companies together to improve river water quality. The action plans for this group are available on line.*

**Q11. Would Dwr Cymru accept the findings of Citizen Science to inform further investigation or interventions?**

*Welsh Water must use reliable and scientifically robust data and information to base our investment plans upon (which run in 5 year cycles). We need to be sure of the quality of this data as it is used to present to our regulators. Welsh Water can only secure investment when we have data to evidence the risk, who is contributing and that the investment will make a difference.*

*It would be for our regulators to decide whether data of this kind would be acceptable. Welsh Water does see benefit in citizen science and that is why we are part of the Catchment Monitoring Co-operative. This is an OFWAT funded initiative, that we hope will generate a standardised approach and a central platform. Welsh Water appreciates the appetite for citizen science but would support a standardised approach as to not waste this exciting resource.*

*There is a [NRW webpage](#) that describes good practices. Welsh Water has also supported the supply of 'field kits' previously, but without improved regulator governance and guidance on methods and data validation, this isn't an avenue we would support at the moment.*