Monmouthshire County Council Briefing

5th December 2024

Sharon Evans

Director of Quality Policy & Compliance

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What we do

-Water & wastewater services to **3 million residents** across Wales, Herefordshire and parts of Deeside

- **27,000km** of water mains
- **30,000km** of sewers
- **800+** sewage treatment works
- **63** water treatment works

-**£26 billion** asset replacement value

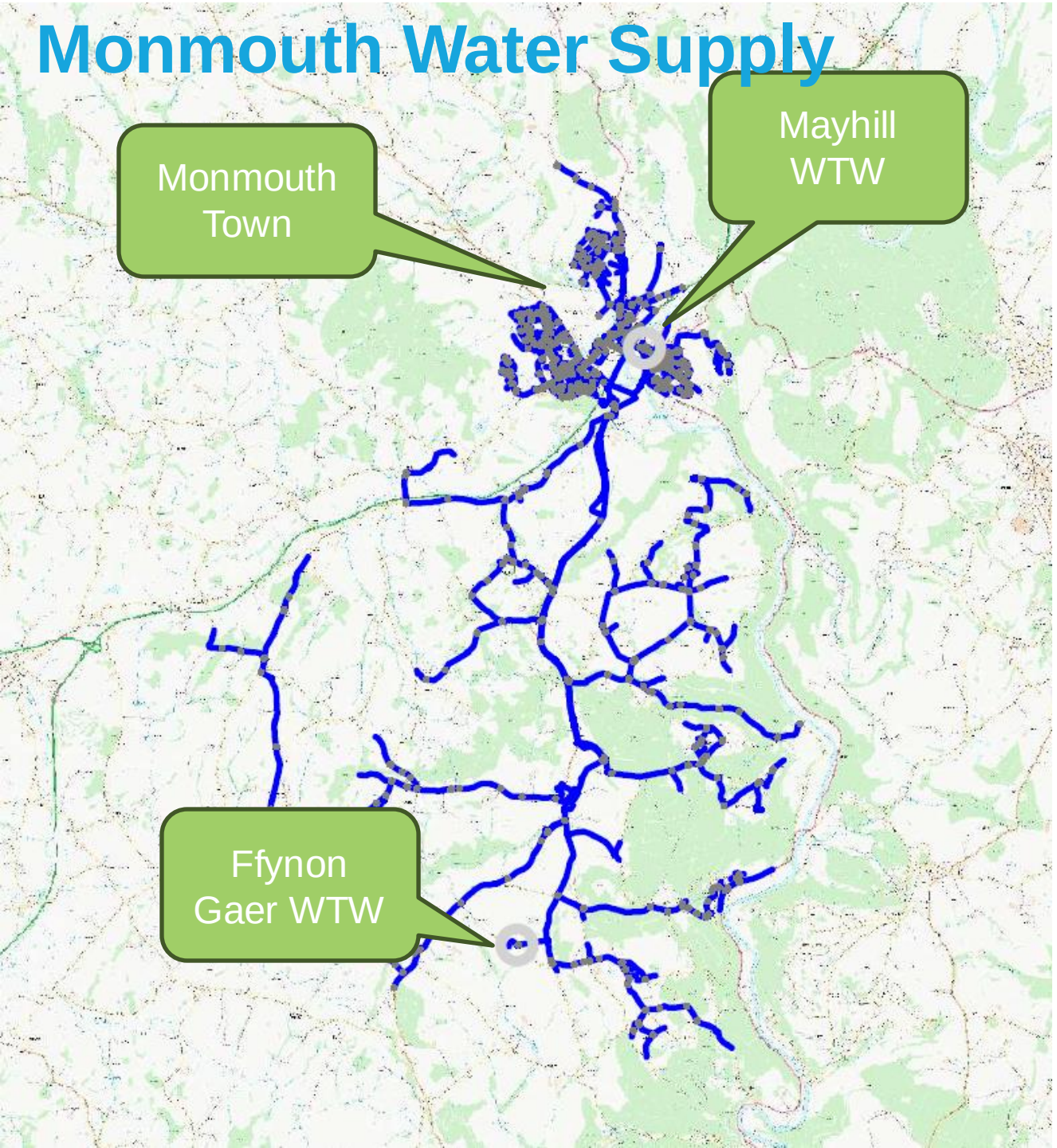
-Company limited by guarantee;

