

Clean Rivers and Seas Task Force

SMACF January 2023

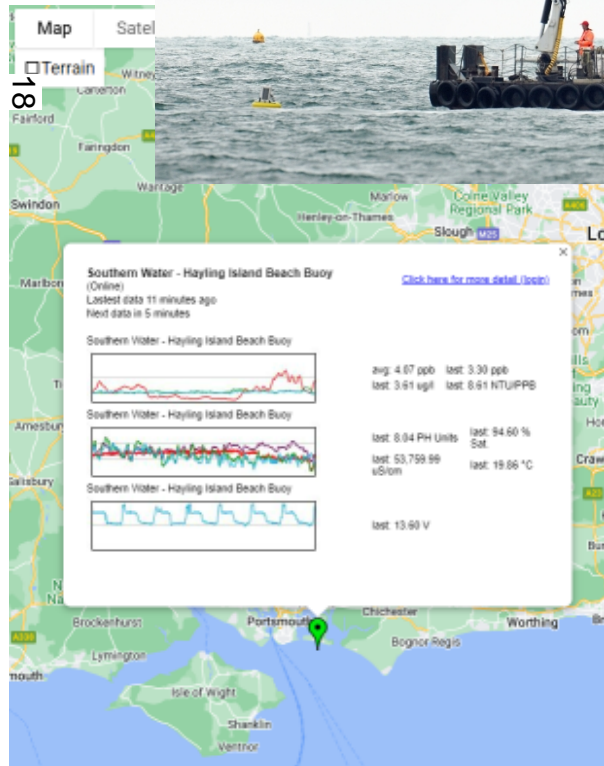


from
**Southern
Water** 

Water quality testing buoys



- Southern Water wants to improve water quality understanding
- Two water quality testing buoys were launched into the sea in the summer 2022 – one off Tankerton shore and one off Hayling Island
- These are 12-month pilots
- Data will be publicly available online once calibration is complete



Beachbuoy improvements

[Beachbuoy \(southernwater.co.uk\)](https://southernwater.co.uk)

Beachbuoy is evolving

We continue to listen to Beachbuoy users and develop the tool to ensure we provide accurate information about the impact storm releases have on bathing waters.

In September 2022, we upgraded the map to take into account the impact a release has on a local bathing water, based on the location of the outfall, the duration of the release and tidal conditions at the time. For instance, if the outfall is 8km out to sea, the release was short and the tidal conditions meant there could be no impact on a bathing water, we no longer turn the bathing water icon red (the outfall icon will remain red to indicate a release). This information is still in the release table however, to provide a transparent view of all our releases. For further details on how we model the impact to bathing waters please [click here](#).

We've also made additional improvements to the way you can interact with Beachbuoy, including the introduction of pop ups which provide more information about releases. Over the remainder of 2022, we will continue to roll out improvements to the release history table and other elements based on the feedback that you've given us.

In the long-term, we have started work on the addition of inland waters and developing the technology that will enable Beachbuoy to provide information on bathing water quality.



- Listened to feedback from customers and stakeholders
- New functionality provides a more accurate indication of whether a release actually impacts the bathing water.
- This feature uses the location of the outfall, duration of the spill and the tide conditions to determine whether the release impacts the bathing water or not.
- Data still available in the release table

