



Vale of Glamorgan

January 2025

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Environment Advisor and Stakeholder Lead (All Wales)



- **3 million customers** served across Wales, Herefordshire & parts of Chester and the Wirral
 - **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.
- **44.5%** of Rivers in Wales are at Ecologically 'Good' Status, 14% in England.
- Regulated by Ofwat, DWI, NRW & EA.

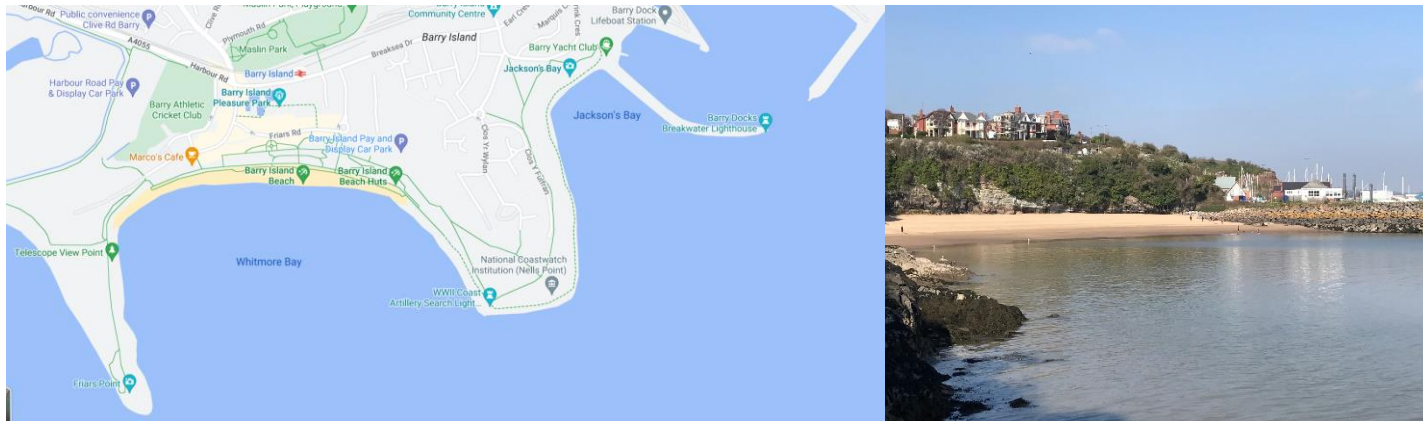




BW Name	Classification 2024
Cold Knap Barry	EXCELLENT
Col-Huw Beach (Llantwit Major)	EXCELLENT
Jackson's Bay Barry Island	GOOD
Penarth Beach	GOOD
Southerndown	EXCELLENT
Whitmore Bay Barry Island	GOOD
Watch house Bay	SUFFICIENT
Ogmore by Sea	POOR

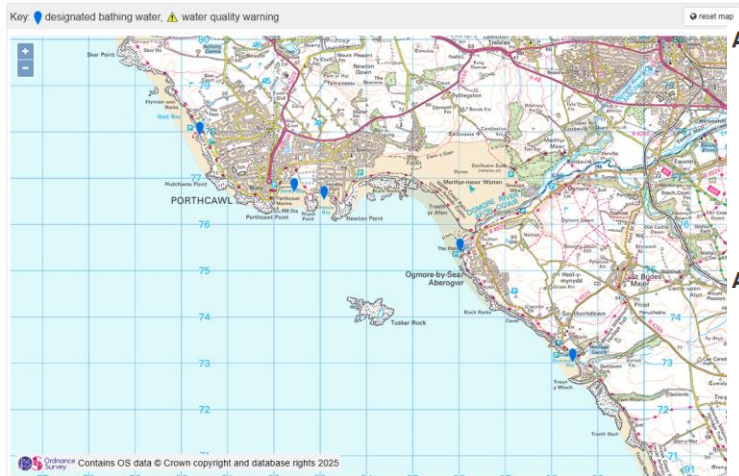


- Additional water quality and hydraulic modelling has been completed and shows there has been deterioration in WQ compared with the 2017 baseline.
- Investment is planned for Barry bathing waters in AMP8 and 9. We intend to deliver improvements through a range of catchment measures including RainScape. This should secure 'good' status long term.
- The alternative is a large storage tank that would be hard to locate, high carbon and financial cost and would not be as resilient to the changing climate and rainfall patterns.
- The investment will likely lead to improvements at Whitmore Bay and Penarth also.