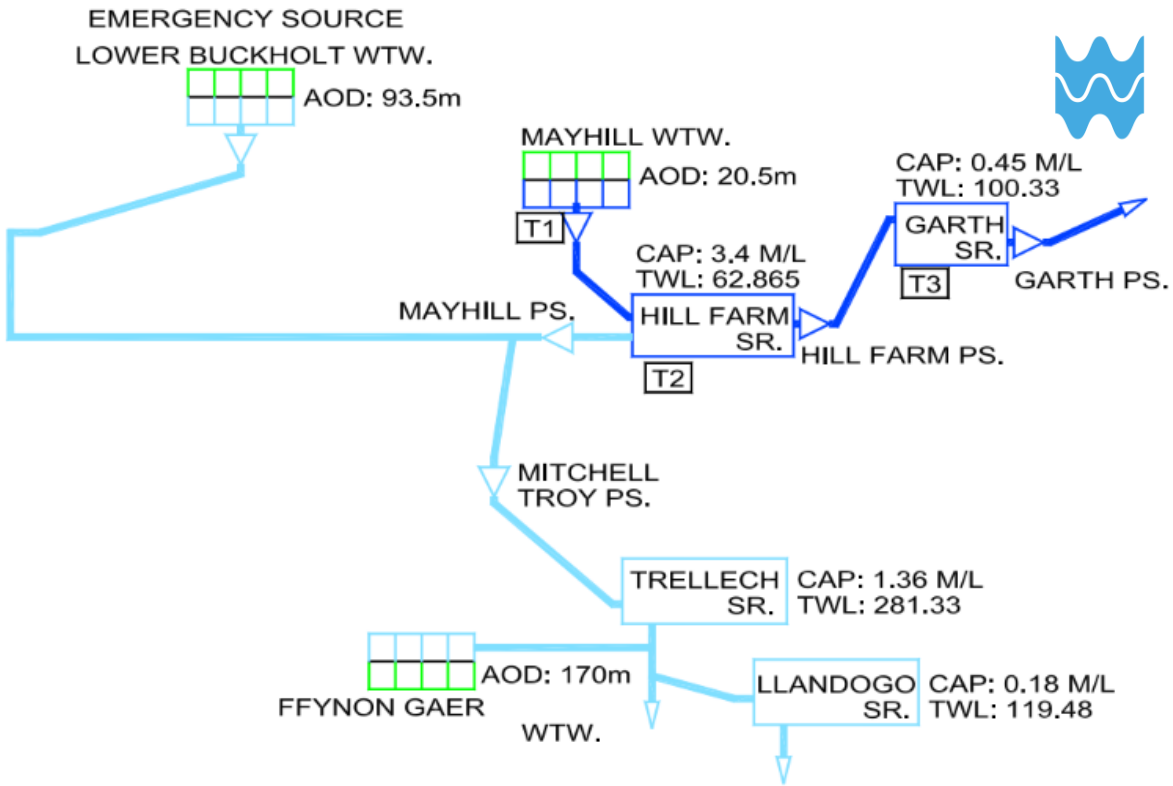
-No shareholders – all financial surplus retained to improve service and reduce bills

-Private company owned on behalf of customers but not a mutual or co-operative

£1bn a year boost to Welsh economy

Monmouth Water Supply





- We serve approx. 11,000 people in Monmouth across 5,000 properties.
- We supply 772 businesses across Monmouth.

