Stakeholder update: West Sussex

11 June 2025

from Southern Water

Today’s agenda

- Welcome
- Company update
- Water-related investments and highlights
- Wastewater highlights
- Bathing Water
- Clean Rivers and Seas
- AOB

Our Business Plan: 2025 to 2030

- In December 2024 we received our Final Determination from Ofwat for our Business Plan for the period April 2025 – March 2030
- After very careful consideration, our board decided to appeal Ofwat's Final Determination to the Competition and Markets Authority (CMA)
- We felt Ofwat's Final Determination would not enable us to deliver the environmental and performance improvements and new infrastructure that our customers and communities rightly expect
- It is important to note, the CMA appeal will not affect customer bills for 2025-26

CMA appeal – where we are

- Recently Ofwat submitted its Statement of Case (SOC) to the CMA on disputing company cases
- The CMA appeal process does not hinder plans for 2025-26, which will be delivered as laid out in our Business Plan 2025-30
- The CMA appeals process is due to be completed before the end of the calendar year 2025
- During the appeal process, and to continue advancing investment in the improvements and new infrastructure our network and assets need, we've also announced our intention to raise £900million of new equity from our investors

Business Plan 2025–30

£7.8bn

£682m
Spill reduction

To stop 2,500 spills

£559m
Wastewater nutrient removal

To remove phosphorus and nitrogen during wastewater treatment before releasing it back to the environment

1,200
Schemes and investigations

To protect, restore and enhance the environment

38
Wastewater treatment works

Increasing capacity and capabilities to support predicted population growth

Network maintenance
Maintaining and upgrading equipment to further improve reliability of our assets, improving pollution and leakage performance

Microbiological treatment
Ultraviolet disinfection to protect shellfish water quality

Screens
Investment in new screens to keep more debris, such as wet wipes and sanitary products, out of the wastewater system

Sludge treatment
Increasing use of the byproducts of wastewater treatment as agricultural fertiliser and using captured gases as renewable energy

Investment

West Sussex

£276.2m

£84.5m
Bognor regis and Littlehampton

£95.3m
Chichester

£45.7m
Crawley, East Grinstead and Uckfield

£28.4m
Horsham

£22.3m
Worthing and Shoreham

Water investments

Simon Moore

from Southern Water

Enhancing water resilience and supply

- We have a **comprehensive plan to support the environment** and **improve the resilience** of our sites and pipe network across the Central area. As part of this plan, we will be **investing over £350 million** over the next five years to strengthen our infrastructure and safeguard water supplies for the future
- Our key initiatives include:
  - **Improving Operational Resilience:**
    - Installation of standby generators at critical sites including **Hampers Lane WSR** and **Turners Hill WSR**, ensuring continuity during power disruptions
    - Installation of **nitrate removal plants** at locations experiencing increasing nitrate levels
    - Installation of **UV treatment systems** at sites where **cryptosporidium** may present a future water quality risk
  - **Expanding Supply Capacity:**
    - Recommissioning **Smock Alley WSW**, **Haslingbourne WSW**, **Lewes Road WSW**, and **Rogate**, providing over **12 (Ml/d)** of additional water
    - Delivering just under **15 Ml/d** through the innovative **Ford Water Recycling Scheme**