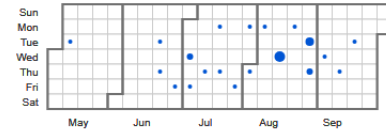
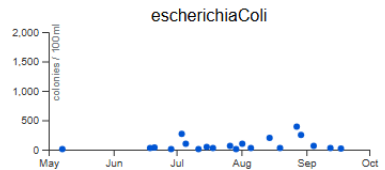
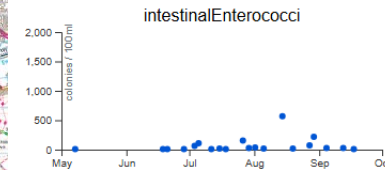




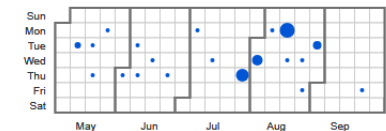
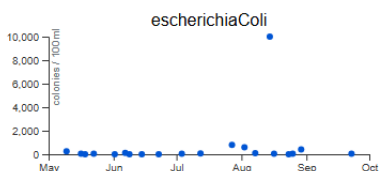
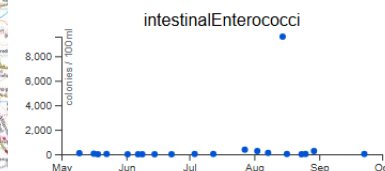
- Poor status 2024
- Bathing waters investigation confirmed for 2025-2030
- Ogmore Storm Overflow – 6 Spills during the bathing season 2024 and 99.96% data



