### **Business Plan 2025-30 update**





### Our Business Plan – 2025 to 2030

- In October 2023, we submitted our Business Plan to Ofwat for the period 2025-30.
- On the 11 July we received initial feedback from Ofwat, known as the Draft Determination.
- We have now published our response, ahead of Ofwat's **Final Determination** in December 2024.
- Our plan is the company's largest ever c.£8 billion to enhance the health and wellbeing of our communities, protect and improve the environment and help to sustain the local economy.
- More than 25,000 customers spent over 8,000 hours telling us what they think.



### **Draft Determination response**

- After carefully reviewing Ofwat's Draft Determination, we don't believe it would secure the investment required to deliver change required.
- In our response we've said that to secure the investment required, essential change is needed to its draft determination to make plans affordable, deliverable and financeable.
- We've spoken to thousands of customers to inform our proposals, to further understand their priorities.
- Our revised plan will achieve this and includes additional investment.
- These changes will deliver more environmental improvements in a shorter timescale.





### **Proposed bill increases**

- While we proposed increasing customers' bills gradually over the next five years, those figures are not currently relevant as Ofwat has initially reduced the proposed increase.
- Bill increase details are still TBC. Ofwat decides the charges our customers should pay, based on what we've proposed to deliver in our plan to meet regulatory requirements.
- We will be able to clarify once we receive our Final Determination from Ofwat in December 2024.
- The average water and wastewater bill for 2024 is £439. In 2014 it was £437. That's an increase of 0.5% in 10 years.



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### Supporting our customers



- We understand concerns about bill rises, especially during a cost-of-living crisis, but improvements are needed
- We have been keeping bills very low the average combined water and wastewater bill has risen by only £2 in the last decade in nominal terms – but we cannot keep doing this if we want to invest and improve
- At the same time, inflation has significantly increased, driving up the cost of everyday items
- We propose that prices will increase gradually over five years
- To help people, we're offering more support for customers than ever before with a £235 million support package for those in the most vulnerable of circumstances and a minimum of 45% off for those that qualify for our Essentials tariff (over 120,000 households now and rising to 200,000 by 2030).
- We plan to increase our Hardship Fund to £1.25m and increase our Priority Services Register to 20% of our customer base (currently 8%)





# Storm overflows

Finding innovative new ways to 'slow the flow' of water entering the sewer system



# **Our history**











from

Southern Water.

# **Heavily diluted**

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As storm overflows typically happen when there is a huge amount of rainwater and groundwater in the system, the water is heavily diluted and usually screened before being released.



Storm overflow releases can be up to 95% rainwater, and only 5% wastewater. This wastewater comes from toilets, showers, and sink waste, as well as household appliances like dishwashers and washing machines.



Southern Water.

# Why do we need to tackle them?



As well as the obvious environmental and ethical considerations, there are several other factors that have contributed to this need for change



An increase in extreme weather events



Less permeable land (degreening)



Customer feedback



The release of the government's Storm Overflow Reduction Plan.

### How do we tackle them?



There are four main ways to reduce storm overflows and the harm they cause







#### **Stormwater treatment**



**Building bigger infrastructure** 



# Pathfinder projects

How we're solving the problem





### Pathfinder projects What is a Pathfinder?

A Pathfinder Project is a scheme where we trial solutions in a community to reduce local storm overflows.

By taking a holistic approach to community wastewater management (including surface and groundwater), we can make sure we're installing the most effective engineering solutions with the greatest added benefits.







Total storm overflow releases: 19,807 Sorted by reason for release We used AI and enhanced analysis to figure out why storm overflows were happening, so we could plan the best solutions. After detailed insight and surveying of the area, we decide which solutions to roll out.

These are broken down into five steps.

