

# Clean Rivers and Seas Task Force

November 2023 update



from Southern Water

The Clean Rivers and Seas Task Force is responsible for finding new, innovative and nature-based solutions to reduce storm overflows. We're spending £35m before March 2025 to achieve this, and the team are already delivering in all six of our Pathfinder areas. It's critical that the industry finds better ways to manage the rainwater and groundwater that enters the network, which is the leading cause of storm overflows. We're already seeing results, and have built a regional plan to reduce storm overflows for good.

“ We've come a long way since the task force was set up, and we've learnt a great deal which has shaped our delivery approach and future plans. We're now scaling the pathfinder programme and expanding the team, and it's great to see delivery of these projects on the ground making a difference, improving communities, and reducing storm overflow releases.



We've been receiving national recognition for our approach, which is a good indication that we're on the right path. We're eager to share the knowledge we've gained to help improve the available resources and data on storm overflow solutions. We're now at a point where we can proceed with proven solutions, and by sharing data and collaborating with other industries, partners, and the public, we can make a much bigger difference.”

Dr. Nick Mills

## Snapshot in numbers

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13 new team members



1939 slow-drain water butts installed



243 rain planters installed



2 rain gardens installed



142 private misconnections identified



37 site tours



58 schools provided with SuDS



34 highway SuDS schemes being investigated



200 leaking pipe joints sealed



1.2km of private pipework sealed



1 wetland constructed



## Bigger team, bigger impact

We've welcomed 13 new team members into the Task Force to help maximise our efforts including Pathfinder Engineers, a Wetland Lead and a Partnerships Delivery Manager. If you're interested in partnering with us to reduce storm overflows in your area, [let us know](#).

The [Water Industry Awards](#) are to recognise good work in the water industry with focus on practices that protect and enhance the environment. The Task Force was nominated for two awards, Asset Management of the Year and the Groundbreaker Award.

**Answering your burning questions:** Did you know we have FAQ's on different topics, including [Storm Overflows](#) and [Wetlands](#). Looking for a different FAQ? [Let us know](#).

# More funding to reduce storm overflows

We're spending £35m between now and March 2025 to reduce storm overflows. This additional funding, agreed by Ofwat, is allowing us to industrialise our pathfinder approach, reduce releases and enhance our knowledge ahead of the next Asset Manager Period (AMP) 2025-2030.

We've committed to focusing on at least 30 storm overflows, aiming to reduce annual storm overflow discharges by at least 420 releases within the next two years.

We published our [Pathfinder Update](#) in April, which outlines our plans and includes several case studies on the work we are already delivering.



## Wetlands

We're using [wetlands](#) at our water treatment works to provide extra storage and slow the flow of water into the network. We aim to construct four wetlands before spring 2025 and are well on our way with one wetland in Lavant already operational.

To ensure the best success for this project, we're working alongside industry experts and engaging with the Environment Agency throughout the creation process.

Find out more about [constructed wetlands](#).

## Beachbuoy

If you haven't heard of [Beachbuoy](#), it's our interactive, near real-time web app designed to help you make the most of the South's amazing beaches and enjoy the waters, while staying informed of any storm overflow releases nearby.

We know the importance of transparency when it comes to storm overflows and the environment, so we're revamping Beachbuoy and releasing a new version in spring 2024, which will include all inland storm overflow outfalls, have better usability, and a host of other features co-created with our customers and stakeholders.

With a new software comes a new name, which we'll be announcing soon. In the meantime, we're conducting independent reviews with specialists in four different subjects: Tidal Modelling, Bathing Water Quality, User Engagement, and Software and Systems. We'll be publishing these reviews shortly.