Annual classification 2024: **poor**



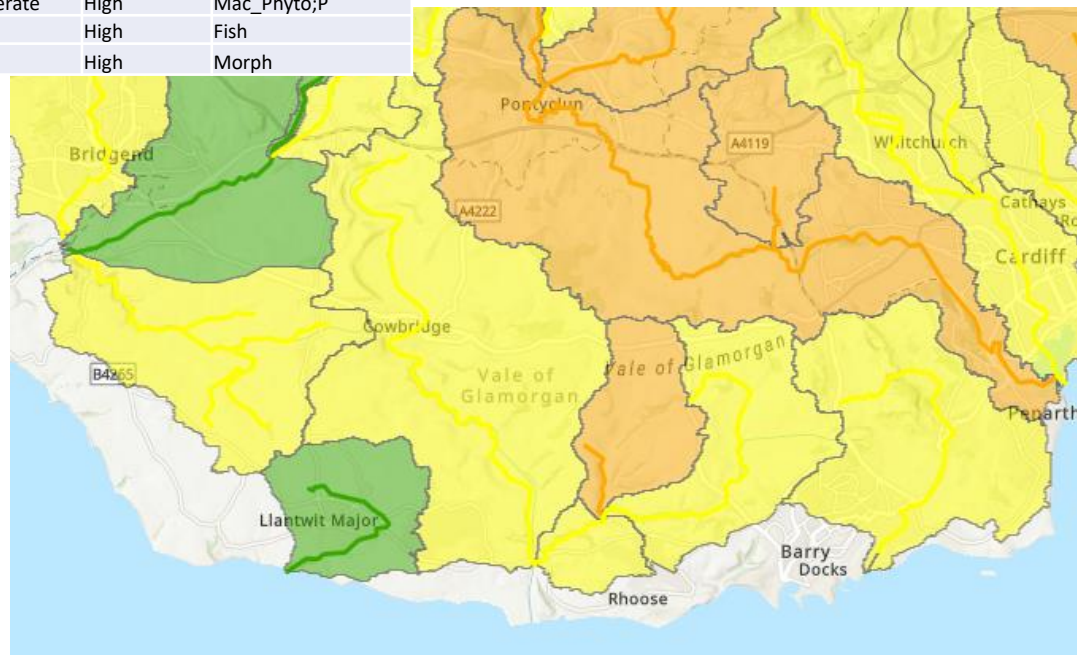
Annual classification 2023: **poor**





River Quality

WBID	Waterbody name	OverallWater Body	Eco	Chem	Driving_Element
GB110058026250	Ewenny - conf with Ewenny Fach to tidal limts	Good	Good	High	Fish;Hydro;Morph
GB110058026220	Alun - headwaters to confluence with Ewenny	Moderate	Moderate	High	P
GB110058026430	Thaw	Moderate	Moderate	High	Fish;P
GB109057027260	Ely R - conf Nant Clun to Allot Gardens, Ely	Poor	Poor	Moderate	Inverts
GB109057027080	Nant Dowlais - source to conf Ely R	Poor	Poor	High	Fish
GB110058026420	Cadoxton - headwaters to tidal limit	Moderate	Moderate	Moderate	PAH;DO
GB110058021000	Kenson - conf with Waycock to conf with Thaw	Moderate	Moderate	High	Mac_Phyto;P
GB110058026400	Waycock - headwaters to confluence with Kenson	Moderate	Moderate	High	Mac_Phyto;P
GB110058026410	Llancarfan	Poor	Poor	High	Fish
GB110058021020	Afon Colhuw - Headwaters to Tidal Limit	Good	Good	High	Morph



56 SSSIs
 1 SAC
 10 Water Framework Directive water bodies

HOW OUR COMBINED SEWER OVERFLOWS OPERATE

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.

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

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

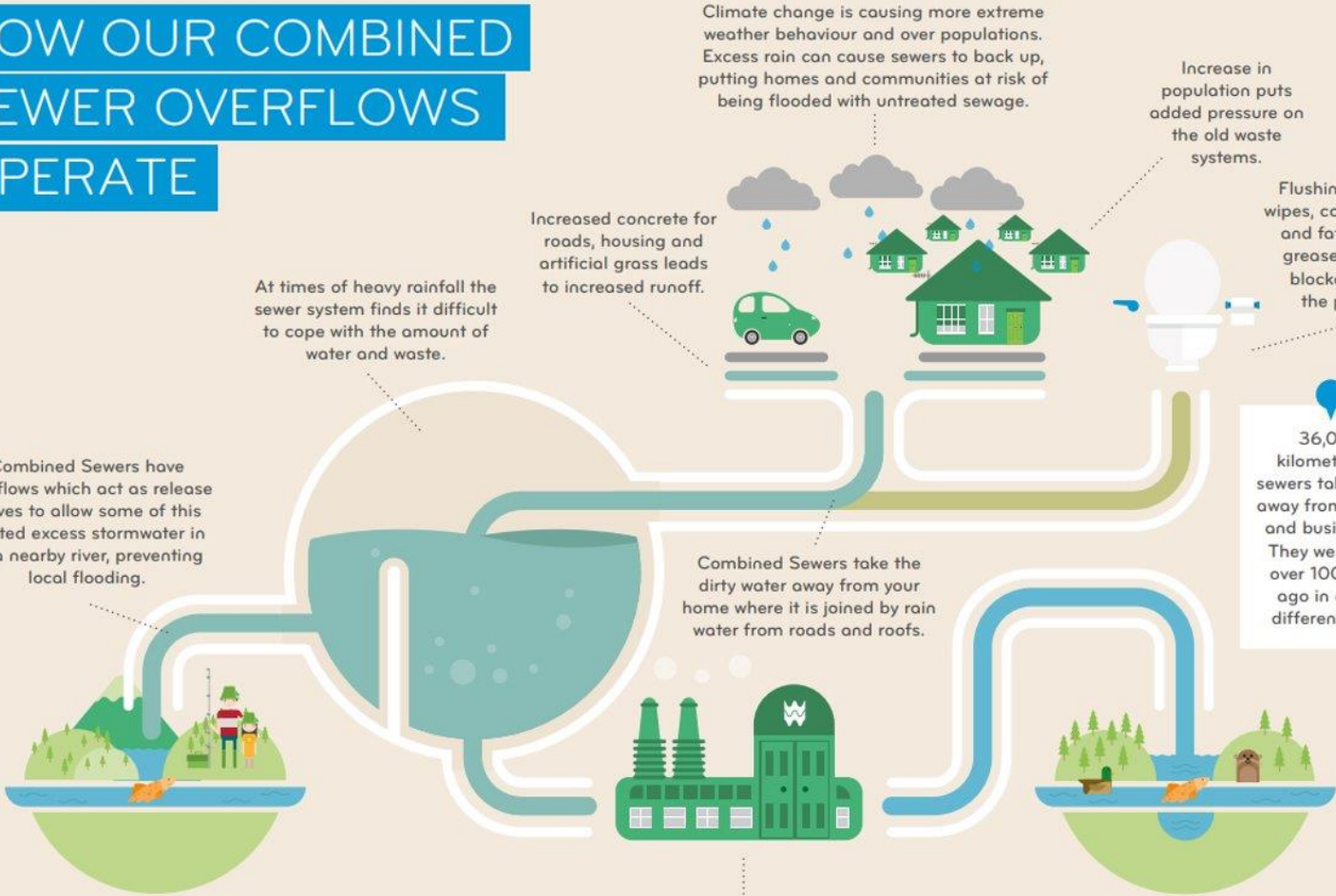
Climate change is causing more extreme weather behaviour and over populations. Excess rain can cause sewers to back up, putting homes and communities at risk of being flooded with untreated sewage.