Water Quality in Monmouth

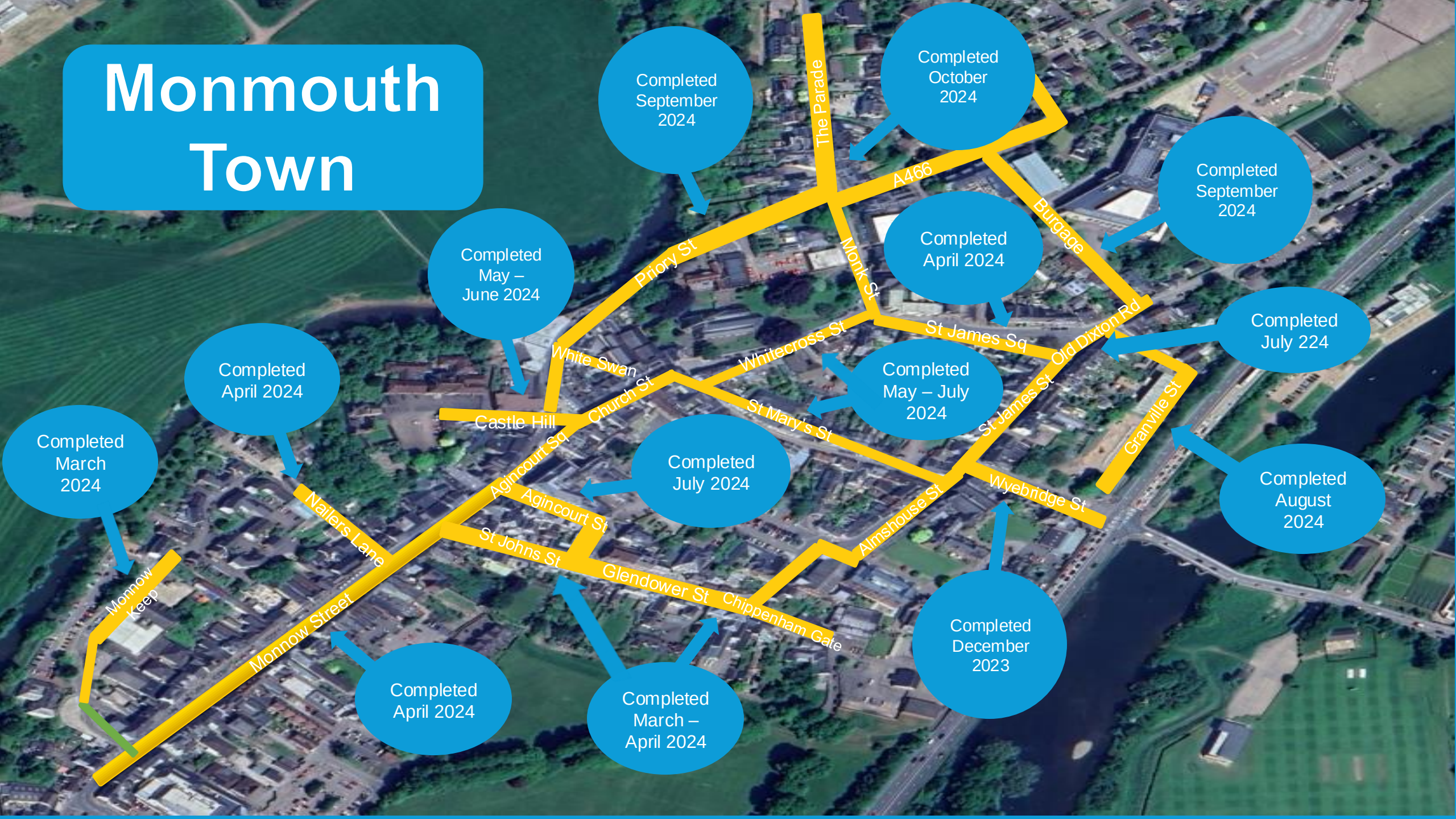
- No issues with the drinking water in the Monmouthshire area – monitored daily
- No concerns over capacity at our water treatment works
- DCWW is a consultee during planning process - assess capacity for new developments
- As part of our commitment to supply high-quality drinking water to customers we're investing £8.4m in Monmouth and surrounding areas to ensure security and resilience of water supply and alleviate issues with loss of supply or low water pressure:
  - Replaced 15km of water main
  - Cleaned 10.3km of pipe
  - Abandoned 3km of pipe
  - Benefitting more than 5,600 homes and businesses in Monmouth, Redwern, New Mills, Whitebrook, Mitchel Troy, Trellech, Cwmcarvan and surrounding areas.

Challenges we face

- The impact of climate change and age of our assets mean we face significant challenges such as discolouration, freeze thaw, supply interruptions, lead pipes.
- Our Business Plan between 2025-2030 will ensure progress on drinking water quality compliance is sustained and future proof.
- **Drinking water quality compliance and water supply interruptions, are our primary areas of focus in our plan.**
- Investment includes replacing 7,500 lead pipes, £157m to strengthen resilience of water supply, £66m to replace 174km of ageing asbestos cement main pipes, £51m to build more resilience into supply.

