



OUR MANIFESTO
FOR RIVERS
IN WALES

MAY 2023



Dŵr Cymru
Welsh Water

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FOREWORD



PETER PERRY
CHIEF EXECUTIVE
WELSH WATER

Doing all we can to protect river and coastal water quality is one of our primary responsibilities and a growing priority for our customers. Our teams operating and maintaining our infrastructure expend every effort to minimise our impact on the environment. This is backed up with almost £1bn of investment in our wastewater systems in the five years to 2025, which we plan to increase to £1.4bn between 2025 – 2030. Our impact on river and coastal waters is only one part of a complex range of factors that impact on their quality – but we recognise that our role is central to driving the change, creating new partnerships, and helping to lead the improvement that we all desire.

In Wales, the situation in terms of river and coastal water quality is different to other parts of the UK. Here, water quality achieves 40% 'good' ecological status as measured under the Water Framework Regulations compared to 16% in England. Wales also has the best coastal bathing water, with over 30% of the Blue Flag beaches from only 15% of the UK total coastline. But for the avoidance of doubt, we want to make further improvements.

We fully support the Welsh Government's First Minister's focus on reducing nutrient pollution as the main priority to gain the biggest and fastest level of river water quality improvement in Wales. We are working with others to help deliver the eight commitments that came out of his Phosphate Summit held in July 2022. We are investing an additional £60m specifically to reduce phosphate in the five failing Special Area of Conservation (SAC) rivers in our operating area.

In the next investment period to 2030, we will target investment with the ambition that none of our wastewater treatment works are the cause of ecological failure. Through our phosphorus investment plan, we will have removed 90% of the phosphorus load from our wastewater treatment works discharging to failing SAC rivers. We need to do this to ensure we are doing our part to allow these special rivers to meet their water quality targets, this work will also help to relieve pressure on development restrictions. We expect to complete this programme of work by 2032. With £1.4bn being invested to improve wastewater services and all that entails in the decade to 2025, no other organisation is investing at this level and pace to reduce nutrient pollution and improve river water quality in Wales.

In making these improvements, we are also doing all we can to work supportively with others, with free of charge provision of water quality modelling, offering up our expertise and using our own land in some places to develop innovative solutions jointly with others, such as wetlands to remove phosphate.

We also fully recognise public concern about storm overflows and want to reduce the number of times they operate. For us in Wales, this is a massive undertaking. Over 60% of our 36,000km sewerage network is combined, meaning that we have one of the highest amounts of surface water and foul sewage being conveyed in the same network than anywhere in the UK. Added to this, as a country on the western side of the UK, we have some of the highest levels of rainfall and are seeing an increase in severe events linked to climate change.

All of this means we have one of the highest numbers of storm overflows of any water company (over 2,300) and that the number of times they operate is heavily influenced by these factors. Comparing rainfall data for Wales with the east of England, their storm overflows would operate on average only 13 times a year compared to the 44 we see in Wales. We also take every opportunity to work with local and highway authorities to identify and remove surface water from our sewers. If this could be undertaken consistently and at pace across our operating area, the reduction in storm overflow operation would be significant. But with such diverse ownership of drainage systems and limited public funding this is also a long term aspiration.

If we were to contemplate reducing the number of times our total storm overflows operate to 10 spills a year, it would cost in the region of £20bn. To make this financeable as a company, affordable for customers and deliverable in terms of construction, our storm overflow improvement plan can only realistically be implemented over a number of our 5 year investment periods.

The public and other stakeholders rightly ask why this has not been tackled before and this is largely due to prioritisation of other investment needs in previous regulatory periods. Where there have been legal drivers to invest, we have always complied but this has not extended to the majority of our storm overflows – but expectations have changed, both from customers and regulators, and we need to adapt accordingly. But this will be a long-term programme in order to maintain customer bills at affordable levels.

