



Sustainable Bond Impact Report

2023–24



from
**Southern
Water** 

Introduction by Stuart Ledger, CFO



Stuart Ledger
Chief Financial Officer

Welcome to this report showing the impact of our Sustainable Bonds.

Sustainable finance is driving our investments towards a resilient water future for the 2.7 million customers and 4.7 million wastewater customers we serve.

Our business is to provide water for life. We want to make sure our millions of customers have a resilient water future, and this means investing wisely in our water and wastewater networks. Sustainable bonds continue to be vital to this process.

The region that we serve for water and wastewater services is an area challenged by the effects of climate change and an increasing population. Mindful of the impact of these challenges on our business performance, we are using the proceeds from our sustainable bonds to support three vital areas: pollution prevention, improving regulatory compliance and reducing leakage. We are working to accelerate improvements in these and other areas by 2025, with ambitious objectives set out in our Turnaround Plan.

In March 2023, we launched our Turnaround Plan with targets to make improvements to our performance across the business in critical areas such as pollution, compliance and leakage up until the end of the current programming period in 2025. In November 2023 we reported on the progress made so far. The progress made and planned across our business will enable us to continue to protect our customers and the environment, while saving our precious resource – water – for future generations to enjoy.

Work continues to make improvements in the three areas of focus for this report, with our sustainable bonds providing vital investment.

We have reduced the number of pollutions and we are committed to going further, following the approach outlined in our annual Pollution Incident Reduction Plan (PIRP) and using innovative methods, such as creating an extensive network of innovative sewer level monitors to drive down the number of pollutions from blocked drains and sewer flooding.

Our role to provide a reliable supply of water for our customers, means we need to continue to improve the quality of the water we put into supply and improve our CRI (Compliance Risk Index) score further in this area. We have already made progress in treatment works compliance and are aiming to further reduce leakage, with the increased activity of our 24/7 find-and-fix teams.

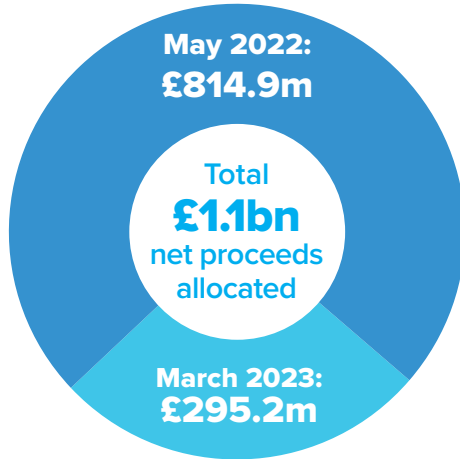
No new bonds were issued in the financial year 2022-23. This update is on the impact of sustainable bond investments in the reported areas covering the 12-month period to 31 December 2022, in some cases the 12-month period to 31 March 2023, and demonstrates our continued commitment to keep our investors informed of progress as we move towards improved performance overall. Our work will continue into the next programming period (2025-30), and our proposed plans for this period were submitted to Ofwat in October 2023. The success of our work will be underpinned by these investments and shows how we are truly succeeding together.

Key highlights

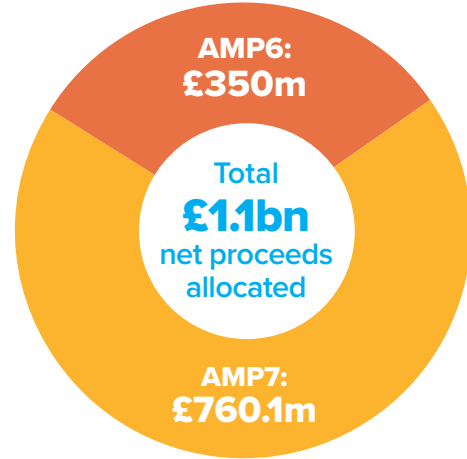
All the sustainable bonds are public issuances and have tenures ranging between six years to 17 years.