Water Services Performance

Measure	2024/25	2023/24	Comment
Water Quality	3.86	7.19	- Likely to be mid-table in terms of industry performance by year end (lower score better) DWR plan having an impact
Leakage	239mld	256mld	- 20mld reduction since January but hitting year end target (208mld) will be challenging
Supply interruptions	13.44	11.53	- Worse performance than last year Impacted (60% of minutes lost) due to 3rd party damage Project Novello helping mitigate bursts in West Wales


Monmouth Town
Completed September 2024
The Parade
Completed October 2024
A466
Completed September 2024
Burgage
Completed May – June 2024
Priory St
Monk St
Completed April 2024
St James Sq
Old Dixton Rd
Completed July 224
White Swan
Whitecross St
Church St
Completed May – July 2024
St James St
Granville St
Completed April 2024
Completed March 2024
Castle Hill
St Mary's St
Agincourt Sq
Completed July 2024
Nailers Lane
Agincourt St
Wyebridge St
Completed August 2024
St Johns St
Almshouse St
Monnow Keep
Glendower St
Chippenham Gate
Monnow Street
Completed December 2023
Completed April 2024
Completed March – April 2024

Drinking Water Inspectorate Report

“The DWI report makes reference to an isolated incident that happened over three years ago. This isolated event, which led to 73 customers (from over 950,000 supplied) reporting an unusual taste to the water in the Monmouth area. This was fully investigated at the time, and we have not seen any recurrence of the issue since.

“There are no current issues with the quality or quantity of drinking water quality in the Monmouthshire area and the DWI report also states, ‘drinking water in Wales is of an excellent standard and this is demonstrated through a continuing high standard of 99.98% compliance."

Statement sent to the Monmouthshire Beacon

DWI Notice

"The AMP8 UV Disinfection Schemes notice is a result of a document that has been agreed with the Drinking Water Inspectorate (DWI) following the standard process of risk assessment undertaken by Dŵr Cymru Welsh Water.

This established regulatory process requires us to manage potential future risks and agree a course of action to mitigate them. The notice document is the outcome of that process which formally sets out the set of actions that we submitted to DWI and agreed to undertake.

As the notice name indicates, these actions are planned for our next investment period (AMP8 2025 to 2030) and will lead to us further investing to upgrade our water treatment services in the Monmouthshire area to ensure these potential future risks are managed.

For the avoidance of doubt, we must be clear that there are no current issues with the drinking water in the Monmouthshire area."

Statement sent to the Monmouthshire Beacon

Ed Bennett

Head of Waste Water Networks

Pwllmeyric Catchment

Pwllmeyric SPS & CSO

- High spills primarily caused by inflows & River Ingress
- High storm response in the u/s catchment (Shirenewton).
- There are 4 flooding locations