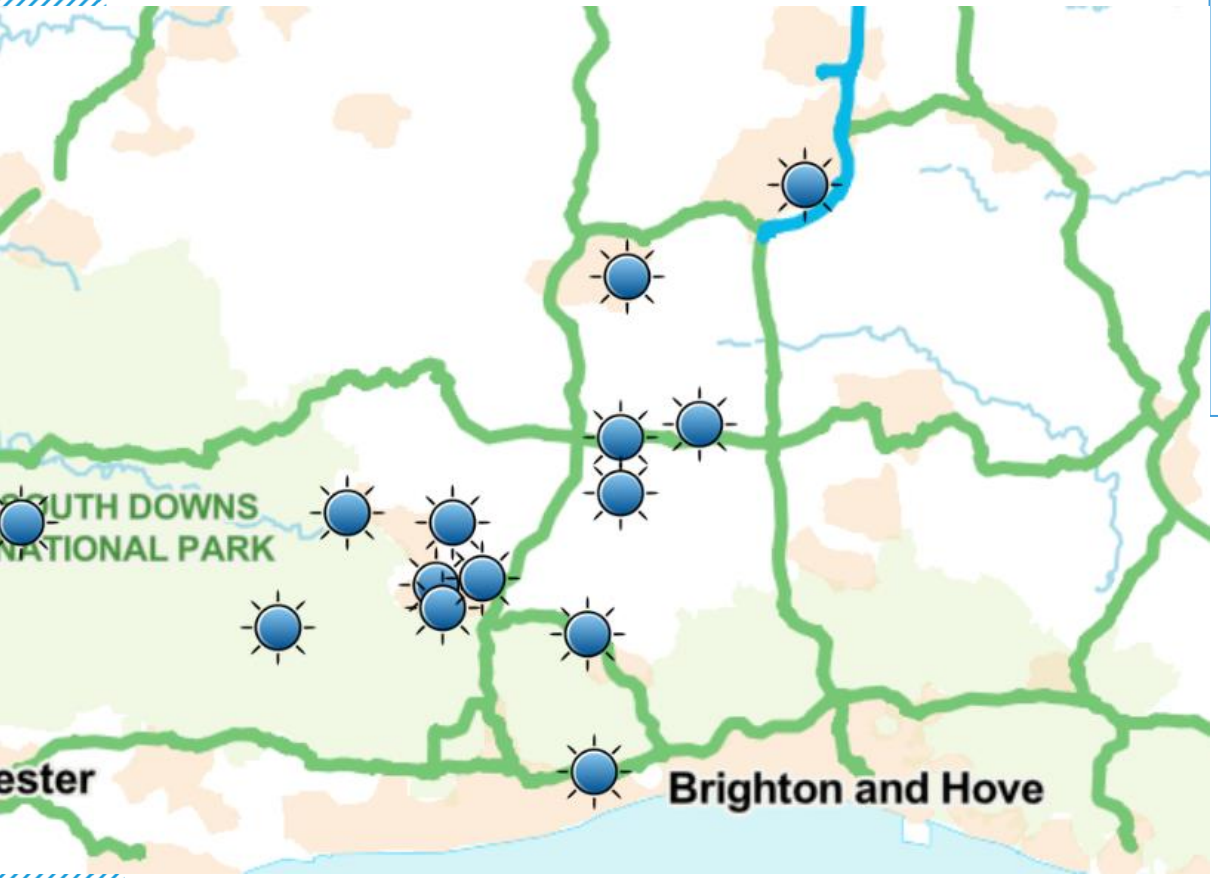
Enhancing water resilience and supply, continued...

- Delivering an additional **14 (Ml/d)** through a new **water transfer from Sutton and East Surrey's** Outwood site to the **Turners Hill reservoir**, alongside the **Sussex North WRZ** bulk import as part of the **Southeast Surrey** re-zoning extension

- **Upgrading Existing Infrastructure:**
  - Enhancing performance and reliability at our key supply source at **Hardham**
  - Rebuilding **Weirwood WSW**, which will deliver an additional **20 Ml/d**
  - 30km of pipe in Sussex is being investigated for replacement

- This comprehensive investment will significantly boost our region's water security, environmental performance, and service resilience for years to come

Our mains replacement programme



- Identified 1**1 locations with high burst rates** across Sussex, totalling just under **30km**, which we're seeking to replace - we have started site investigations and early designs
- We will provide more detail about the 2025/26 programme this autumn, including confirmation of schemes to be included
- We'll be organizing customer drop-in events to ensure customers are aware of the plans once finalised
- **£1m per year funding** to resolve issues on trunk mains regionally, identified through operational activities and trunk main walking

Locations and approximate lengths (m)	
Weald Drive - Crawley	1,384
Cowfold Road - Horsham	4,191
Causeway area - Cocking	9,323
Picts Lane - Cowfold	3,097
Partridge Green area	4,599
Washington Road - Storrington	1,270
Muttons Lane to Mill Lane	1,809
Houghton Lane - Houghton	1,446
Melton Drive, Downsview Avenue, Bannister Gardens – Storrington	495
Millas, Forestfield, Smithbarn - Horsham	1,396
Brighton Road - Sompting	410

Key production site schemes in AMP8

Key:
Red - 2 sites
Green - Nitrate sites
Orange - DFRP schemes

- We will be investing over **£100m** in **Hardham WSW** improvements **and Weirwood WSW** re-build
- We will be investing **£50m** in **nitrate** schemes by:
  - Installing nitrate plants at **Patcham WSW, Mossy Bottom WSW, Patching WSW** and **Madehurst WSW** and
  - Implementing blending for **Stanhope Lodge WSW**
- We will be investing **£9m** in the **Disinfection Future Resilience Programme (DFRP)** by:
  - Installing permanent crypto management at **Patcham WSW** and **Burpham WSW** and
  - Increasing contact time for virus management at **Balsdean WSW**
- Under **WRMP** we are planning on investing in below schemes; however, they are currently under review by WRMP Team:
  - Wastewater recycling scheme at Ford to supplement river baseflow for abstraction at Hardham
  - New transfers from Sutton and East Surrey into Sussex North to help balance SDBI
  - Returning Haslingbourne WSW, Rogate WSW and Smock Alley WSW to service
  - Hardham Winter transfer

