

Our Teifi – One Catchment

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Ffynnone Resilience Group meeting 29th September 2022





 3 million customers served across Wales, Herefordshire & parts of Deeside

- **27,000km** of water mains
- **36,000km** of sewers
- 843 sewage treatment works
- 69 water treatment works
- Not for Profit: all profits are reinvested for the benefit of our customers.
- Over a third of the entire UK's Blue Flag beaches are in Wales.
- 3 star rating under 2021 Environmental Performance Assessment metrics (EPA).
- Regulated by Ofwat, DWI, NRW & EA.





Wastewater Treatment



- Welsh Water receive wastewater from domestic homes, some traders, community facilities etc & rainwater where systems are combined
- <u>Treatment</u> = a combination of settlement and biological processes
- Levels are set and permitted by our regulators, dependant on the receiving watercourse quality, allowing safe release back into the environment



Sewerage Network & CSOs

- Victorian age sewer system serving 000s of people, some systems combined...
- Combined Sewer Overflow (CSO) a permitted release point within a sewerage system
 that contains both rainwater and diluted sewage these are unplanned events
- When the network becomes overwhelmed with the volume of water, these assets can overflow into waterbodies.
- Without these release points an alternative route would be found, potentially into customers homes and businesses.

HOW OUR COMBINED SEWER OVERFLOWS OPERATE

At times of heavy rainfall the sewer system finds it difficult to cope with the amount of

water and waste.

weather behaviour and over populations.

Excess rain can cause sewers to back up,
putting homes and communities at risk of
being flooded with untreated sewage.

Climate change is causing more extreme

Increased concrete for roads, housing and artificial grass leads to increased runoff. Increase in population puts added pressure on the old waste systems.

Flushing of wet wipes, cotton wool, and fat oil and grease causes blockages in the pipes.

Combined Sewers have overflows which act as release valves to allow some of this diluted excess stormwater in to a nearby river, preventing local flooding.

Combined Sewers take the dirty water away from your home where it is joined by rain water from roads and roofs.

36,000 kilometres of sewers take waste away from homes and businesses. They were built over 100 years ago in a very different time.



Sewerage Network & CSOs

- Flow from CSOs is not tested in the same way as Wastewater Treatment Works.
- Regulators allow discharges in certain conditions which allows
 Welsh Water to prevent sewage flooding to homes and businesses.
- Welsh Water monitor these events and report to our regulators.
- Spills cannot be reported in advance unplanned events.



■ More information can be found <u>here</u> DCWW's Improving Our River Quality 2022

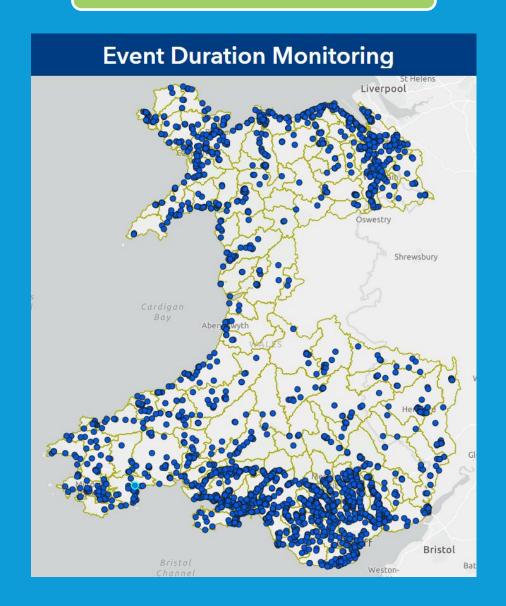
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CSO Monitoring

- EDM to remotely observe these release points.
- £10.5 million already invested in improving the monitoring of our CSOs since 2015.
- Welsh Water monitor >99% of our CSOs
- Sensors detect spills into waterbodies and read every 15 minutes.
- Welsh Water report real time alerts for bathing waters.

2021 data available here





Investing in our network

- Almost £100m being invested between now and 2025 to improve CSOs.
- This is part of a wider investment package of £836m to protect the environment.
- £3.7m invested in Cardigan in 2021/22 to help reduce the risk of sewer flooding to the Lower Town area.
- Currently investing £42m across Wales in our Storm Overflow Assessment Framework.
- In the decade to 2025, we will have invested approximately £1.5bn in improving and maintaining our wastewater network.
- Providing £250,000 funding and expertise to the Welsh Government
 'Four Rivers for Life' programme, on the river's Cleddau, Teifi, Tywi and Usk





Sewer Overflow Assessment Framework

- 600+ assets between 2020-2025.
- Framework developed in collaboration with Water UK environmental regulators.
- Prioritisation and Assessment process.
- Root cause has a big influence on investment needed to resolve.
- The highest priority assets move into latter stages of the framework.





Wales Better River Quality Taskforce

- Partnership working with Welsh Government, our regulators and other water companies.
- Working together to improve river water quality in Wales.
- Regular meetings held to create action plans to drive rapid change, improvement and investment.
- Aiming to reduce the adverse impact of any overflow discharges on the environment.
- More information can be found at https://gov.wales/wales-better-river-quality-taskforce





How you can help

- **Let's Stop the Block** Only flush the 3 Ps (everything else goes in the bin).
- Separate systems / RainScape rain water back to the environment and wastewater to the sewer.
- Connect Right Investigate potential misconnections
- Something doesn't seem right? Please let us know via our 24hr phoneline 0800 085 3968.











Citizen Science



Data drives Welsh Water investment



Data must be contextualised & consistent



Data must be calibrated & verified



Data must be regulator accepted



Welsh Water funder & partner of Catchment
Monitoring Co-operative

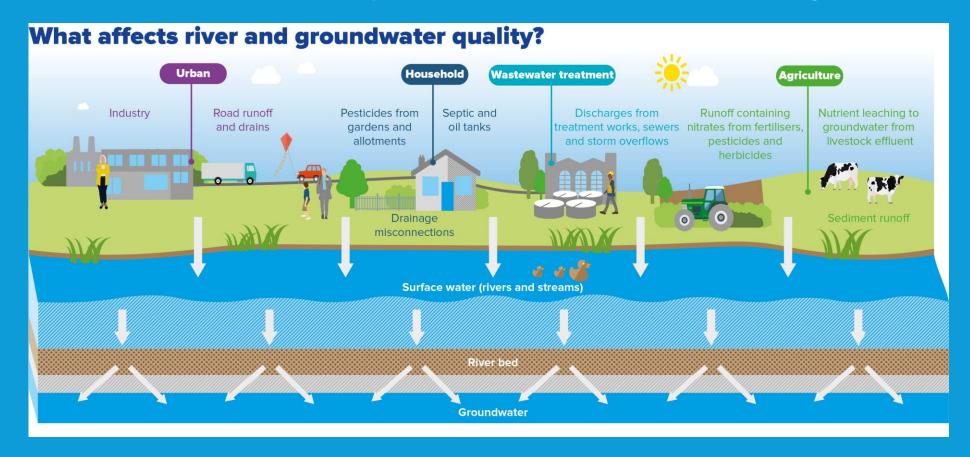


NRW good practice guide is available here



One goal

Welsh Water are working with multiple stakeholders and organisations to help restore river compliance - river water quality in Wales is 3x better than in England.





- We have launched the Welsh Water Community Fund to give something back to the communities we are investing in.
- If you live in an area where work is taking place and you're fundraising for projects to benefit the community you could receive funding from Welsh Water up to a value of £1,000.
- For more information visit dwrcymru.com or contact communityfund@dwrcymru.com





Thank you for listening Diolch yn fawr

Overview video available here