dwrcymru.com

Dŵr Cymru
Welsh Water

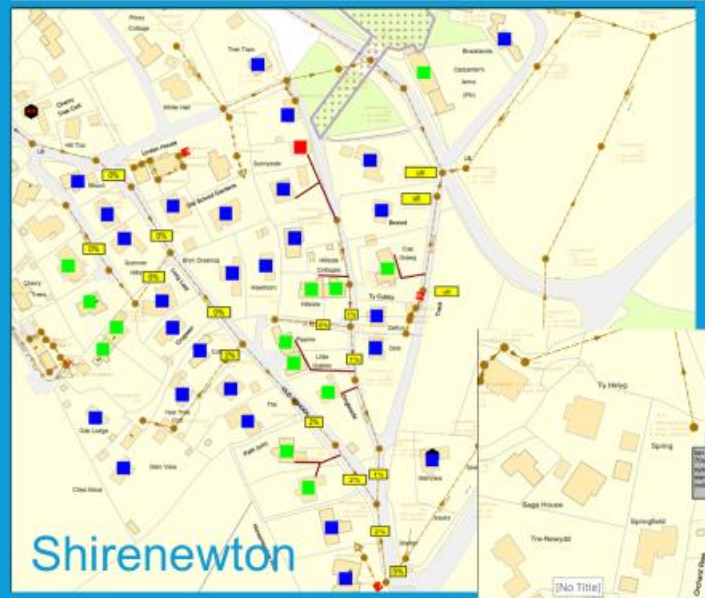
Investigations – Pwllmeyric

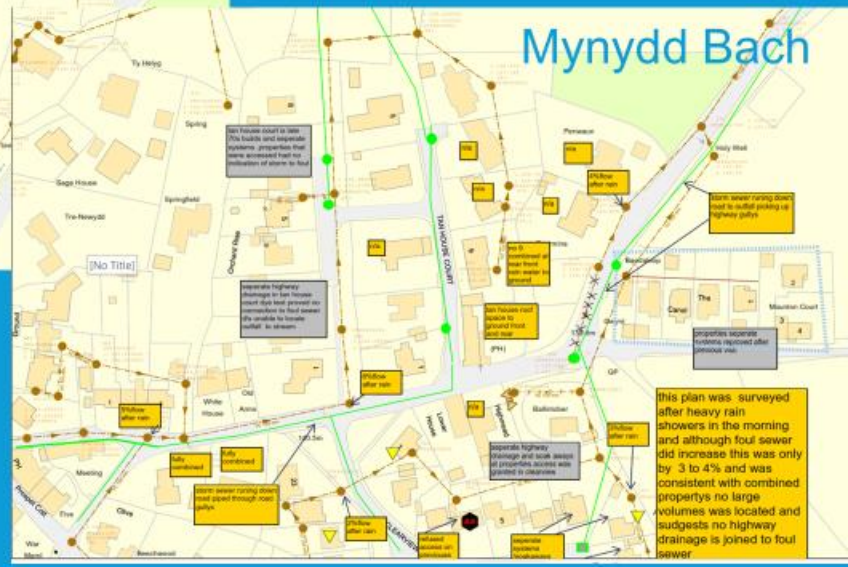
Investigations & Investment

- 155m of 375m pipework, which is acting as storage from ST51926101 downstream to the CSO. Added to cyclic desilt programme.
- Ongoing: Connectivity surveys completed at Shirenewton and Mynach Bach. 74 properties were surveys at Shirenewton, with 32 cross connected at approx. 65 separate locations.
- Review of flow monitor data to be undertaken and hydraulic model updated (Atkins support).
- HAL assessment of SPS completed in March 22. Air valve on rising main to be replaced.
- Electro Scan survey completed on various lengths Example between A48 and SPS. Identified 21.8l/s ingress throughout.
- £482,000 invested over 6 year period and £100,000 of additional lining work programmed
- Regular meetings between DCWW, Stakeholders & Regulators

	Scans	Meters	Pinholes*	Defects	LPS	LPD
Total	4	149	0	235	21.8	1,884,516

Date	Mainline ID	Pipe ID	Pipe Type	Diameter	Distance (m)	Pinhole	Small	Medium	Large	LPS	LPD
24/03/2022	ST51926101 - ST51926002	ST51926101 - ST51926002	CP	400	83	0	143	13	5	14.13	1,220.967
24/03/2022	ST51926101 - ST51926102	ST51926101 - ST51926102	DIP	400	17	0	27	7	2	4.95	427.521
24/03/2022	ST51926002 - ST51925001	ST51926002 - ST51925001	CP	400	34	0	20	3	0	2.23	192.693
24/03/2022	ST51925001 - ST51926001	ST51925001 - ST51926001	VCP	225	15	0	13	2	0	0.58	43.335





Specialist team focussed on removing unwanted flows from our network

Unwanted flows

Key Insight

- We have identified inflows quickly and cheaply (through targeted investigations) and worked with local authorities, land and property owners to deliver small inflow reduction projects.
- We've had success with a number of projects to reduce highway drainage inflows, with local authorities taking a lead and are keen to continue this work to mitigate pollution events due to hydraulic overload.

Dŵr Cymru Welsh Water

Dŵr Cymru
Welsh Water

Pwllmeyric – LDP

Deposit LDP consultation – 16th December 24

No detriment to the wastewater network

Requirement of HMA or surface water removal agreements

Daniel Humphreys

River Quality Liaison Manager

What is discharged and why?