Summary of improvements

- Dynamic modelling
- (New) outfall pop ups
- Location pop ups
- UX changes



Outfall awareness programme

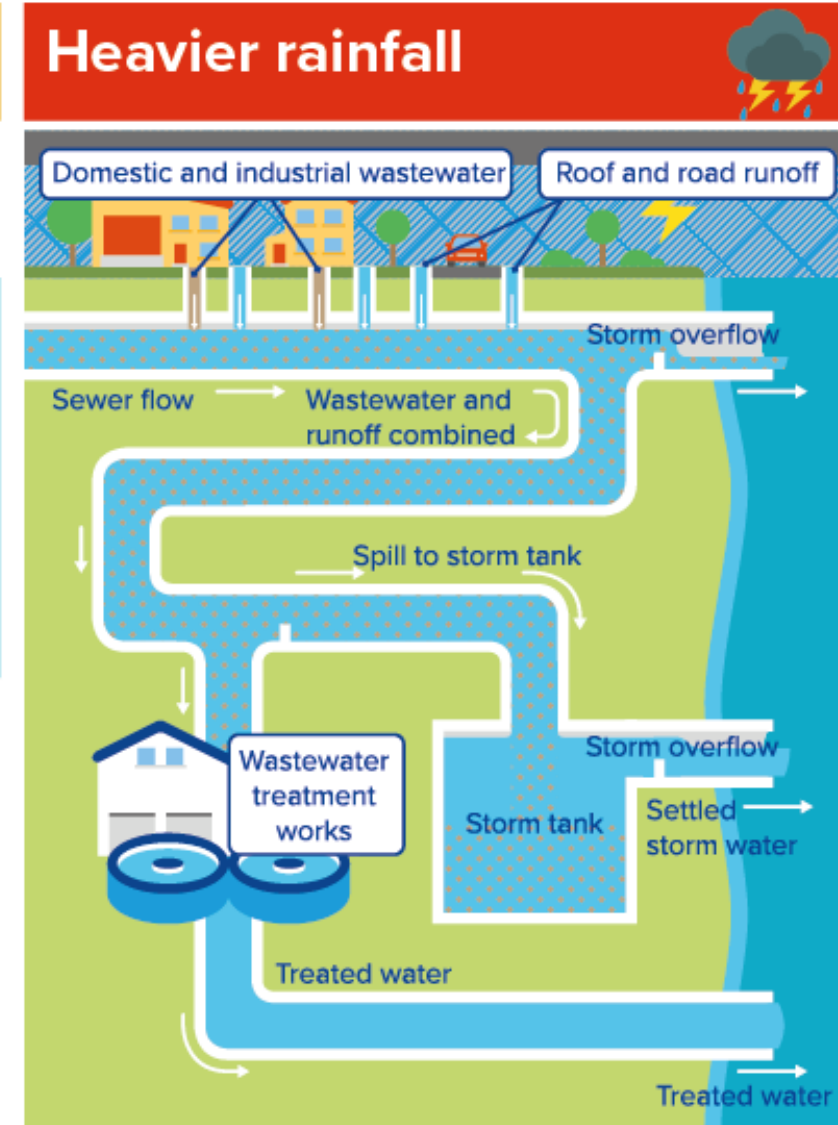
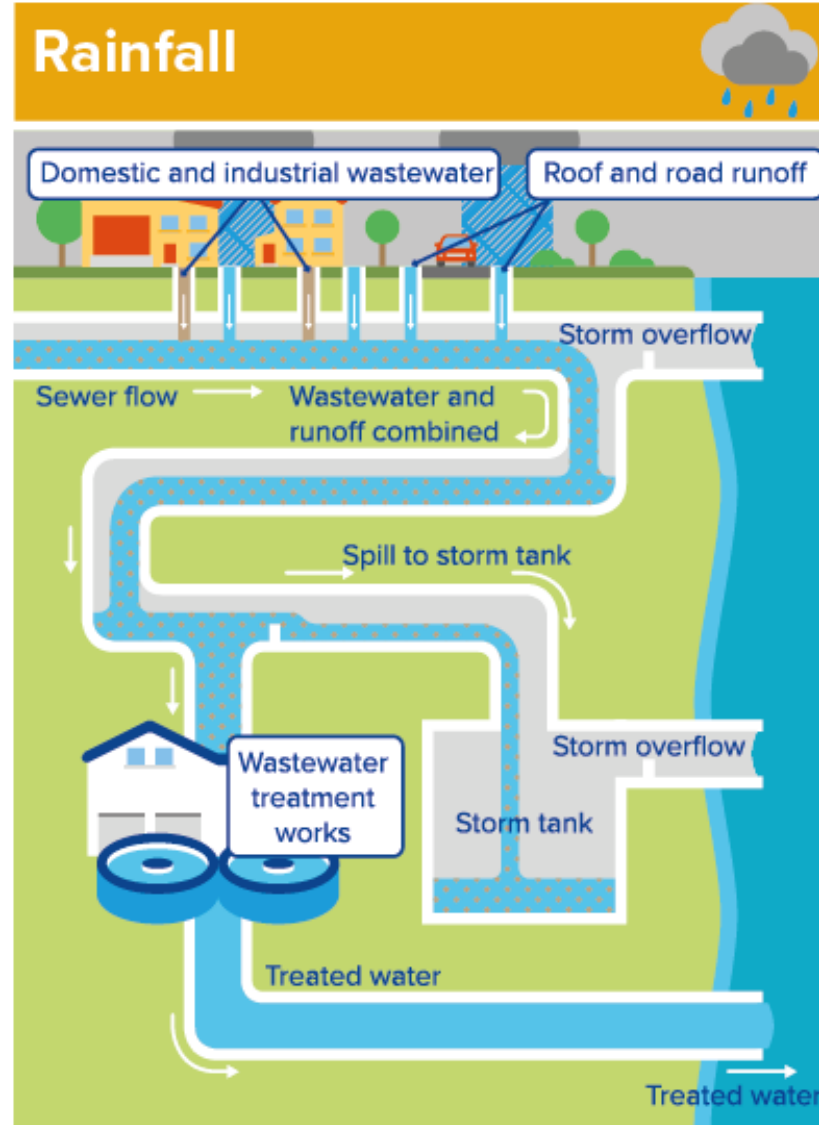
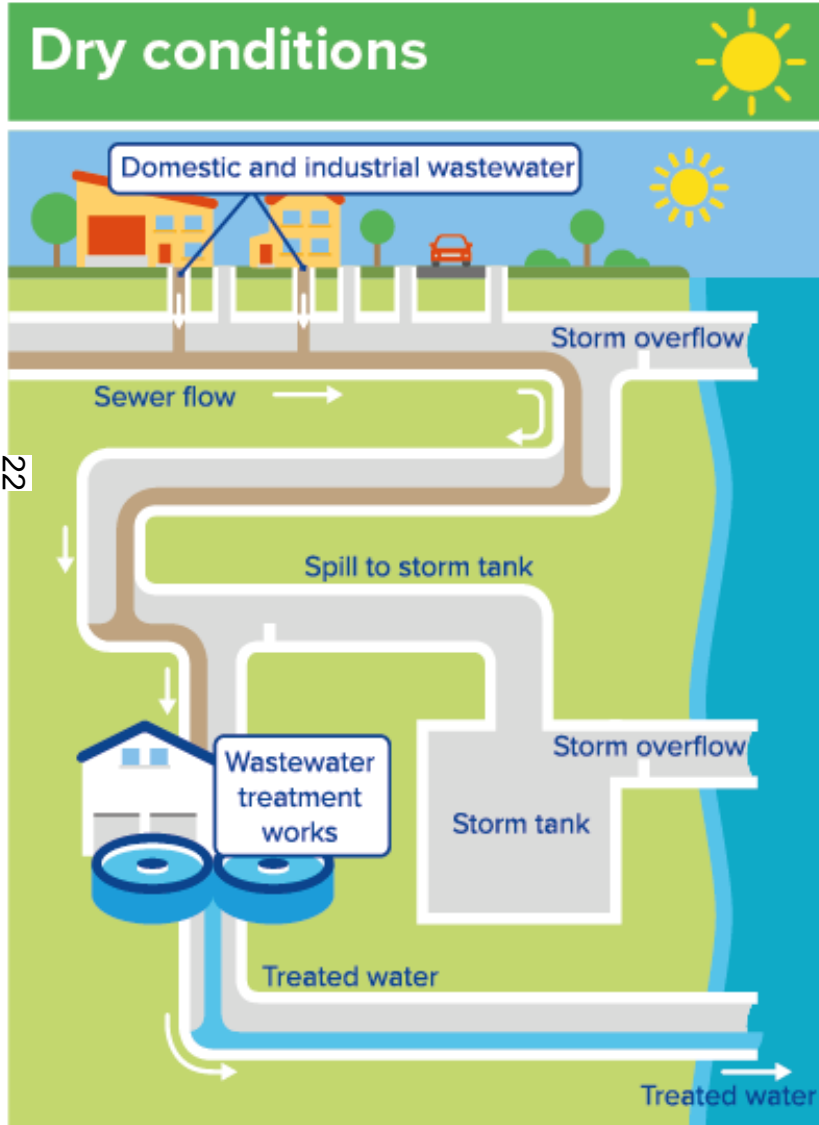
- Pilot project mapping individual outfalls in an area. Brighton and Hove is one of the chosen areas for the pilot.
- Several outfalls, not all convey storm releases and not all are owned by Southern Water
- Detail individual purpose, ownership and how to find more information and from whom (e.g. Southern Water, Local Authority, Environment Agency etc).
- Information packs will be shared with all stakeholders and published on our website. In addition, signs will (where physically possible) be put up
- Aiming for bathing water season this year (May 2023)