We target investment on those storm overflows causing environmental harm rather than those which spill the most. By doing this, we achieve the largest water quality improvement and have pursued this approach for many years. Put plainly, if we targeted the number of times a storm overflow operates as a priority, we will not see the much bigger gain to the ecological status of our rivers that is achievable through more targeted improvements. We are also, however, conscious of the aesthetic and bathing water concern around the operation of storm overflows and will invest with these concerns in mind. That said, we already invest significantly to improve storm overflows with a further £420m planned from 2025 to 2030. At the end of 2023, we will publish our storm overflow manifesto which will detail how we will target this investment on storm overflows during that period.

We would encourage Welsh Government and communities to work with us to reduce plastic pollution and sewer abuse. We respond to over 20,000 sewer blockages a year and through our 'Stop the Block' campaign, we engage the public to help us eliminate single use plastics from our sewers, especially wet wipes. Over 70,000 children a year participate in our education programme and part of this is targeted at stopping plastics being flushed down toilets.

Recognising the public concern about storm overflows, we do all we can to be open and transparent. We have remote monitoring on over 99.5% of our storm overflows. We were also amongst the first companies in the UK to provide full disclosure of our storm overflow operation via our website and have done this since 2016, publishing the previous year's data. We also participate in alert systems with organisations such as Surfers Against Sewage and other water user groups. In order to extend this type of process, in 2023 we have attempted to contact all bathing organisations and groups across our operating area. This will help us provide information when overflows operate and to help identify where we can target future investment. By 2025, we plan to roll out real time operation data for all our storm overflows via our website, with those assets close to designated bathing waters available sooner.

As a not-for-profit shareholder company, we are able to plan for the long term and our Welsh Water 2050 strategy enables this. Our structure has allowed us to bring forward over £100m additional investment in our wastewater infrastructure accelerating investment that will have a direct benefit in improving rivers in Wales by 2025. Our model has also ensured we have been innovative in terms of delivering water quality improvement. Our 'RainScape' sustainable urban drainage schemes in Llanelli, Cardiff and Llandudno are using nature-based solutions to remove or slow the amount of surface water entering our sewers and reducing how often they overflow. We are working in partnership with newly formed nutrient management boards to develop wetlands in Herefordshire to tackle phosphate pollution and have just launched a nutrient trading scheme on the river Usk to stimulate multi-sector cooperation to reduce phosphate levels.

We will continue to do our best to help protect river water quality – now and for years to come. This must be a collaborative effort, working with all those sectors which have an impact on our rivers so that we can safeguard our wider environment for the benefit of future generations.



Peter Perry
Chief Executive Officer



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WHAT WE KNOW
ABOUT OUR ASSETS

At Welsh Water, we are very conscious of our relationship and responsibility to the environment. Our rivers support incredibly complex ecosystems that can be sensitive to water quality changes, such as biological, chemical and physical. Some of these conditions can have polluting consequences. Water pollution can describe any substance that has harmful effects on the water environment. Water pollution can come directly from point sources, such as any discharge pipe or from more diffuse sources, such as run-off. Welsh Water are committed to doing all we can to protect these ecosystems, by monitoring, improving and reporting against our water and wastewater assets.

WASTE NETWORK AND TREATMENT

Our wastewater network is made up of over 36,000km of sewerage pipes. These pipes carry wastewater from the toilets, sinks, washing machines and dishwashers in our homes, from local businesses and other community facilities, sometimes over several miles to a wastewater treatment works. We have 828 wastewater treatment works across our operational area that receive this wastewater. It is treated through physical and biological processes to a standard, determined by our regulator(s) and returned to the environment.

Some of our sewers date back as far as 100 years and over this time, surface water has been diverted into some of these pipes, combining with the wastewater. Around 60% of our wastewater network is combined sewer (carrying sewage and urban run-off) and during rainfall events these pipes can become overwhelmed. To prevent any combined sewer flooding back into our homes and businesses, assets called Combined Storm Overflows (CSOs) or Storm Overflows provide permitted relief points within the network, which discharge this combination of wastewater and rainwater into the environment when it rains heavily.

