

Storm Overflows Implementing our Roadmap

Mark Squire – Principal Advisor Regulation, NRW

- **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
- **Over a third** of the entire UK's Blue Flag beaches are in Wales.
- **44.5%** of Rivers in Wales are at Ecologically 'Good' Status, 14% in England.
- **3 star rating** under 2021 Environmental Performance Assessment metrics (EPA)
- Regulated by Ofwat, DWI, NRW & EA





**Cyfoeth
Naturiol**
Cymru
**Natural
Resources**
Wales

Storm Overflows

In Wales we have over 2300 permitted storm overflows

Storm Overflows play a critical role in our sewerage systems

Water Companies monitoring the duration of storm events

Further monitoring planned

Improvement required

Greater evidence and Communication needed

COMBINED SEWER

OVERFLOWS

Climate change is causing more extreme 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.

Increase in population puts added pressure on the old waste systems.

Increased concrete for roads, housing and artificial grass leads to increased runoff.

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

At times of heavy rainfall the sewer system finds it difficult to cope with the amount of water and waste.

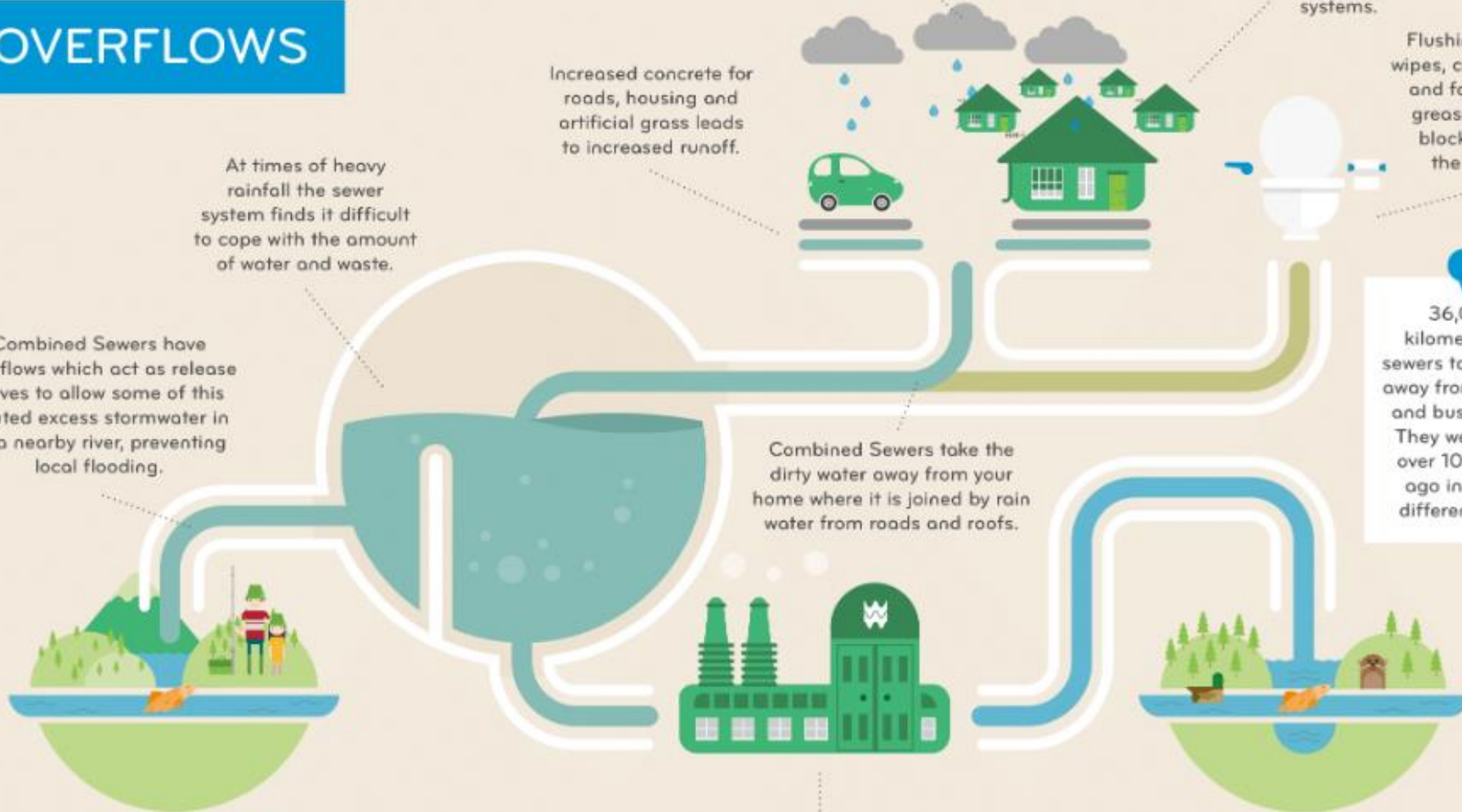
Combined Sewers have overflows which act as release valves to allow some of this diluted excess stormwater in to a nearby river, preventing local flooding.