Reducing storm overflows

21

What are storm overflows?



Clean Rivers and Seas Task Force

- The task force is a dedicated team that is central to Southern Water's drive towards significantly reducing the use of storm overflows by 2030, and managing catchment flows.
- The establishment of the task force indicates Southern Water's commitment to ambitious targets and is a highly important workstream within the business.
- The task force is responsible for delivering at least six pathfinder projects over the next two years. The task force will seek to establish strong partnerships to ensure their success.
- In parallel, we will build and deliver a regional plan to reduce storm releases between now and 2030.
- Weblink - [Storm Overflows \(southernwater.co.uk\)](https://www.southernwater.co.uk/storm-overflows)

23



There are broadly 3 main types of intervention to reduce flooding and storm overflow use:

1. **Source control** (removing and slowing the flow of rain water)

Rainwater harvesting, Permeable paving, Green roofs, Soakaways (includes tree pits), Rain garden (swales), Planters

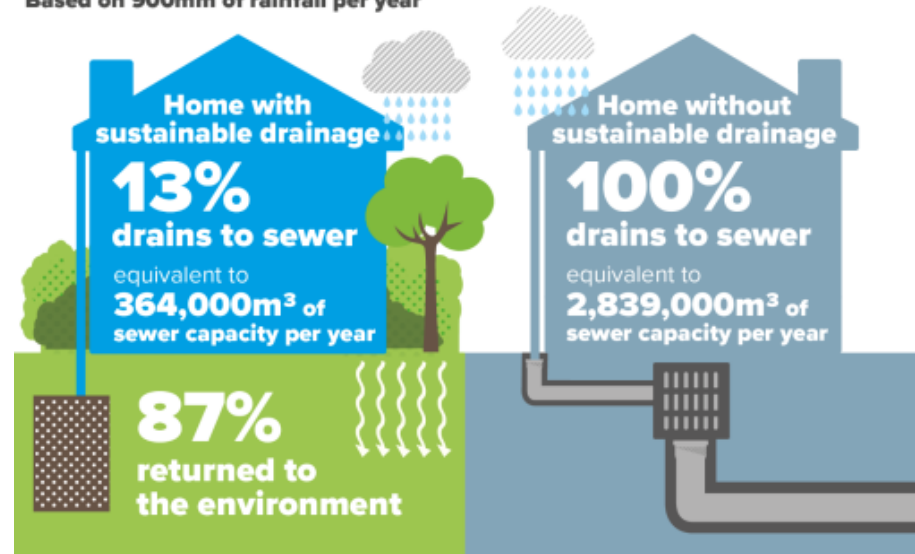
2. **Optimisation of existing infrastructure**

Optimisation, tweaking of connected systems and interface, Different mechanical and electrical equipment (e.g. pumps), Improvements in pumping station and storm tank use and control, Smart network control with increased digitalisation

3. **Build bigger infrastructure** (building larger pipes, pumping stations, etc.)