Welsh Water have over 2300 combined storm overflows, of which over 99.5% are monitored by our Event Duration Monitors (EDM). We publish information about these monitors on our website and report to our regulators. We are working hard to reduce the operation of these assets and increase our resilience to ever changing environmental challenges such as urban creep and climate change.

PHOSPHORUS

Phosphorus is an element essential for plant growth and it is in lots of the food we eat and is a key part of fertiliser. When too much reaches the river, it can cause algae growth, which can be harmful. Phosphorus can come in many different forms and is often referred to as 'phosphate' – this is the most easily measurable form. When referring to our wastewater treatment works and processes, we use the term 'phosphorus' as this encompasses all the different types.

Over the past 18 months, we have updated our Source Apportionment Graphical Information System (SAGIS) water quality models to better understand the impact of our assets on Special Area of Conversation (SAC) rivers in our operating area, where we are failing phosphorus targets.

This system, developed and used by regulators and the wider industry, has allowed us to build a virtual representation of these rivers. It takes data inputs from different sources, identifies the proportion of phosphorus from each and the total concentration against river targets. The model allows us to test proposed improvements in our sewage treatment works discharges to establish their impact on water quality in the river.

To provide assurance that this model is robust, Natural Resources Wales has commissioned a quality assurance and has concluded that it is fit for purpose for informing wastewater planning decisions.

The purpose of these source apportionment maps is not to apportion blame. They are to inform the solution and identify the most efficient and effective way of delivering a coordinated, and collaborative solution to improving the river water quality in these failing rivers that is both cost-effective and has a greater chance of succeeding.

SO WHAT HAVE WE LEARNT FROM THIS MODELLING?

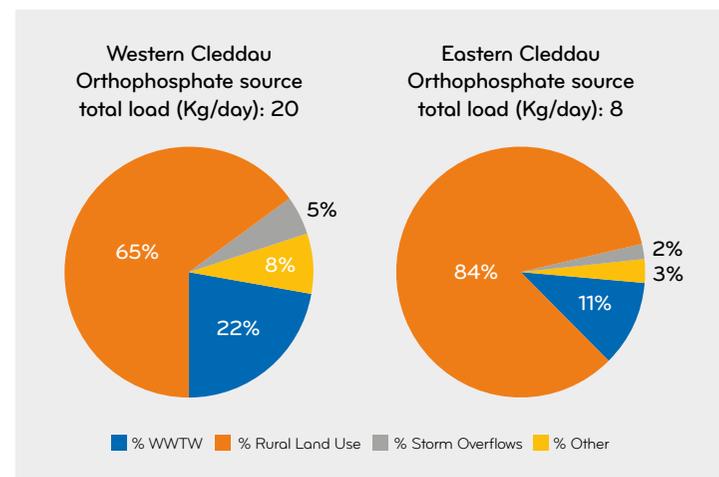
The graph below shows the total phosphorous load in the SAC rivers – Cleddau, Dee, Teifi, Usk, and Wye and the sources of the phosphorous for each river. You can find more information on our website regarding the modelling, within the non-technical reports for each failing SAC.

CLEDDAU

Our modelling on the Western Cleddau shows that our wastewater treatment works contribute 22% of the phosphorus in the SAC waterbody, with Combined Storm Overflows (CSOs) responsible for 5%.

Our modelling on the Eastern Cleddau shows that our wastewater treatment works contribute 11% of the phosphorus in the SAC waterbody, with Combined Storm Overflows (CSOs) responsible for 2%.

The remaining sources have been identified as rural land use and other sources that include private septic tanks and surface run-off.



DEE

Our modelling on the Dee shows that our wastewater treatment works contribute 34% of the phosphorus in the SAC waterbody, with Combined Storm Overflows (CSOs) responsible for 11%.

The remaining sources have been identified as rural land use and other sources that include private septic tanks and surface run-off.

TEIFI

Our modelling on the Teifi shows that our wastewater treatment works contribute 66% of the phosphorus in the SAC waterbody, with Combined Storm Overflows (CSOs) responsible for 3%.

The remaining sources have been identified as rural land use and other sources that include private septic tanks and surface run-off.