Wastewater investments

Chris Braham

from Southern Water

Previous events have provided investment overviews: website summaries available shortly

£122.2m in Arundel and the South Downs

We're investing millions in conservation projects in the Arun Valley and the River Western Rother area. Lidsey Wastewater Treatment Works will benefit from £49m worth of improvements to make the site more resilient and reduce spills. We're also making improvements to remove more phosphorus from treated wastewater returning to rivers across the area, protecting the surrounding environment.

£95.3m in Chichester

We're improving the quality of water leaving Thornham Wastewater Treatment Works with better UV treatment and nutrient removal to protect local shellfish. Nearly £15m is being spent on reducing spills at our Thornham and Pagham Wastewater Treatment Works, enhancing local bathing waters. We're also increasing treatment capacity at Thornham to protect local communities from flooding and reduce the use of storm overflow releases.

£23.3m in Worthing and Shoreham

We're making improvements to Broadwater Water Supply Works to manage the impact of climate change and increase the site's resilience. We're reducing spills in Shoreham and improving nutrient removal at our Clapham site as part of our commitment to improve the health of over 1000km of rivers. A £14.9m upgrade to East Worthing Wastewater Treatment Works will make the site more resilient.

£28.4m in Horsham

We're improving the resilience of Hampers Lane Water Supply Reservoir to keep our customer's taps flowing. £26m will help our sites treat wastewater to a higher standard, benefitting the local environment and ecology. This will include the removal of phosphorus from treated wastewater returning to rivers and seas. We're also increasing treatment capacity at Horsham Wastewater Treatment Works.

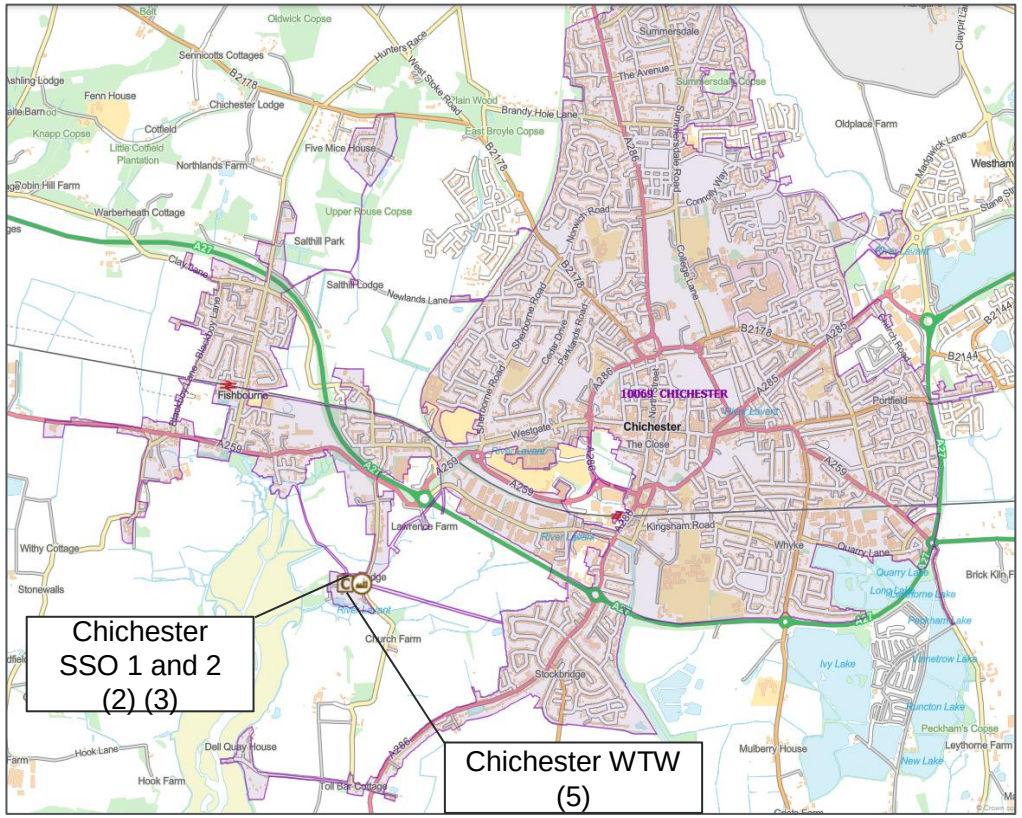
£67.1m in Mid Sussex

To keep up with population growth and protect the environment, we're upgrading our wastewater treatment sites, including Goddards Green and Scaynes Hill, where we're reducing spills and improving screening. We're increasing the capacity of Goddards Green and improving sludge treatment to generate renewable energy and supply farmers with this valuable byproduct. At Slaugham, we're improving outflow quality by removing more