Treated Effluent

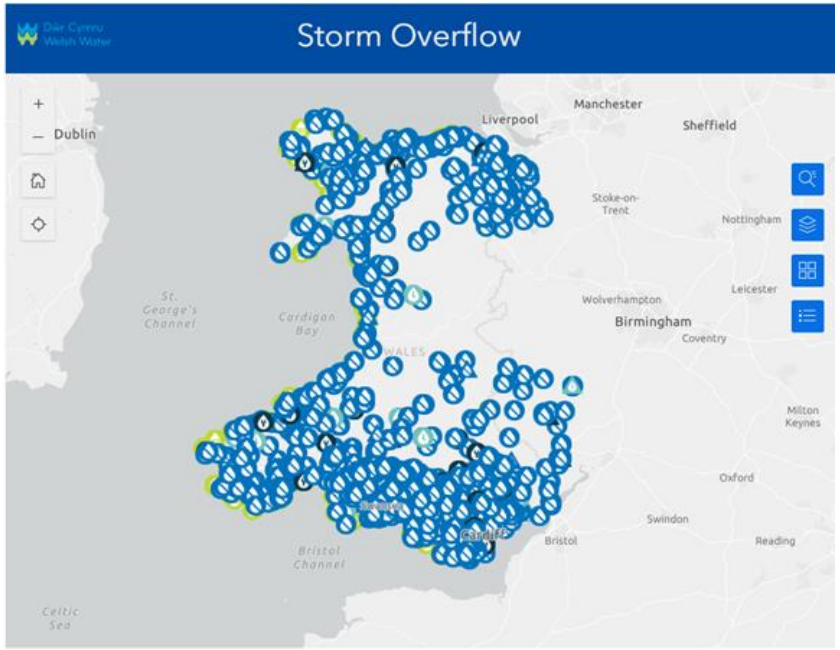
At our Wastewater Treatment plants effluent undergoes up to 5 stages of treatment and is cleaned to the standard specified in our permits before being discharged back into the environment