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

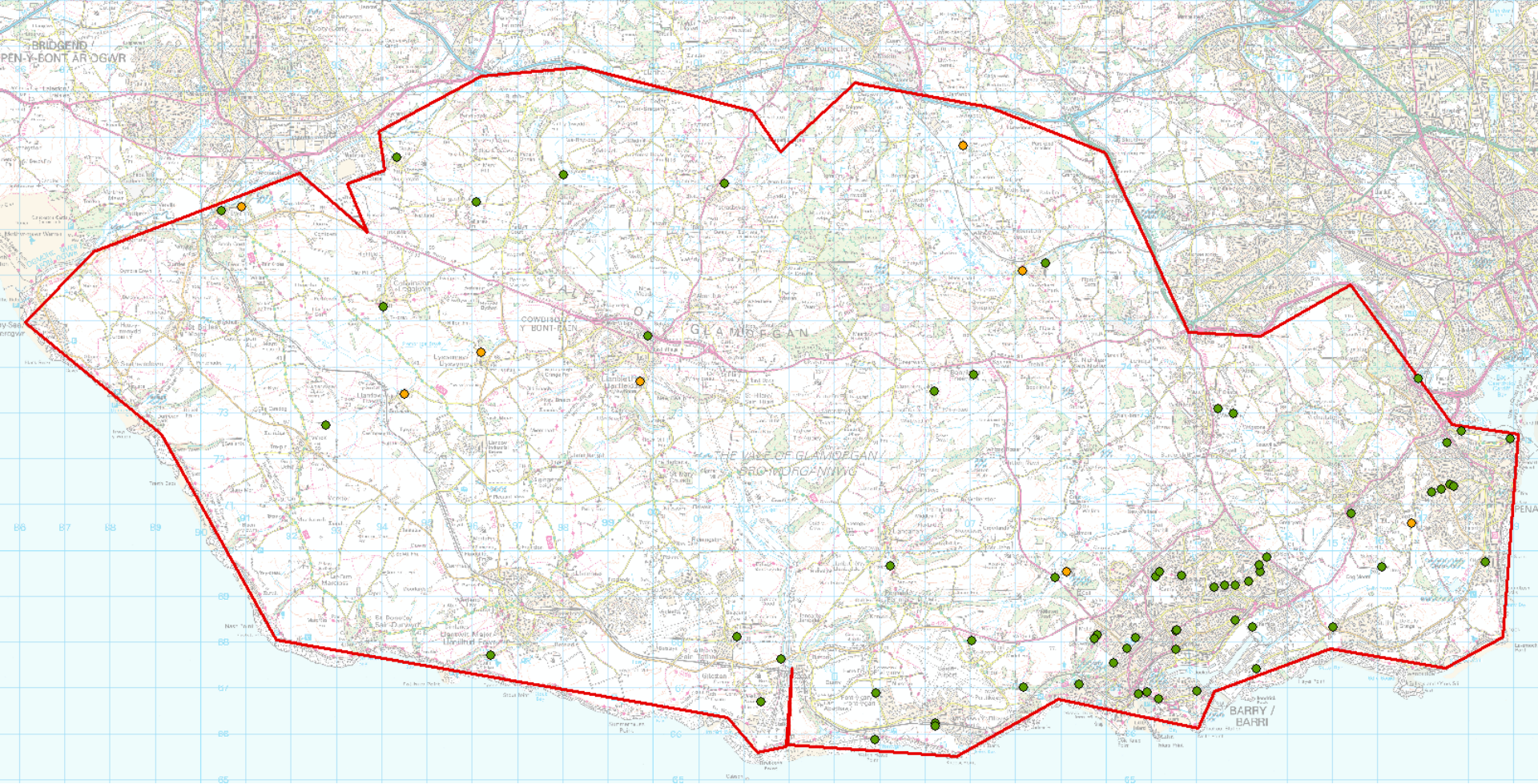
Flushing of wet wipes, cotton wool, and fat oil and grease causes blockages in the pipes.