£84.5m in Bognor Regis and Littlehampton

To support new homes and protect the environment, we're increasing the capacity, resilience and quality of wastewater treatment at our Ford site. £14.8m will improve sludge treatment, so we and local farmers can benefit from its biofuel. We're improving flow monitoring at our sites in the area to improve their ability to handle emergencies and reduce spills.

Case Study 1: Chichester catchment



Headline strategy

Development within the city boundary has been previously constrained due to nutrient levels in the Harbour and high storm overflows usage. The storm overflow reduction plan, combined with infiltration reduction will reduce flows over the medium to long term.

We have recent agreed with environmental regulators and CDC to enable growth by adopting the principle of flow neutrality, where additional flows from new developments are offset by flow reduction methods.

Focus areas

- Reducing groundwater infiltration into the public and private sewer systems
- Increase overall treatment capacity by 60%, reducing overflow spills
- The treatment works has capacity for dry weather flows and already treats nutrients to below the technical achievable limits
- Develop and implement a flow neutrality approach for shorter term, akin to that used for nutrient neutrality with developers
- Continue to work with regulators to use nature-based solutions such as wetlands to support storm overflow reduction plan

AMP8 projects

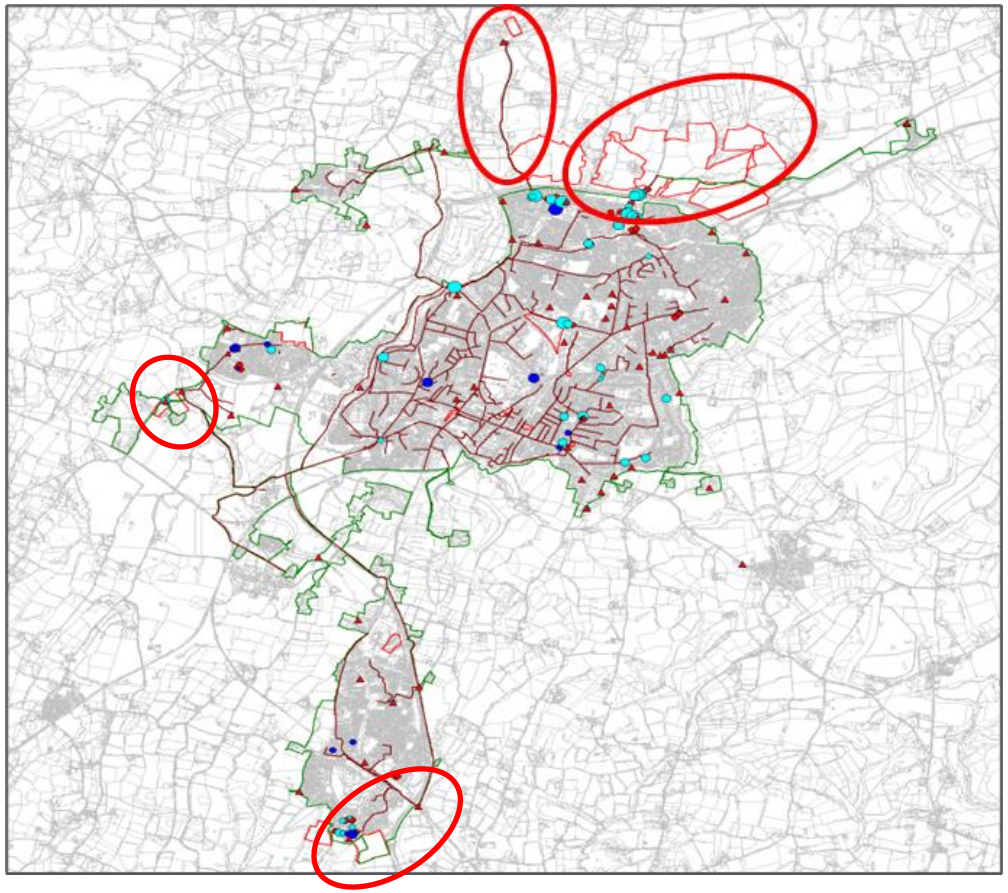
(1) Chichester WTW U_IMP5 – increase capacity to meet FFT of 540L/s - handed over to delivery partner May 2025, in design phase with 2026 target completion