Sustainable Bonds raised in May 2022 and March 2023

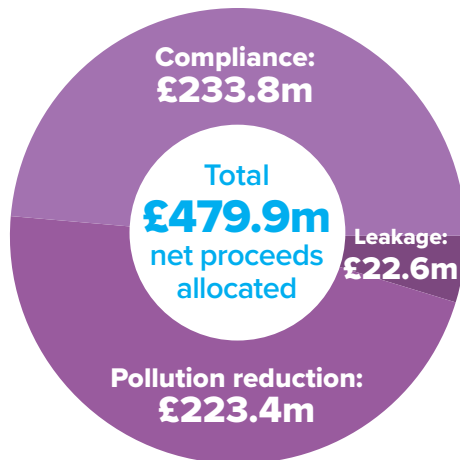
100% allocated across both issuances



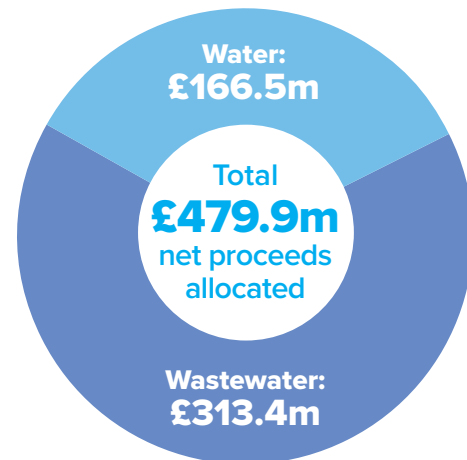
Split of funding per investment period



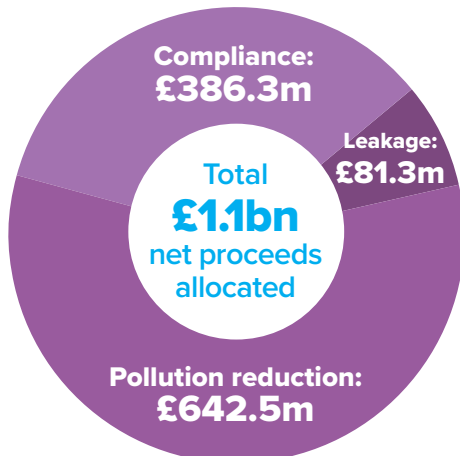
Areas of impact 2022–23



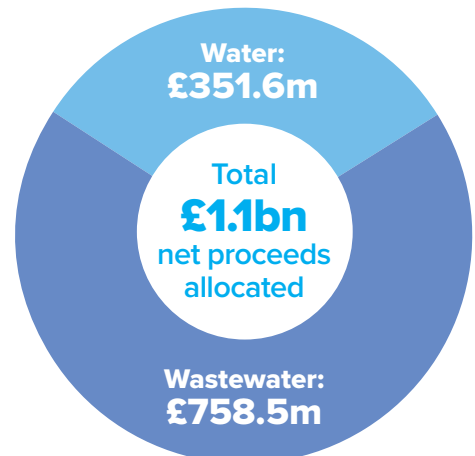
Split of water/wastewater 2022–23



Areas of impact to date



Split of water/wastewater to date



Progress in allocation of sustainable bonds

This report covers the impact from the allocated projects for the period up to and including 31 March 2023.

A wide range of projects have been supported by our sustainable bonds, creating positive impact across the business and delivering for our customers now and for the future.

No new projects were allocated in the year as proceeds received to date were fully allocated in the year to 31 March 2022. The project allocation therefore remains unchanged, however, the impact of these projects is ongoing, and they directly contribute to our pollution, leakage and compliance metrics that are reported here.

A total of 179 projects within the current Asset Management Programming Period (AMP7) have been allocated to the sustainable bonds issued in May 2020 and March 2021. Of the 179 projects allocated in the year 2021-22, 70 were new projects which began in 2021-22, and the remaining 109 were projects which began in the prior period 2020-21. The majority of the May 2020 bonds were used to refinance 16 projects from the last financial programming period (AMP6).

The three main areas supported by allocated projects are pollution control, compliance and leakage reduction. They correspond to the performance commitments or Operational Delivery Incentives (ODIs), set by our regulators. Our performance against the ODIs for each of these three areas is shown on page seven of this report.

Pollution

Funded projects reducing pollution include logger maintenance, sewer rehabilitation and operational asset management. Specific examples of pollution projects that have all been allocated are:

- Wastewater pumping station improvements
- Sewer rehabilitation schemes
- Event Duration Monitors

Compliance

Projects supporting improved compliance cover areas including capital maintenance and effluent re-use. Examples of compliance projects that have been allocated are:

- Testwood UV enhancements
- Eel screens at Otterbourne
- Nitrate removal schemes





Leakage

Improvements in leakage reduction involve projects covering distribution networks and domestic meter replacement, for example. Specific projects that were allocated include:

- Digitalisation of the water network
- Communication pipe replacements
- Stop Tap replacement



Our five year strategy

-  Deliver great service
-  Protect and improve the environment
-  Use water wisely
-  Fit for the future

Our use of proceeds to date and the expected sustainability impact of these investment is covered in this report.

The allocation of the net proceeds to eligible projects continues to drive forward delivery on our objectives to reduce pollution, increase compliance and improve leakage.

All the individual capex projects are referred to as sustainable investments. This means they have all met the criteria for allocation to our sub portfolio of Social and Green categories, as they fall within one or several Social categories and one or several Green categories.

The proceeds of the bonds have now been allocated fully, according to our Sustainable Finance Framework, a framework published in 2020 and developed in alignment with the International Capital Market Association (ICMA) principles:

- **Green Bond Principles**
 - **Social Bond Principles**
 - **Sustainability Bond Principles**
- and the Loan Market Association's:
- **Green Loan Principles**
 - **Sustainability Linked Loan Principles**
 - **KPIs**

Here we are reporting at a portfolio level given the large number of projects being financed.