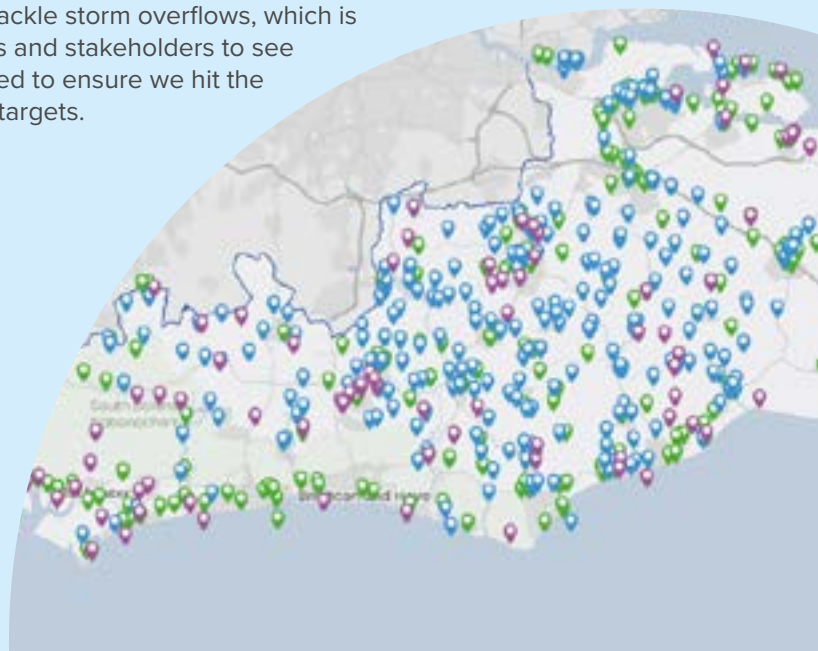
## Storm overflow reduction – Interactive map

We recently published our [Clean Rivers and Seas Plan](#) to tackle storm overflows, which is displayed on an interactive map. This allows our customers and stakeholders to see all the storm overflows in our area and what work is required to ensure we hit the Government's [Storm Overflows Discharge Reduction Plan](#) targets.

The interactive map will show;

- Why the storm overflow releases.
- If the storm overflow releases into a site of interest such as shellfish waters or bathing waters.
- What we're planning to do to solve the issue.
- The estimated investment required to complete the proposed improvement.
- When we aim to start the work.

This is part of our dedication to transparency and keeping our customers and stakeholders informed. The plan will evolve as we learn more from our pathfinder projects and we'll continue to work closely with our regulators to deliver an ambitious programme.



## West

### Isle of Wight and Pan Parishes

**Trading Tankers for Tubogel:** We worked with customers and local authorities in Pan Parishes to seal over 1.2km of private pipework with Tubogel. Traditional pipe lining requires us to dig it up. This caused road closures, disruption, and extra expense. Tubogel is a new product used to seal pipework from the inside, meaning the pipe can be sealed from pressurised ground water without disruption. As a result of this work, we have reduced tankering from Mullens Pond. We know tankers are an inconvenience, and we hope to continue this success to other areas.

**Household SuDS:** The team are working hard to install [slow-drain water butts](#) for homes and businesses around the Isle of Wight. If you're in Fishbourne, Wootton or East Cowes you may get a door knock for a free slow-drain water butt.

**Fairlee Storm Storage:** By repurposing unused treatment tanks, we more than quadrupled the storm storage at Fairlee. We expect this will reduce storm overflows at the site by up to 75 releases per year.

**Hitting the Highways:** We're investigating 20+ highways to see if we can install sustainable drainage to reduce flooding and storm overflows in the local areas.

**SuDS In Schools:** We're continuing to engage young minds on the importance of water management by getting them involved with the sustainable drainage systems (SuDS) such as rain gardens and planters at their schools in Hampshire and on the Isle of Wight. As well as increasing biodiversity and water efficiency at the schools they are installed in, these SuDS will slow the flow of water into the sewer system and help reduce storm overflows.

**Extend the Bend:** We're rectifying a sharp bend in pipework that is causing flow issues in Cowes, which should dramatically reduce storm overflows from the local outfall. Keep an eye out for our upcoming case study where we will go into detail about the results, as well as showing you what was happening underground before we made the change, and what is happening now instead.

**Seawater ingress:** We've installed a one-way flap valve at the Market Hill storm overflow in Cowes to prevent seawater coming back up through the pipe and taking up space in the sewer system.

**Talk of the Town:** Newport Town Centre has been approved for sustainable drainage and will be started this winter.

## East

### Whitstable, Margate, Deal and Fairlight

**Swalecliffe Storm Storage:** We've reconfigured our Swalecliffe site to hold a total of 1.8 million litres of water before we use the long sea outfall. We estimate this will reduce storm overflows by up to 30%, and it's already saved several storm releases since it was made operationally live at the end of August.

**Managing Misconnections:** A misconnection is when a surface water pipe is connected to the wastewater sewer, which can contribute to the system becoming overwhelmed and cause storm overflows. We've found 10 misconnections in Whitstable, Deal and Fairlight, and will be working with the landowner, local authority, and the Environment Agency to rectify them.

**Caring for Cornwallis:** Cornwallis Circle is an excellent opportunity for us to work with our Partners in the Local Authorities to take an existing open green space and utilise it as a SuDS Park to increase natural drainage. We'll also be offering free installation of slow-drain water butts to every property in Cornwallis Circle. With these two interventions combined, we will be able to manage 1.2 hectares of impermeable area, slowing the flow of surface water into the network.