USK

Our modelling on the Usk shows that our wastewater treatment works contribute 21% the phosphorus in the SAC waterbody, with Combined Storm Overflows (CSOs) responsible for 1%.

The remaining sources have been identified as rural land use and other sources that include private septic tanks and surface run-off.

WYE

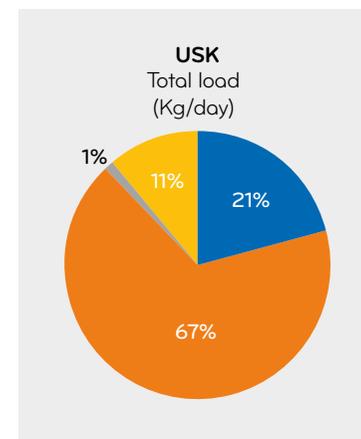
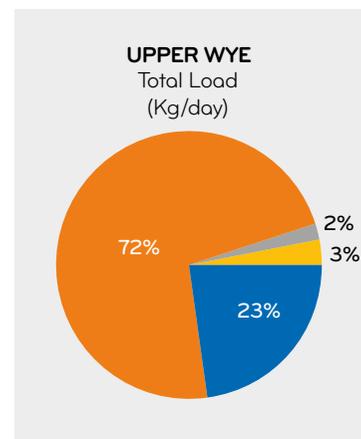
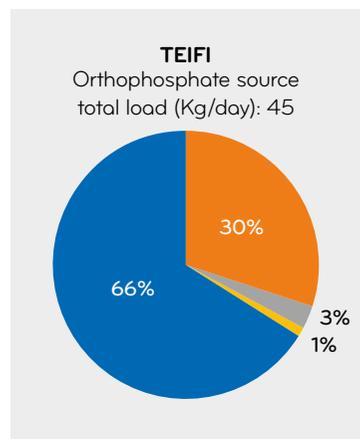
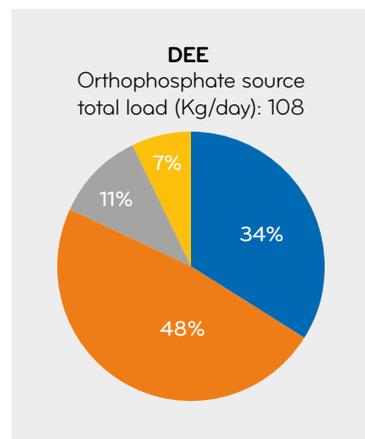
Our modelling on the Upper Wye shows that our wastewater treatment works contribute 23% of the phosphorus in the SAC waterbody, with Combined Storm Overflows (CSOs) responsible for 2%.

The remaining sources have been identified as rural land use and other sources that include private septic tanks and surface run-off.

COMBINED STORM OVERFLOWS

Our £42m Storm Overflow Assessment Framework (SOAF) programme is investigating over 800 assets between 2020-2025. Following this nationally developed process, we look into storm overflow assets that operate more than we'd like. This process helps us to understand the impact of our assets and look at solutions. We are investing £140m on improving CSOs between 2020-2025. There are currently over 70 assets being investigated under our SOAF programme within the Cleddau, Dee, Teifi, Usk and Wye catchments.

- % Wastewater Treatment Works/ Sewer Treatment Works
- % Storm Overflows
- % Rural Land Use
- % Other





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OUR PLANS

Detailed below are our plans for AMP7 (2020-2025), most of which are currently in progress. Our plans are based on relevant environmental needs using the best available data at the time of our price review. We work with our environmental regulators (Natural Resources Wales & Environment Agency) to develop an investment programme to protect and restore environmental failures which could be as a result of operations. Most of the schemes listed below were agreed for investment to meet the needs of the Water Framework Regulations. We are also investing to protect the Special Area of Conservation rivers.

Much of this work to date focused on the south-east and we will be using any lessons learned to inform future investment as we move across our operating area.