(2) Infiltration reduction work in the catchment, surveys in progress and 1000m relining completed

(3) Acceleration of 2 storm overflows, assumed solution mix of sewer sealing and ideally wetlands. 2035 regulatory target date to reduce to <10 spills

(4) Investigations for AMP8 includes developing nutrient and chemical model for Solent, covering Chichester Harbour – to determine sources and levels of nutrients and chemicals

Case Study 2 – Horsham Catchment



Growth hotspots

Investment drivers

- Local watercourses are in poor ecological status. Also feeds into sensitive watercourses downstream, hence recent scheme to reduce phosphorous
- Population growth requiring reinforcement schemes in the network and capacity at the treatment works

AMP7 investment – just completed, £35m scheme

- Horsham WTW Growth Scheme
- Network Reinforcement - including land north of A264
- Storm tank upgrades
- Tightened phosphorous permit to meet water quality driver

AMP8 schemes

- Horsham New WTW will receive additional biological treatment capacity by 2029 to for tightening ammonia permit (1.5mg/l)
- Four growth hotspot areas, currently under review with our Delivery Partners to develop solutions. Proposals expected Oct 2025
- Preferred solutions expected to be a combination of network reinforcement, connections to alternative areas with capacity and surface water separation

Bathing Water

Nick Mills

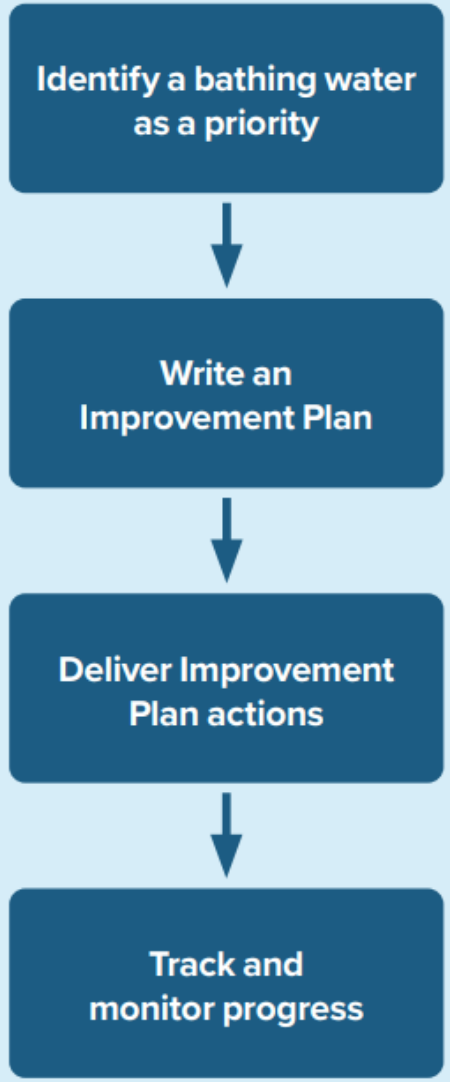
from Southern Water

What is Southern Water's role in bathing water quality?

- We recognise the key role we have in trying to improve bathing water quality
- We are a key custodian, alongside others like the Environment Agency and Highways authorities, with local authorities responsible for public health
- It's vital we work with local partners to tackle these issues collaboratively, and that we work closely with the Environment Agency and other regulators to monitor improvements
- Work to improve bathing water quality has been defined in our Improvement Plan Strategy, which prioritises key locations for targeted work based on a number of factors.

Check out our bathing water pages!

The Improvement Plan Strategy process:



What can impact bathing water quality?

There are a variety of issues which have the potential to impact water quality. For us, these include:

- Leaking assets
- Blockages
- Illegal connections
- Storm overflow releases

Other sources of pollution **outside of our control** include:

- Road, farming and industrial surface water run-off
- Waste from other water and beach users
- Seabirds also have an impact

Bathing water quality

Test data shows that **storm overflow releases do not always cause poor bathing water quality**. There are several other factors that can impact bathing water quality including:

- **Agricultural/farm run-off** which can include pesticides, animal medicines and animal waste
- **Blockages and other asset issues** which can cause serious pollution
- **Private sewer issues such as misconnections and illegal connections** which cause sewage to end up in bathing waters
- **Seabird and other animal waste** causing spikes in bacteria concentration
- **Disposal of waste/liquid contaminants down surface water drains** which go directly out to sea unfiltered and untreated
- **Seaweed and algal blooms** protecting bacteria and allowing them to live longer and sometimes providing a medium for them to reproduce
- **Marine activities** such as discharging on-board toilet and hygiene facilities
- **Road surface run-off** which at scale, can have a significant impact on water quality