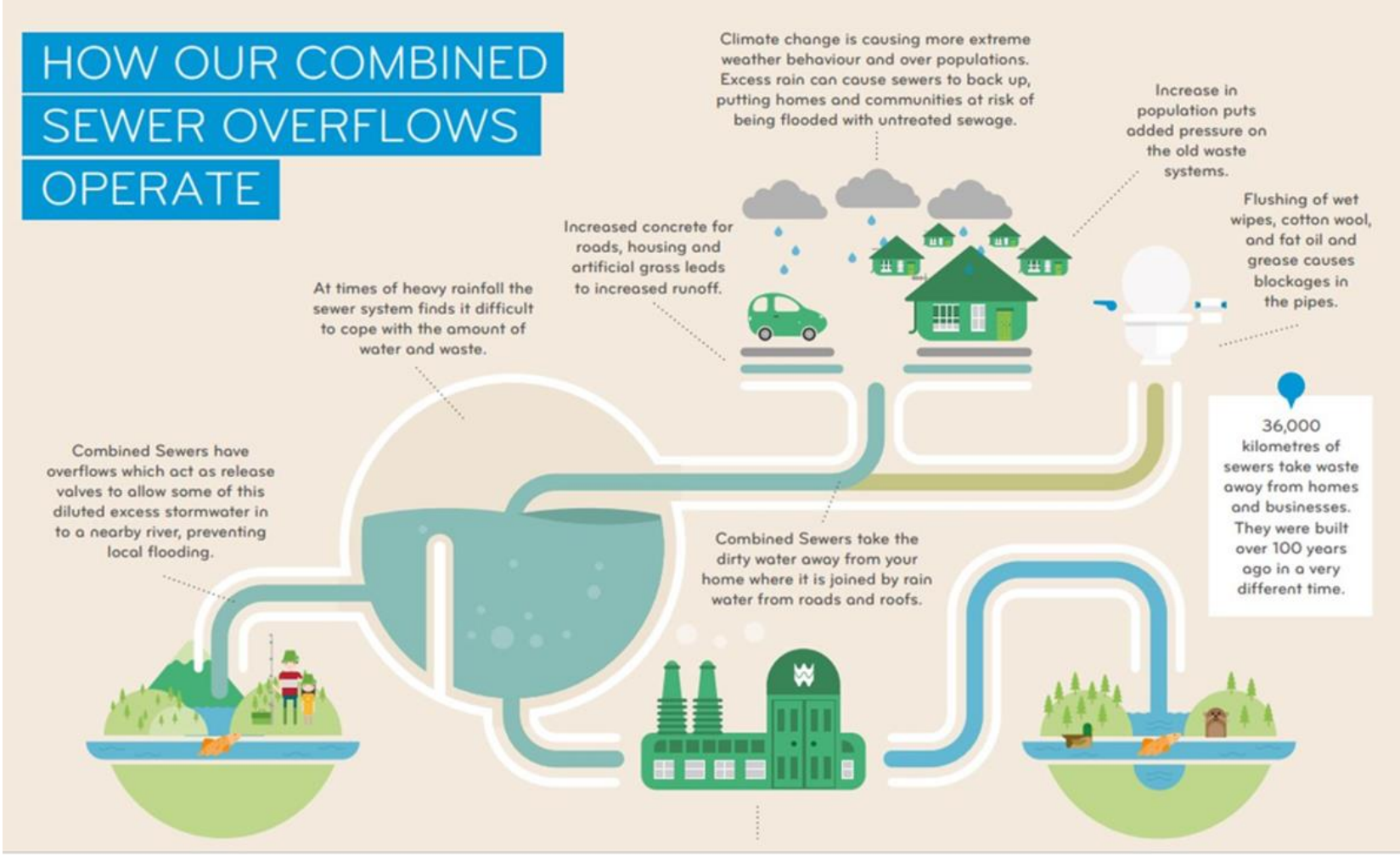
Storm Effluent

During heavy rainfall conditions when the sewer system is overwhelmed, a dilute mix of rainwater and wastewater is discharged via storm overflows in line with their environmental permit

Storm Overflows

- Approx 2300 across our operating area.
- Being open and transparent with our data.
- Since its launch on 1st February 2024, there are now over 1500 sites available.
- We continue to address issues as they appear and aim to have most of our assets available by March 2025.





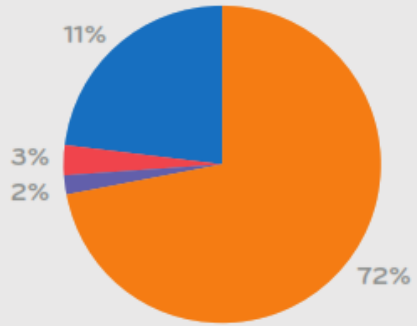
Special Area of Conservation (SAC) Rivers Update

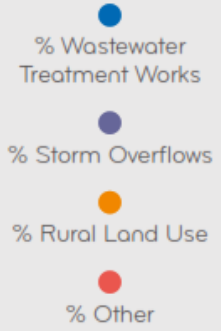
SAGIS modelling found 67 kg/day total load to the Upper Wye and 180 kg/day to the Usk. This was from all sources.

We're committed to reducing 100% of our fair share of phosphorous from our operations by 2032.

UPPER WYE

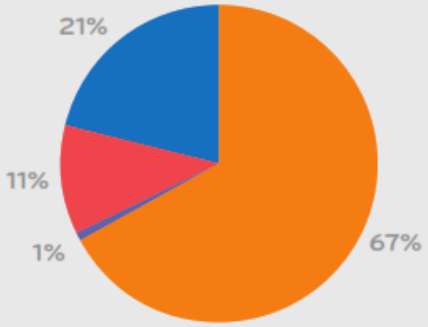
Total Load (Kg/Day)





USK

Total Load (Kg/Day)



Progress on the River Wye:

- The Upper and Lower Wye had the highest number of scheme commitments of all SAC catchments between 2020-2025.
- In the past year, we've invested £53m over 7 major schemes.
- £80 million has been invested in this catchment alone.
- We have accepted new protective phosphorous limits at 28 WwTW. Many of these have already come into effect, limiting the amount of phosphorous in our effluent.
- Our phosphorous reduction has helped support planning proposals for the Llandrindod Wells area.
- £20k in citizen science funding for the Wye catchment

Progress on the River Usk:

- Over £20 million has been invested to improve river quality between 2020-2025.
- We've accepted new protective phosphorous limits at 24 WwTW. Many of these have already come into effect, limiting the amount of phosphorous in our effluent.
- Our phosphorous reduction has helped us support planning proposals for the Brecon area.
- We are forecasting the largest phosphorous load removal across Wales is in the Usk catchment, with an estimated 36.3kg/day removed.
- We're part of Usk Catchment Partnership to help achieve phosphorous targets and meet socio-economic needs of local communities.