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

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



EDM maps Vale of Glamorgan (orange under SOAF investigation)





74 Storm Overflows in VoG catchment

7 over 40 average spills

67 <40 average spills not under investigation AMP7

8 under SOAF investigation

24 identified in 2023
23 in 2024 (16 new investigations)

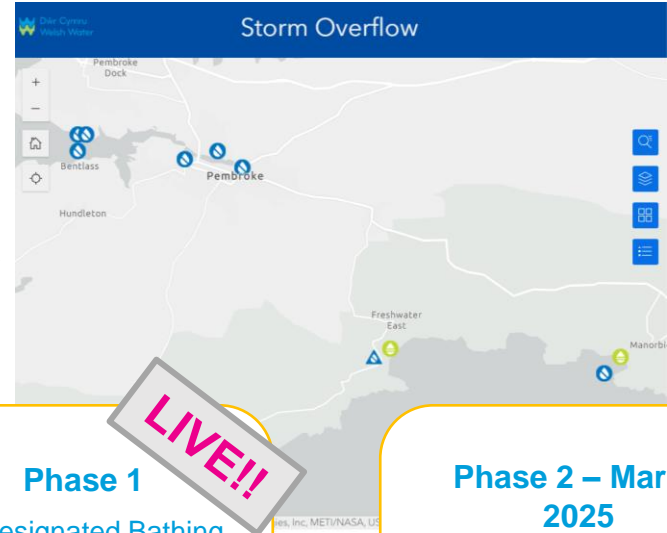
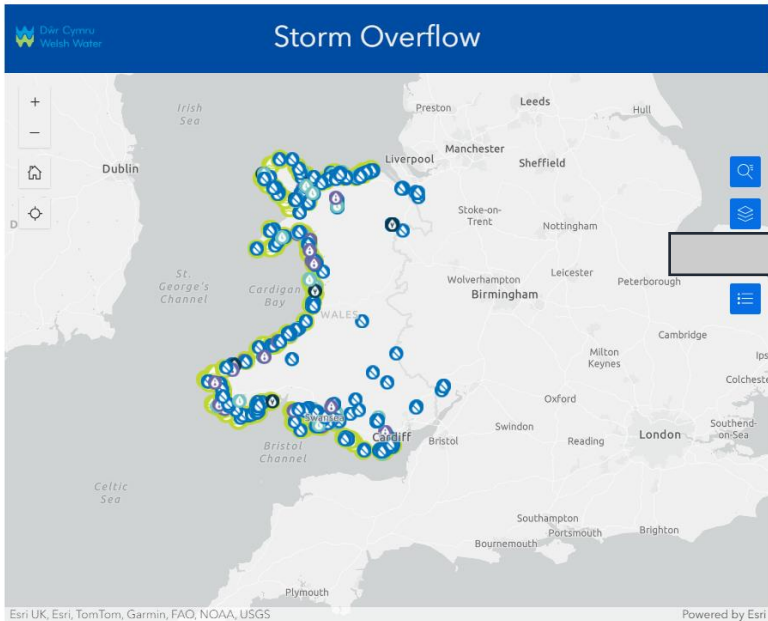
7 cause investigations complete
6 impact investigations complete
2 impact investigations outstanding

0 Severe
Impact

0 High
Impact

0 Moderate
Impact

6 Low/Very
Low or No
Impact



LIVE!!