West Sussex Bathing Water Classifications

Bathing Water	2023	2024	Change
Bognor Regis (Aldwick)	Poor	Poor	↔
Bognor Regis East	Good	Sufficient	↓
Bracklesham Bay	Excellent	Excellent	↔
Felpham	Good	Good	↔
Goring Beach	N/A	Sufficient	N/A
Lancing, Beach Green	Excellent	Good	↓
Littlehampton	Good	Good	↔
Middleton-on-Sea	Excellent	Excellent	↔
Pagham	Good	Good	↔
Selsey	Excellent	Excellent	↔
Shoreham Beach	Excellent	Excellent	↔
Southwick	Excellent	Excellent	↔
West Wittering	Excellent	Excellent	↔
Worthing	Good	Sufficient	↓
Worthing Beach House	N/A	Poor	N/A

Bathing water deliverables in West Sussex

Improvement plans developed in all areas listed below, focusing on Southern water sewers, Illegal Connection investigations, third party issues and engagement

Worthing Beach House

Illegal Connections team survey of the surface water catchment ongoing.

- Brighton Road, Worthing sewer collapse repaired
- Car wash illegally discharging washdown into the surface water system
- Greek restaurant: Kitchen waste incorrectly connected – resolved
- Pizza restaurant caught emptying mop buckets into an arco drain
- Investigations continue across the catchment
- Shadow Sampling programme in place to monitor multiple coastal locations

Worthing Beach

Illegal Connections team survey of the surface water catchment ongoing.

- Worthing Pier had an overflow from toilet overflowing from the cistern tank
- Water supply leak identified and resolved
- Shadow Sampling programme in place to monitor multiple coastal locations
- Heene Terrace, West Street and 'The Steyne' surface water catchments are continued areas of focus
- Review of CCTV investigations to identify issues

Bognor Regis (Aldwick)

Illegal Connections team survey of the surface water catchment ongoing.

- 18 misconnected properties - all have been resolved
- Crescenta walk leaking sewer identified and resolved
- Focus is currently on Nywood Lane and Victoria Drive catchments
- Private drainage in Hawthorne Road blocked - Arun District Council resolved
- Supported the "Yellow Fish" campaign in Bognor Aldwick
- Shadow Sampling programme in place to monitor multiple coastal locations

Bognor Regis East

Illegal Connections team survey of the surface water catchment ongoing.

- 5 misconnected properties identified - all resolved
- Defects identified on Bognor Regis Pier - resolved by pier maintenance team. Situation is being monitored

Goring Beach

Illegal Connections team survey of the surface water catchment ongoing.

- Currently investigating evidence of household wastewater
- Shadow Sampling programme in place to monitor multiple coastal locations

Bathing water season preparation

- Ahead of the 2025 season, health checks are completed at all wastewater pumping stations (WPS) and wastewater treatment works (WTW) that have the potential to impact bathing water quality
- Resources in the Southern Water Bathing Water team have been increased, allowing for a more agile approach to addressing deteriorating water quality in 2025 and beyond.
- Collaboration will continue with partners, local authorities and the Environment Agency, particularly in areas where bathing water quality is at risk.