Wetlands treatment (Groundwater), Sewer lining/sealing (Groundwater), Larger sewers, Large storm tanks, Large treatment works

Water run-off for a development of 10,000 homes:
Based on 900mm of rainfall per year



What might the solutions look like?



25

Working in partnership

- We want to work in **collaboration** with a range of partners at all levels and across industries to achieve this.
- We also want to promote the simple actions that everyone can do to help such as installing water butts to recycle rain water or reducing the amount of pavement in gardens.



Our task force is exploring ways to reduce storm overflows via our pathfinder projects

The Clean Rivers and Seas Task Force is a dedicated team that is working to significantly reduce the use of storm overflows by 2030. It is delivering six pathfinder projects over the next two years.

26

Pan Parishes

- Sealing private pipework with an innovative chemical called Tubogel, as well as sealing the public sewer network to reduce groundwater infiltration.
- Exploring the creation of a local wetland.



Swalecliffe

- Working to reduce Swalecliffe's 74 hectares of hard surfaces.
- Separating the surface water and sewer network.
- Hotspot mapping shows us where to target solutions.



Margate

- Finding opportunities to increase surface water drainage with local councils. For example, reducing the amount of hard surfaces across Margate.
- Looking at opportunities to separate the surface water and sewer network and improve drainage.



Deal

- Installing smart or passive water butts or rain planters.
- Working with the local councils and highways to introduce roadside verges, parks and gardens and more green spaces.
- Engaging with schools.
- Surveying surface water connections.
- Introducing rainfall monitors and tracking the flow of surface water.
- Improving our Golf Road pumping station.
- Increasing our storm tank capacity.



Sandown

- Enhancing wastewater pumping station control, surface water removal and storage solutions.
- Trialling slow-drain water butts in Havenstreet.



Key updates/progress

- [Bathing water season report](#)
- [Secretary of State letter](#)
- [Infiltration Reduction Plan](#)
- Deal, Margate, Swalecliffe, Sandown and Fairlight Technical and Summary reports [published](#)
- Early interventions in delivery
- [SuDS in schools](#) partnership with the Department for Education; £1.6m project
- Insight programme to begin to ensure we're listening to our customers
- Further partnerships being explored
- Jargon busting to make educational materials accessible to all, such as our [FAQ document](#)



What can we do to protect water quality

28



Protecting water quality

- Make sure that dog faeces is always cleared away both on the beach and in the town as the highway gullies drains to the coast and will impact bathing water quality.
- Make sure that gulls are not attracted to the beach by litter and by being deliberately fed. Markers for gull faeces are found in all samples where detailed analyses has been carried out.
- Make sure that all household appliances are connected to the right sewer (foul not surface water) [ConnectRight](#). Misconnection of household appliances is a major sources of contamination where there are separate foul and surface water systems.
- Make sure that only the 3 P's (pee, poo, paper) are flushed down the toilet ([Unflushables - City to Sea - The things you really shouldn't flush!](#)). Flushing cotton buds, wet wipes, nappies etc down the toilet causes blockages which may then cause the system to overflow. In addition, fats should never be washed down into the sewer system as this also causes blockages.



Communities slowing the flow of rainwater

- Let nature do what nature does best
- Avoid building over gardens, tarmacking driveways, building extensions that connect to the foul sewer
- Collect rainwater or slow it down – slow-drain water butts, planters
- Encourage green space development – parks with green areas, not concrete
- Work with us – where are the problems, inform us about suspected pollutions
- Learn about the wastewater network



Questions

31