RIVER WYE

Completed projects:

Norton Wastewater Treatment Works
£4 million; Decommission wastewater treatment works and transfer waste to Presteigne Wastewater Treatment Works.

Presteigne Wastewater Treatment Works
£4 million; Reduce phosphorus discharged from works and accommodate growth.

Weobley Wastewater Treatment Works
£3.5 million; Reduce phosphorus discharged from the works.

Kingstone & Madley Wastewater Treatment Works
£3.7 million; Reduce phosphorus discharged from the works.

Clehonger Wastewater Treatment Works
£1.7 million; Increase flow passed forward through the works.

Peterchurch Wastewater Treatment Works
£0.4 million; Increase storm storage capacity.

Leominster Wastewater Treatment Works
£12 million; Reduce phosphorus discharged from the works.

Eign & Rotherwas Wastewater Treatment Works
£27 million; Reduce phosphorus discharged from the works.

Projects to be completed by March 2025:

Lower Cleeve Wastewater Treatment Works
£4.6 million; Increased capacity to accommodate growth.

Monmouth Wastewater Treatment Works
£3.1 million; To accommodate growth and reduce phosphorus discharged from the works.

Rhayader Wastewater Treatment Works
£5.85 million (subject to costing); Reduce phosphorus discharged from the works.

Pontrilas Wastewater Treatment Works
£7.7 million; Increased capacity and reduce phosphorus discharged from the works.

RIVER USK

Projects in the catchment to be completed by March 2025:

Usk Wastewater Treatment works (WwTW) and Storm overflow - £10 million

Phase 1 – December 2022

New screen installation as Usk Sewerage Pumping Station (SPS) storm overflow.

Improvement on aesthetic impact when asset discharges. Completed.

Phase 2 – Spring 2024 – March 2025

Increase pass forward flow from SPS to WwTW resulting in reduced spills from the storm overflow. Ongoing.

Phase 3 – Spring 2024 – March 2025

Increased storm tank and treatment capacity at the WwTW. Large scheme to increase the amount of flow treated at the works. We will also increase the volume of storm water storage. This will result in a decrease in modelled storm discharges from the works. Ongoing.

Llanfoist Wastewater Treatment works - £1.9 million

Phosphorous removal scheme, brought forward as part of £60 million additional released.

Brecon Wastewater Treatment works - £9 million

Phosphorous removal scheme and additional capacity for growth.

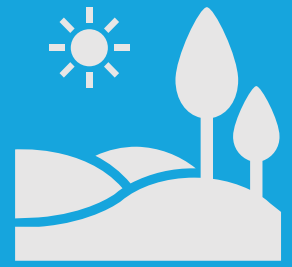
How can we improve river water quality?

Increased treatment quality

New storage capacity

Storm overflow improvements

Rain/Surface water removal



Catchment interventions

Monmouth WwTW Growth Mitigation

Growth has led to increased flow and load at the works. Additional plant has been installed to treat these additional flows and maintain compliance. The works has been split into two phases with a total investment of £3m.

Phase 1 – works completed

Installation of two SAF biological treatment units, feed pumping station and associated control equipment.

Phase 2 – ongoing

Installation of new sludge holding tank, two Mecana tertiary treatment units and associated pumping station, new final effluent sampling chamber. Construction phase is currently ongoing and scheduled for completion in January 2025.

AMP8 (2025-2030)

To address population growth to meet the agreed design horizon of 2045, DCWW will require to construct a new sewage treatment works to treat the increased growth within the catchment and tightening permit requirements.

Proposed solution: install a Sequence Batch Reactor (SBR) plant, ferric dosing to control phosphorus discharge levels and new sludge processing. This would be a large offline build and will require planning approval.

We will also be undertaking work in the upstream catchment to remove infiltration and surface water flows from the combined sewerage system. This will reduce the flow and loading at the wastewater treatment works.

Survey works has started in the catchment (ground investigation, CCTV, asset surveys). The design is planned for early AMP8 with the construction phase / programme to follow.