CLEDDAU

Letterston Wastewater Treatment Works — AMP8 scheme brought forward

Objective: Reduce phosphorus discharged from works

Expected completion date: March 2025

Investment: £3.9m

Spittal Wastewater Treatment Works

Objective: Reduce phosphorus discharged from works

Expected completion date: March 2025

Investment: £TBC

Rosemarket Wastewater Treatment Works

Objective: Reduction in BOD, ammonia and total suspended solids

Expected completion date: March 2025

Investment: £1m

Wolfscastle Wastewater Treatment Works — AMP8 scheme brought forward

Objective: Reduce phosphorus discharged from works and flow to treatment maintenance*

Expected completion date: March 2025

Investment: £5m for both drivers*

DEE

Malpas Wastewater Treatment Works**Objective:** Reduce phosphorus discharged from works**Expected completion date:** December 2024**Investment:** £6.5m**Chester Wastewater Treatment Works****Objective:** Increase storm storage**Expected completion date:** March 2025**Investment:** £2.3m**Corwen Wastewater Treatment Works****Objective:** Reduce phosphorus discharged from works**Expected completion date:** March 2027**Investment:** Over £5m**Farndon Wastewater Treatment Works****Objective:** Reduce phosphorus discharged from works**Expected completion date:** March 2025**Investment:** £8.5m**Lixwm Wastewater Treatment Works****Objective:** Innovative trial of wetlands**Expected completion date:** March 2025**Investment:** £300,000**No Man's Heath Wastewater Treatment Works****Objective:** Decommission wastewater treatment works and transfer waste to Malpas Wastewater Treatment Works**Expected completion date:** July 2023**Investment:** £2.4m**Tattenhall Wastewater Treatment Works****Objective:** Reduce phosphorus discharged from works**Expected completion date:** March 2025**Investment:** £800,000**Whitchurch Wastewater Treatment Works****Objective:** Reduce phosphorus discharged from works**Expected completion date:** March 2025**Investment:** £2m



TEIFI

Lampeter Wastewater Treatment Works – AMP8 scheme brought forward

Objective: Reduce phosphorus discharged from works

Expected completion date: March 2025

Investment: £1.3m

Llanybydder Wastewater Treatment Works – AMP8 scheme brought forward

Objective: Reduce phosphorus discharged from works

Expected completion date: March 2025

Investment: £TBC

USK

Usk SPS and Wastewater Treatment Works

Objective: Reduce volume and frequency of storm overflow operation

Expected completion date: December 2025

Investment: £10m

Brecon Wastewater Treatment Works

Objective: Reduce phosphorus discharged from works and accommodate growth

Expected completion date: July 2024

Investment: £9m

Llanfoist Wastewater Treatment Works – AMP8 scheme brought forward

Objective: Reduce phosphorus discharged from works

Expected completion date: March 2025

Investment: £1.9m

WYE**Norton Wastewater Treatment Works**

Objective: Decommission wastewater treatment works and transfer waste to Presteigne Wastewater Treatment Works

Completion Date: December 2021

Investment: £4m

Presteigne Wastewater Treatment Works

Objective: Reduce phosphorus discharged from wastewater treatment works and accommodate growth

Completion Date: June 2022

Investment: £4m

Weobley Wastewater Treatment Works

Objective: Reduce phosphorus discharged from wastewater treatment works

Expected Completion Date: March 2023

Investment: £3.5m

Leominster Wastewater Treatment Works

Objective: Reduce phosphorus discharged from wastewater treatment works and accommodate growth