Clean Rivers and Seas Task Force update

Joff Edevane

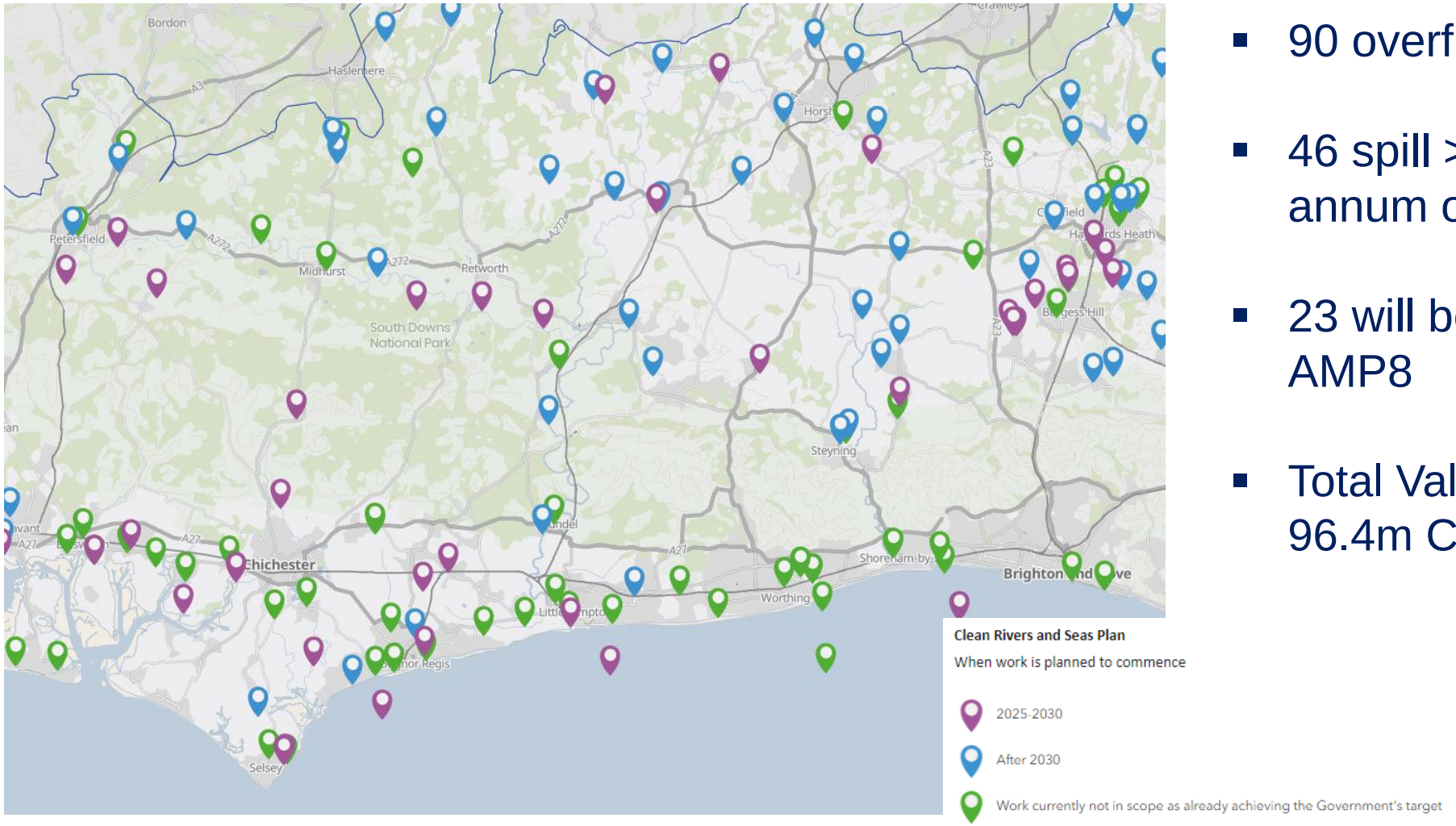
from Southern Water

AMP 8: Year 1

West Sussex & Surrey storm overflow catchments

- Thornham: 2 overflows
- Bosham: 1 WTW SSO
- Lavant: 1 overflow
- Chiddingfold: 1 WTW SSO (Surrey)
- Ford: 4 overflows
- Burgess Hill: 8 overflows
- Scaynes Hill:13 overflows

Storm Overflows in West Sussex: Arun & Western Streams catchment



- 90 overflows
- 46 spill > 10 times per annum on average
- 23 will be started in AMP8
- Total Value in AMP8 96.4m CAPEX

Reducing Storm Overflows

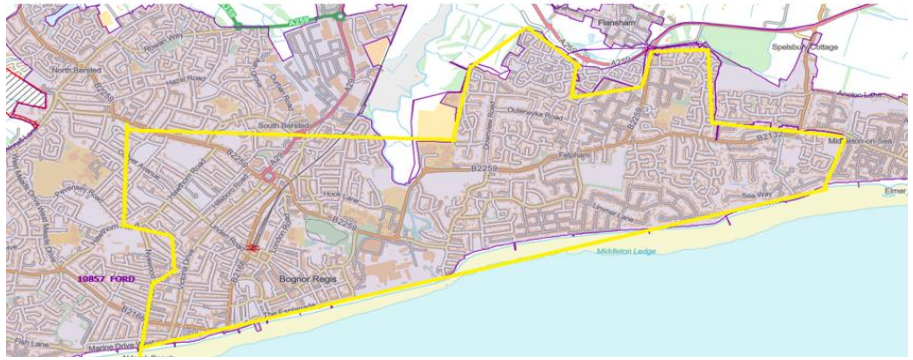
Currently working on the following storm overflows in West Sussex to reduce spills to 10 a year based on a 10-year average:

- by end June 27 at **Bosham WTW, Thornham WTW and Singleton Relief CSO – Shell fish driver**
- by end March 2027 at **Bognor Main CSO – Bathing Water Driver**