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.

Dirty water is then treated in one of our 800 waste treatment works before it's returned to the sea.

99% of these overflows are monitored so we know when and for how long they operate. We're able to report on these results, working closely with regulators and partners to find innovative solutions to minimise our reliance on them.



<https://youtu.be/QUqG8q0kssk>

Making a difference by investing in our network

- Our AMP7 plans started with just over **£100m** being between 2020 and 2025 in Storm Overflows
- We have added an extra **£60m** to our Storm Overflow budget to spend before 2025, which includes investigations and modelling as well as investment in reducing the impact they may cause. £40m of this expenditure was part of the £100m additional investment announced by DCWW at the First Ministers Summit on River Quality in July 2022
 - This is part of a wider investment package of over **£930m to protect the environment**
- In the decade to 2025, we will have invested approximately **£1.5bn** in improving and maintaining our wastewater network



Our longer term commitments

- Providing **real time alerts** by 2025 – designated Bathing Waters by Dec 2023
 - A review of where swimmers are using non-designated waters so we can prioritise these for real time alerts too
- Publishing **more data** and improving the information on our website
- **Better data** analytics to indicate where we need to investigate or carry out repairs
- Understanding the **environmental impact** of **all** our CSOs by 2027
- To reduce harm / impact from all Storm Overflows by 2050





**Cyfoeth
Naturiol
Cymru
Natural
Resources
Wales**

Where we
currently
stand

Storm Overflows are covered by Environmental Permits

Since 2010 Duration Monitoring required

Data on performance being evaluated

Changes to the way we regulate.

Implementing our Storm Overflow Roadmap



**Cyfoeth
Naturiol**
Cymru
**Natural
Resources**
Wales

Better Water Quality

- The Roadmap for Storm Overflows is one part on the highway to Improving Water Quality.
- How does it fit in the wider Water Quality improvement programme:
 - 1) We show clear direction and leadership in dealing with issues such as overflows
 - 2) Use the evidence to draw others into the conversation
 - 3) Ensure our regulatory principles align to our objectives.
 - 4) Engage with communities and new partners.
- We use it as a way to bring others into the wider Roadmap.





**Cyfoeth
Naturiol
Cymru
Natural
Resources
Wales**

Our Goals:

Storm Overflow Roadmap

In Wales we want to:

- Deliver seamless support to Welsh Government to achieve their nature and climate change ambitions.
- Reduce the adverse impact of any overflow
- Work to develop the existing regulatory framework to ensure water and wastewater companies effectively manage and operate their network of sewers.
- Gather greater evidence of the impact of overflows on our rivers through improved monitoring and drive towards truly smart networks making best use of technology and real time control.
- Work with water customers to tackle sewer misuse.
- Work with the public and stakeholders to improve the understanding and role of overflows in Wales

The 5 Themes of our action plan



**Reducing visual impact
(Installation of Screens)**



**Improving effluent quality
and river quality**



**Environmental regulation
of overflows**



**Capacity of the network –
planning for the long term**



**Public understanding and
engagement**



**Cyfoeth
Naturiol
Cymru
Natural
Resources
Wales**



Thank you for listening

Over to you for questions