- 1. Optimisation
- 2. Surface water connections
- 3. Household SuDS
- 4. Non-household SuDS
- 5. Highway schemes



### **Step 1: Optimisation**

Reconfiguring our permits and existing sites to help us reduce storm overflows

### Pathfinder Process - surface

- 1. Optimising infrastructure
- 2. Surface Water connections
- 3. Household SuDS
- 4. Non-Household SuDS
- 5. Highway Schemes

#### **CASE STUDY**

Optimising infrastructure to slow the flow in Whitstable





# **Swalecliffe Optimisation**

- Before the reconfigure, when flows reached above 205l/s the excess would go out the long sea outfall combined with treated effluent.
- We now utilize two of the storm tanks from 205I/s to 450I/s.
- This has allowed us to reduce storm overflow releases at Swalecliffe Wastewater Treatment works by 28%.



### **Step 2: Surface water connections**

Redirecting surface water that has been illegally connected into the foul/combined sewer

#### Pathfinder Process: Surface water

1. Optimising infrastructure

### 2. Surface water connections

- 3. Household SuDS
- 4. Non-Household SuDS
- 5. Highway Schemes



Gurnard, Isle of Wight Large illegal surface water connection





### Surface Water Connections to Foul

- Storm overflow reduction of 20%
- 0.6ha of impermeable area managed



### **Step 3: Household SuDS**

Rolling out 'slow the flow' measures at scale on properties in our catchments

#### Pathfinder Process: Surface water

- 1. Optimising infrastructure
- 2. Surface water connections
- 3. Household SuDS
- 4. Non-Household SuDS
- 5. Highway Schemes

#### **CASE STUDY**

Using slow-drain water butts slow the flow in Havenstreet Sustainable drainage systems (SuDS) are an eco-friendly and sustainable way to create better drainage of rainwater and groundwater in communities.





### **Step 4: Non-Household SuDS**

Targeting large roof areas with 'slow the flow' measures to deliver impact





#### Pathfinder Process: Surface water

- 1. Optimising infrastructure
- 2. Surface water connections
- 3. Household SuDS
- 4. Non-Household SuDS
- 5. Highway Schemes

CASE STUDY Sustainable Drainage

Systems (SuDS) to slow the flow in schools

### **Step 5: Highway Schemes**

With significant volumes of surface water coming from public highways, influencing the design of placemaking schemes will be an essential part of the solution



Plans for highway SuDS

#### **Pathfinder Process:** Surface water

- 1. Optimising infrastructure
- 2. Surface water connections
- 3. Household SuDS
- 4. Non-Household SuDS
- 5. Highway Schemes



Cornwallis Circle, Whitstable Managing 1.2 hectares of impermeable area with regreening; featuring swales and tree planting

### Large SuDS – Green Parks Cornwallis Circle Whitstable





- Public Consultation completed working with the community.
- Working with Canterbury City Council and Kent County Council.
- This scheme will manage 1.2ha (12,000m2) of impermeable area.



# **Reducing groundwater infiltration**

# What is groundwater infiltration?

**Groundwater** is the water found underground in the cracks and spaces in soil, sand and rock.

**Groundwater infiltration** is when water from the ground squeezes its way into the system through underground public or private pipework.

If the system is filled with groundwater then there is less space for rain and wastewater, so the sewer system is more likely to become overwhelmed when it rains. This can result in storm overflow releases.

### How do we tackle it?



Sealing our pipework to prevent excess groundwater entering the sewer system.





Monitoring with temperature sensors, boreholes and pipe cameras.





Sealing private pipework to prevent excess groundwater entering the sewer system.

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Water, `





Constructing wetlands to soak up, hold and pre-treat excess water.



### Clean Rivers and Seas Plan

Our interactive storm overflow action plan



### **Clean Rivers and Seas Plan** Edenbridge



#### OXTED WASTEWATER TREATMENT WORKS 1

What causes storm overflows here: Too much rainwater getting into the network

Average annual releases from site:

Estimated investment required: £1.68m

Site of interest: Yes - Other sensitive site

When work is planned to commence (subject to regulatory approval):

After 2030. Timings to be updated once our regulators have completed assurance.

#### Solutions:

Further investigation required, the solution will likely involve multiple interventions.