Parish Council and other stakeholder events have been held and continue

Sealing sewers to prevent groundwater infiltration causing spills at **Singleton**

Bognor Main WPS catchment



Bosham - We have finished sealing sewers in Funtington village and are currently sealing sewers in West Ashling

We are also undertaking CCTV connectivity surveys to look for sources of surface water into our sewers. We are also undertaking surveys approach in **Thornham and Bognor Main** catchments

Once we survey results back we can design interventions to reduce overflows such as removal of surface water connections from Highways and roof drainage

Engagement and comms approach has bought the community on board: feedback has been good…

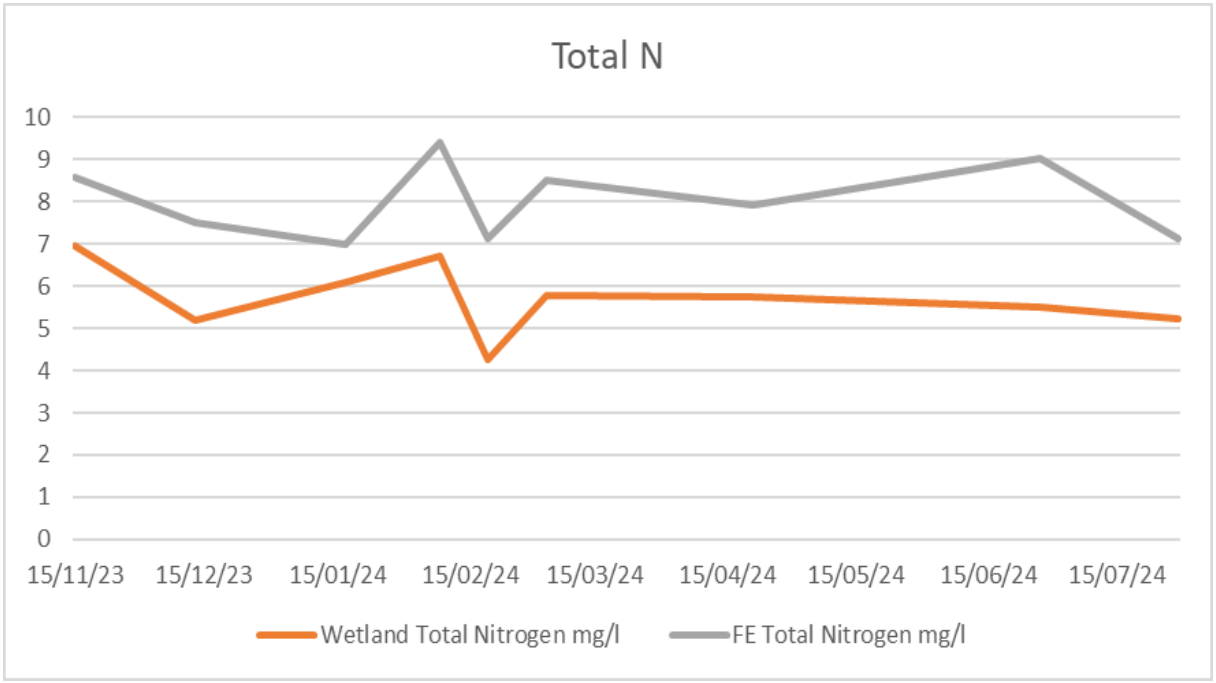
*Thank you for your time last week and your **very informative demonstration** of how you are sealing the sewage network. I look forward to seeing the results over the winter and **feel very reassured** that your continued relationship with the Funtington community will mean Southern Water are with them until the issue is fully resolved.*

Jess Brown-Fuller MP
Chichester

*Thank you very much to you and your team for coming to meet me in Charlton on Friday morning. I am grateful to have heard from all parts of the task force who took the time to share in detail the work that has been carried out so far and the plan for future works. The Parish Council confirmed that they are now **happy with the updates they are receiving** from Southern Water and that communication has **improved vastly** since our last meeting.*

Andrew Griffith MP
Chichester

Lavant wetland is now fully established and continues to perform



We hope to shortly commence a trial with EA and Defra looking at wetland performance

Working in partnership

SuDS for Schools to take place in Bognor, in partnership with Department for Education

Positive conversations with leisure park about managing their surface water

Discussing further opportunities for Highway SuDS with WSCC

Slow drain water butt scheme currently being delivered in Felpham

Share your thoughts

from Southern Water


Click here to vote now,
or go to slido.com and
use the code
#3605 824

AOB

Contact us
stakeholderteam@southernwater.co.uk