**Impermeable Investigation:** Impermeable land is a huge contributor to storm overflows, and it's increasing by an average of 1% year-on-year. Car parks, large roofs, concrete driveways, it all adds up. We've identified the 6 most effective impermeable land opportunities in Whitstable and are investigating the best way to resolve them. We're also installing roadside SuDS in Margate which will manage a 5200m<sup>2</sup> area of impermeable land.

**Green solutions:** We're investigating the use of green solutions to reduce surface water in Market Wood and Hastings Country Park.

**Slow-drain Water Butts:** We've installed almost 500 slow-drain water butts so far in Whitstable. In total, these water butts will hold and slow-drain over 46 tonnes of rainwater, preventing this water from overwhelming the system and causing storm overflows. We're extending this project to Deal, where we plan to install over 1000 more.

**SuDS in Schools:** We're installing raingarden planters in schools in Whitstable and Deal, part of a £3 million project with the Department of Education. Our SuDS in schools programme has seen planters installed at 58 schools, with another 35 planned this year. The aim of this match funded programme is to slow the flow of rainwater off school roofs and playgrounds, to reduce standing water and prevent the sewer system becoming overwhelmed and causing storm overflows.

### Interested in what we're doing in your area?

Watch our Pathfinder update videos for [Whitstable](#), [Deal](#), [Fairlight](#), [Pan Parishes](#), [Havenstreet](#) and [the Isle of Wight](#).



# Using technology to change the status quo

As well as the launch of our interactive map, we're rolling several other exciting new technologies that could change the way the water industry works as well as our understanding of how water flows in our communities.

**Citizen Science:** We provided testing equipment to groups and councils on the Isle of Wight and in Whitstable so they can test the water quality in their area. We'll soon be extending this project to Eastbourne and Brighton.

**Water quality buoys:** Last year we launched two real-time water quality testing buoys as part of a 12-month pilot, testing technology that hasn't been deployed in this way before. If successful, lessons from this project may be used to inform future schemes.

These buoys automatically measure the water quality every few minutes, we'll openly share the results with the public once we've finished the complex calibration.



## Partnership is paramount: joining forces to make a bigger difference

Storm overflows are a nationwide issue, and we're under no illusions, we can't do this alone. Our partnerships play a vital role in allowing us to make the changes needed on a larger scale, as well as helping us to raise awareness and rally for change across the entire industry and UK governance.

- Nick was the keynote speaker at the [ICE Autumn Prestige lecture](#) to encourage engineers to take storm overflows and the environment into consideration when building infrastructure.
- Laura gave a talk to the Women's Institute, who have recently made Clean Rivers for People and Wildlife their objective for the year.
- Nicole and Nick were guests on the [CCW Water Saving podcast](#) to discuss our [Smart Water Butts](#) and how we can slow the flow to reduce storm overflows.



- Our SuDS in schools programme in partnership with the Department of Education has seen raingarden planters installed at 58 schools, with another 35 planned this year. The aim of this £3 million programme is to slow the flow of rainwater off large roofs to prevent the sewer system becoming overwhelmed, which is what causes to storm overflows.
- We're also working with many other partners, industries and local authorities including NHS Property Services, Rivers Trust, the Environment Agency, Defra and Ofwat to discuss how we can team up to reduce storm overflows.

## A lot to look forward to

We know we need to work faster, more effectively and with better collaboration in order to overcome storm overflows. We're continuing our progress toward this goal by:

- **Constructing four wetlands** by spring 2025.
- **Seeking out partnerships** to make a bigger difference.
- **Delivering solutions in all our Pathfinder areas** and publishing case studies on the results.
- **Launching the new and improved Beachbuoy** in spring 2024 complete with all inland storm overflows.
- **Extending our citizen science project** to more locations.
- **Continuing to install free [slow-drain water butts](#)** to slow the flow in towns and villages across the South.
- **Working with at least 35 more schools** to manage their rainwater runoff with SuDS.
- **Managing [misconnections in private pipework](#)** to prevent surface water entering the wastewater sewer.
- **Engaging with thousands of customers in the next two years** to talk about storm overflows through site tours, talks and more customer events.
- **Working with partners** to further improve bathing water quality across our region.
- **Targeting large roofs and impermeable spaces** as priority locations for SuDS.
- **Investing over £35 million** into reducing storm overflows by 2025.
- **A host of innovative infrastructure improvements and optimisations**, more on this in our next update.