#### OXTED WASTEWATER TREATMENT WORKS 2

What causes storm overflows here: Groundwater getting into sewers (both public and private)

Average annual releases from site: 123

Estimated investment required: £11.82m

Site of interest: Yes - Other sensitive site

before 2025)

When work is planned to commence (subject to regulatory approval): 2025-2030 (part of this work will be carried out

Solutions: 4.67 hectares of wetlands and 19.7 km sewer relining.

#### LINGFIELD WASTEWATER TREATMENT WORKS

What causes storm overflows here: Groundwater getting into sewers (both public and private)

Average annual releases from site: 89

Estimated investment required: £9.52m

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Edenbridge

**Site of interest:** Yes - Other sensitive site

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When work is planned to commence (subject to regulatory approval): 2025-2030 (part of this work will be carried out before

2025) Solutions:

3.25 hectares of wetlands and 20.17 km sewer relining.

#### EDENBRIDGE WASTEWATER TREATMENT WORKS

What causes storm overflows here: Too much rainwater getting into the network

Average annual releases from site: 47

Estimated investment required: £2.63m

Site of interest: Yes - Other sensitive site

When work is planned to commence (subject to regulatory approval):

After 2030. Timings to be updated once our regulators have completed assurance (part of this work will be carried out before 2025)

#### Solutions:

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Sustainable drainage solutions in the community and increased & optimised storage capacity. We estimate we need to manage approximately 2.2 hectares of impermeable land in the area, by installing sustainable drainage systems (SuDS) (e.g. planting trees, installing raingardens, etc.). This may include the installation of at least 144 household water butts and similar solutions for businesses and public buildings.

#### CHIDDINGSTONE CAUSEWAY PUMPING STN

What causes storm overflows here: Multiple impacts

Average annual releases from site: 15

Estimated investment required: £1.21m

Site of interest: No

When work is planned to commence (subject to regulatory approval): After 2030. Timings to be updated once our regulators have completed assurance.

#### Solutions: Further investigation required, the solution will likely involve multiple interventions.

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# Learning and transparency

Our commitment to data sharing, transparency, and learning more about water quality monitoring



# Beachbuoy

Beachbuoy is our interactive, near real-time web app designed to help you stay informed of any storm overflow releases at nearby bathing waters.

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 autumn**, which will include **all inland storm overflow outfalls**, have better usability, and a host of other useful features.



### WATER for LIFE

### Improvements made to the service

#### **Beachbuoy (original)**

- Coastal outfalls only (around 240 outfalls)
- ✓ Data not exportable

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- Outfalls visible only by selecting a bathing site
- Improvement plans hosted on a separate map
- (i) Basic supporting information
  - Difficult to search for or navigate to a location
  - Data updated once per hour
  - Limited mobile device usability

#### **Rivers & Seas Watch (improved)**

All outfalls in our region (around1020 Outfalls)

Data can be exported as .csv or .json

Outfalls visible by default

Improvement plan toggle included within default map

Detailed step-by-step information and interactive content

Search bar and multiple location-finding features

Data updated every 15 minutes

Optimised for all devices and platforms

# Water quality buoys

We currently have two **real-time water quality testing** buoys testing technology that hasn't been deployed in this way before.

These buoys **automatically measure the water quality every few minutes** and are helping us better understand the contributing factors to water quality and the best ways to improve it.

The goal of this project is to improve **knowledge** and **collaboration** between water companies and those that can influence further action and improvements, such as local authorities and landowners.



### **Citizen science**

We provided **water quality testing kits** to groups and councils on the Isle of Wight and in Whitstable so they can test the water quality in their area.

We're recording the results and using them to investigate **how storm overflows and other contributing factors relate to water quality**.

We'll soon be extending this project to more areas.



# Thank you

More information

Clean Rivers and Seas Plan – Interactive Map (southernwater.co.uk)



Storm Overflows (southernwater.co.uk)



Beachbuoy (southernwater.co.uk)



Flow and spill reporting (southernwater.co.uk)

Our Bathing Water Improvement Plan (southernwater.co.uk)



Our Annual Report (southernwater.co.uk)



How you can get involved (southernwater.co.uk)