Expected Completion Date: April 2024

Investment: £12.5m

Rotherwas Wastewater Treatment Works

Objective: Reduce phosphorus discharged from wastewater treatment works

Expected Completion Date: May 2024

Investment: Circa £27m subject to final costing

Kingstone & Madeley Wastewater Treatment Works

Objective: Reduce phosphorus discharged from wastewater treatment works

Expected Completion Date: July 2023

Investment: £3.6m

Eign Wastewater Treatment Works

Objective: Reduce phosphorus discharged from wastewater treatment works

Expected Completion Date: March 2025

Investment: Cost included in Rotherwas scheme

Clyro Wastewater Treatment Works

Objective: Reduce phosphorus discharged from wastewater treatment works

Expected Completion Date: March 2025

Investment: Circa £5m subject to final costing

Rhayader Wastewater Treatment Works

Objective: Reduce phosphorus discharged from wastewater treatment works

Expected Completion Date: March 2025

Investment: Circa £10m subject to final costing

Monmouth Wastewater Treatment Works – AMP8 scheme brought forward

Objective: Reduce phosphorus discharged from wastewater treatment works

Expected Completion Date: March 2025

Investment: Circa £5m subject to final costing

Clehonger Wastewater Treatment Works

Objective: Increase flow passed forward through the treatment works

Completion Date: April 2023

Investment: £1.7m

Peterchurch Wastewater Treatment Works

Objective: Increase storm storage capacity

Expected completion Date: March 2023

Investment: £0.4m

Lower Cleeve Wastewater Treatment Works

Objective: Accommodate growth

Expected completion date: March 2025

Investment: £4.6m



2025 AND BEYOND – PHOSPHORUS INVESTMENT PROGRAMME

We have recently published a suite of information supporting our future phosphorus investment programme. The full body of information is available on our website with contextual descriptions, reports and overview maps. Our modelling has identified assets within each failing SAC catchment that require a phosphorus permit in order to be protective of the river. Where a permit has not been identified, we have committed to adding a phosphorus permit condition to all but the smallest of our wastewater treatment works in Wales that discharge to a Special Area of Conservation. This will apply at all wastewater treatment works except the very smallest, in both failing and non-failing SACs. Any wastewater treatment works discharging more than 20m³ per day, will be monitored for phosphorus levels and reported to our regulator as part of our permit conditions. Some of these wastewater treatment works will need significant investment to install phosphorus removal technology, so we are in the process of understanding our current performance and will prioritise schemes that will result in significant phosphorus reduction first.

This programme is a major undertaking both logistically and financially, and as such will need to be delivered over several investment periods that will require agreement with OFWAT and NRW.

The table below shows our current proposals for new and tightening phosphorus permits within these catchments. The final detail of these permits is subject to change following the completion of NRW's review of permit process and OFWAT's final determination.

SAC river catchment	Number of new and tightening phosphorus permit conditions within the SAC catchment	Number of new backstop phosphorus permit conditions
Cleddau	11	3
Dee	11	22
Teifi	14	14
Usk	10	16
Wye	17	14

OTHER SCHEMES IMPROVING RIVER QUALITY

We have set out our commitments in this investment period to the Special Area of Conservation rivers, but we are also working hard and investing in the other river catchments. We will continue working with Welsh Government and our environmental regulators to prioritise investment in those assets most likely to be causing environmental harm. We have detailed below examples of schemes that are in progress or are part of our future investment programmes on some of our other rivers in Wales.

One type of improvement scheme is to increase storm storage. This refers to storage tanks on site for incoming excess flow, once the works is at capacity. Storm tanks fill up before releases are made to the environment. These schemes will reduce or remove overflow events and improve the quality of effluent to the environment via partial treatment in the storm tanks. We have multiple examples of these schemes for this current investment cycle and our next (2025-2030). Some of these include:

Tregarth Wastewater Treatment Works**Investment period:** AMP 8 (2025-2030)**Objective:** Increase storm storage**River:** Afon Ogwen**Llwnceilyn Wastewater Treatment Works****Investment period:** AMP 8 (2025-2030)**Objective:** Increase storm storage**River:** Afon Drywi**Llanon Wastewater Treatment Works****Investment period:** AMP 8 (2025-2030)**Objective:** Increase storm storage**River:** River Morlais**Coslech Wastewater Treatment Works****Investment period:** AMP 8 (2025-2030)**Objective:** Increase storm storage**River:** River Ely

Another type of scheme we have increases the volume of flow we treat. These projects increase the flow capacity through the wastewater treatment works, whilst maintaining high quality treated effluent. These site changes indirectly improve river quality by increasing the volume of treated effluent returned to the environment compared to storm water. Examples of this scheme within our current and future plans are:

Garnswllt Wastewater Treatment Works**Investment period:** AMP 7 (2020-2025)**Objective:** Increase flow passed forward through the treatment works**River:** River Loughor**Blaenau Ffestiniog Wastewater Treatment Works****Investment period:** AMP 8 (2025-2030)**Objective:** Increase flow passed forward through the treatment works**River:** Afon Goedol**Llanfyrnach Wastewater Treatment Works****Investment period:** AMP 8 (2025-2030)**Objective:** Increase flow passed forward through the treatment works**River:** Afon Taf**Trebanos Wastewater Treatment Works****Investment period:** AMP 8 (2025-2030)**Objective:** Increase flow passed forward through the treatment works**River:** Afon Tawe



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WHAT ELSE
ARE WE DOING?

COLLABORATING WITH OTHER KEY STAKEHOLDERS

We are already innovating with others to deliver low carbon nature-based solutions to improve river water quality and offset the impact of development. We are working with the Wye & Usk Foundation and Hereford Council, amongst others, to support measures to remove additional phosphorus from our treated effluent above that required by their permits by establishing low carbon wetland treatment sites that will offset the impact of development.

These will take the form of a series of interconnected ponds that provide a natural filtering process to further improve the quality of water being returned to the river by removing unwanted pollutants and nutrients (such as ammonia, nitrogen and phosphorus) naturally whilst also enhancing local biodiversity. The construction of the first of these sites has started and is designed to offset both the impact of development and deliver a net improvement in water quality. In addition, we plan to pursue similar nature-based solutions in dealing with high spilling storm overflows, and we recently received approval from NRW to start constructing such a facility in Pont Y Felin, near Pontypool.

We recently published a suite of information on our website regarding our future phosphorus investment plans. This includes guidance to help local planning authorities and other stakeholders identify, propose and manage collaboration opportunities for nutrient management, using nature-based solutions such as wetlands.

We are very pleased to support future generations through our education programme. Our ambition is to educate and inform as many children as possible across our operational area about water and the role of Welsh Water. The programme has developed over 25 years, now established into a unique model where professional teachers are seconded into the business for an academic year to deliver the company's education programme, through outreach in schools and visits to our education centres. All the activities are curriculum linked and deliver key business and behaviour change messages such as using water wisely, the water cycle, environmental lessons as well as learning about the 3 P's

(Pee, Poo and Paper) and what not to flush down the toilet in line with our Stop the Block campaign. This encourages children to consider the connection between how we use the environment and how we can protect it. This academic year over 60,000 pupils have received a visit by one of our teachers or a visit to one of our education centres.

Our Stop the Block campaigns continue to reach out into communities sharing information about how our customers can help look after our sewers. One of the main causes of pollution incidents is blockages within our network; 53% of our wastewater pollution incidents are caused by blockages with around 24% attributed directly to wet wipes. By engaging with our communities and customers, we hope to encourage more people to refrain from using the wastewater system for anything other than designed, using bins instead of flushing and keeping fats, oils and grease away from the kitchen sink. This collaborative effort to protect our pipes would result in a reduction of these preventable incidents and allow us to focus on other areas of performance.

SUPPORTING OPEN WATER SWIMMING

We want to support people and communities to be able to enjoy our inland and coastal waters and support the development of inland bathing waters policy and criteria.

We are currently engaging with customers and stakeholders via a survey to understand when and where they may be swimming or bathing at coastal and countryside waters in Wales that are not currently official swimming sites or pools. The findings of the survey – expected in May – will help inform our investment plans for 2025-2030.

In anticipation of our live spill reporting project launch, we will be consulting directly with our stakeholders by hosting workshops in 2023. This live spill reporting platform will be another piece of useful information alongside the bathing water status and other relevant information to help people make an informed decision when considering bathing.

We are also participating in an Inland Bathing Waters pilot in association with NRW and the Welsh Government due to begin in May 2023. Two of our reservoirs at our visitor attraction sites will be included in the pilot and we are undertaking water quality testing to determine which sites are most suitable.