Phase 1
All designated Bathing Waters & some swim locations
~500 sites

Phase 2 – March 2025
Progressively adding until all remaining overflows
~2000 sites



Investing £184m to eliminate 90% of the harm caused by phosphorous from wastewater treatment works outflows in SAC catchments by 2030 and 100% by 2032



Investing significantly to improve storm overflows with £140m invested between 2020-2025 with a further £1.1bn planned from 2025 to 2030



Developing nature-based solutions (e.g. RainScape in Llanelli) to achieve what is needed at smaller, rural sites where conventional phosphorous removal is likely to be sub optimal

Welsh Water is planning to invest more than £2 billion in the environment between 2025 and 2030



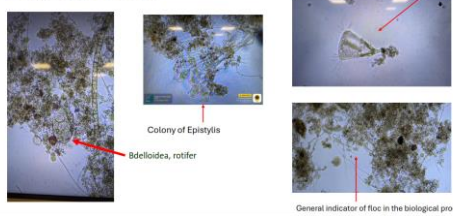
- Environmental Investment programme more than 3x previous AMPs is planned 2025-2030
- All new phosphorus schemes have been published on our website, delivery up to 2032
- £1.1bn planned for classification and improvement of storm overflows, targeting those with the highest environmental impact first
- RainScape style scheme in Barry to secure Jackson's Bay bathing water status
- 'Severe impact' Storm Overflows for optioneering/solution
- Working through the final determination right now so we can share more details on planned investment on a local level



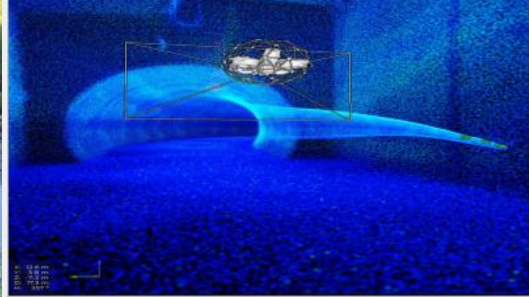
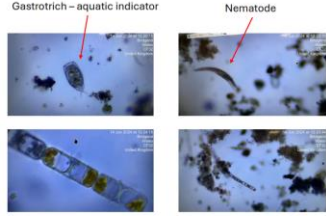
- Black sludge identified in channel at side of Ogmore river on 17 May, next to Penybont WwTW
- Suspected leak from an underground tank on site
- Over 1,200 hours of detailed investigations (trial holes, CCTV inspections, 3D scanning of pipes and tanks)
- Including; Universities, Environmental Consultants, Capital Partners/Engineering, Aerial Services Team, Ops
- Over 1,000 pots of dye used to trace leak
- Sampling taken in the river and Ogmore beach (local bathing water)
- Newsletter issued to stakeholders and local community
- No further evidence of a leak identified (initial leak identified was groundwater pipe – not our asset)
- NRW classified it as ‘abnormal situation’, this was removed on 18th June.



Mixed liquor from the biological process at Penybont WwTW



(2) Oxbow lake sample - upstream



27 May 2024 at 17:17:39
Bridgend
Wales
CF32
United Kingdom



- **Let's Stop the Block** – Help us promote only flushing the 3 Ps (everything else goes in the bin).
- **RainScape** – ensure rain water goes back to the environment and wastewater to the sewer.
- **Connect Right** - Investigate potential misconnections.
- **Community engagement and events** - continued DCWW and VoG partnership working.
- **Something doesn't seem right?** – Please let us know via our 24hr phonenumber 0800 085 3968.



1



2



3




**THEY BELONG
IN THE BIN**

Don't risk a flood. Take action now – throw all wipes, cotton buds, and sanitary products away in the bin.

BREAK YOUR HABITS, NOT YOUR PIPES

Let'sStopTheBlock.com