REAL TIME REPORTING OF OUR COMBINED STORM OVERFLOWS – ‘EDM LIVE’

Within the next 12 months, we will launch our live CSO reporting project, ‘EDM live’. This will provide near real-time information (within 1 hour) about storm overflow activity within 1km of designated bathing waters and other high amenity sites, as indicated by event duration monitoring (EDM). Between the launch and 2025, we will prioritise the sites we add to this system until this is available for all our CSOs.

The map will show if monitors indicate:

- that overflows are currently discharging into a watercourse
- the date and time of the last recorded discharge

The data received from our EDM monitors isn’t always 100% accurate. It doesn’t confirm discharges, it only indicates them. We know how important this type of information is to our customers so we are sharing that data exactly as we receive it, so our customers can be more informed about our assets.

CITIZEN SCIENCE

We are conscious of the appetite for Citizen Science, appreciating the commitment and devotion of the public, caring for our natural environment. Whilst the concept has multiple opportunities and benefits, for the action to be worthwhile, there needs to be consideration of many aspects including quality of sampling, consistency of information, involvement of regulators and very importantly, maintaining the safety of the public.

We currently support the Catchment Systems Thinking Cooperative (CaSTCo) that aims to empower local communities to gather robust data which can be shared with decision makers, customers and other stakeholders, allowing evidence-based catchment management decisions. CaSTCo will develop a national framework of standardised tools and training. We have committed £250,000 to the CaSTCo project and are working with the Wye and Usk Foundation on a trial in the Usk catchment which is demonstrating how the agricultural community can engage in citizen science.

In the meantime, we are developing a citizen science position statement, that will provide Citizen Science groups with information on how Welsh Water can potentially support and fund certain initiatives whilst maintaining a standard of quality and safety. We will launch this in due course.



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WHAT CAN
OTHERS DO?

We know that we need a collaborative approach to help improve river water quality in Wales and all stakeholders in Wales – including customers – could have a role to play:

GOVERNMENT

- ban wet wipes;
- maintain policy of focussing on improving river water quality in the round;
- consider a phosphorus Credit Scheme for Wales to enable sustainable development.

LOCAL GOVERNMENT

- promote and deliver sustainable urban drainage scheme such as Greener Grangetown in Cardiff and RainScape in Llanelli;
- work with Welsh Water to introduce more wetlands to reduce nutrients through our nature-based solutions collaboration scheme;
- work with Welsh Water to remove surface water from the waste water network;
- resource and empower Nutrient Management Boards to oversee river improvements and govern collaboration opportunities;
- consider limiting the use of artificial grass in gardens and property developments.

REGULATORS

- support and introduce regulations to enable “catchment permitting” and then incentivise its introduction;
- incentivise cross-sector collaboration to improve river water quality;
- work with companies and organisations to allow sufficient funding to meet the ambition set by Welsh Government.

WATER COMPANIES

- build evidence base to inform solutions and business cases;
- work with regulators to identify funding opportunities;
- work with partners to develop innovative solutions to reduce impact of treatment works on rivers;
- develop clear investment plans for 2025-30 (and beyond) to ensure that CSOs are not responsible for any failure to achieve Good ecological water quality status by 2030;
- run customer behaviour campaigns to reduce wet wipe usage; we manage over 20,000 blockages a year costing several millions to remove, nearly 25% are attributed to wet wipes alone;
- work with other stakeholders to achieve common goals;
- launch Citizen Science position statement and support scheme.

CUSTOMERS

- do not use non-flushable wet wipes that can cause blockages and environmental damage;
- do not use artificial grass and maintain as much green space on their properties as possible to reduce the amount of surface water entering the combined sewer network.

DEVELOPERS

- promote and deliver sustainable urban drainage schemes such as Greener Grangetown in Cardiff and RainScape in Llanelli;
- work with local planning authorities to introduce wetlands to reduce the risk of additional nutrients.

dwrcymru.com