The bond principles cover four key components: use of proceeds; process for project evaluation and selection; management of proceeds; and reporting.

The return on investment given by the bonds is 2.375% and 3.000% return to investors for the May 2020 bonds (£375 million and £450 million respectively), and 1.625% for the March 2021 bonds.

This report was assured by DNV. The DNV opinion on this report is available at: southernwater.co.uk/dnv-opinion.

Green bond definition

Green bonds are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects (and which are aligned with the four core components of the Bond principles).

Social bond definition

Social bonds are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Social Projects and which are aligned with the four core components of the Bond principles.

Sustainability bond definition

Sustainability bonds are bonds where the proceeds will be exclusively applied to finance or re-finance a combination of both Green and Social Projects.

Matrix category	Sustainability criteria
Social	Affordable Basic Infrastructure
	Access to Essential Services
	Food Security
	Socioeconomic advancement and empowerment
Green	Renewable Energy
	Energy Efficiency
	Pollution Prevention and Control
	Sustainable Water and Wastewater Management
	Environmentally Sustainable Management of living natural resources and land use
	Climate Change Adaptation
	Eco-efficient and/or circular economy, adapted productions, production technologies and processes

Key deliverables

Pollution prevention

We are committed to reducing pollutions and the effects these can have on our customers and the environment.

In our 2022-23 Annual Report, we reported 358 pollutions in Categories 1-3 as a provisional figure under review by the Environment agency. This represents 90.11 Category 1-3 pollution incidents per 10,000 km of sewers. This measure is based on a 12-month calendar year to 31 December 2022. This figure was an improvement on our previous year's performance of 372 pollutions, however it fell outside our Ofwat target of no more than 91 incidents.

Our latest Pollution Incident Reduction Plan (PIRP) 2023 shows how we carried out a root cause analysis of pollutions in 2022 and used the information to prioritise and target our activities until 2025. The analysis identified issues with higher expected levels of seasonal rainfall and pumping station vulnerabilities. Activities identified to help reduce pollutions include the proactive maintenance of our sewerage network.



Sewer level monitor

Regulatory compliance

Our performance in regulatory compliance includes treatment works compliance and drinking water quality.

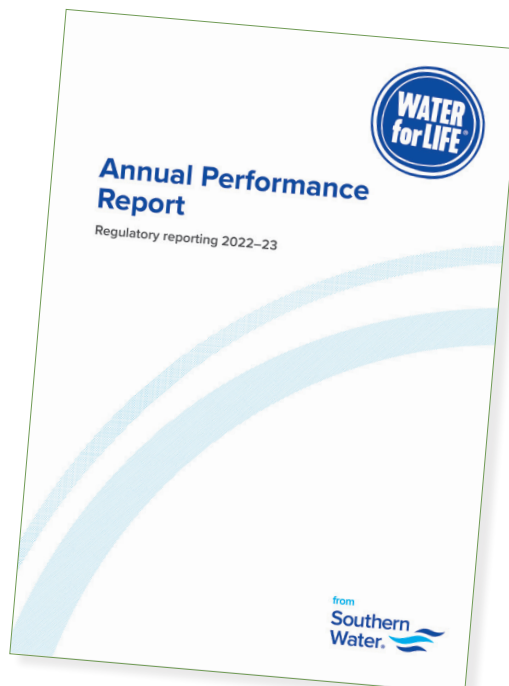
As reported in 2023, we improved on our score for treatment works compliance, with six failed works in 2022 compared to seven the previous year. This gave us a score of 98.22% (2021–22: 97.94%). This measure is based on a 12-month calendar year to 31 December 2022.

Drinking water quality is measured by the Compliance Risk Index (CRI), and the Drinking Water Inspectorate (DWI) is responsible for assessing any failures. We are aiming to improve our water quality CRI score, with last year's figure standing at 6.38 for 2022 (2021: 6.69).

Leakage reduction

Keeping more water in the network is not only more efficient, it protects customers and the environment from the impact of any leaks.

We aim to continue to reduce our leakage. We recorded 108.5 MI/d in 2022-23 (2021–22: 94.9 MI/d), resulting in an increase to the three-year rolling average total to 99.7 MI/d, against a three-year rolling average target of 90.9 MI/d. These measures are based on our financial year, i.e. 12 months to 31 March 2023.



Metrics as submitted to Ofwat in our Annual Performance Report 2022–23

How we deliver

Our Turnaround Plan

In March 2023 we introduced our Turnaround Plan, highlighting the objectives we want to reach by 2025, with four clear outcomes identified:

- a reliable supply of water for our customers
- healthy rivers and seas
- trusted and easy customer service
- empowered and supported colleagues.



Pollution Incident Reduction Plan (PIRP)

We published our fourth PIRP, showing the progress made in 2022. The plan shows how a detailed root cause analysis has shaped future work and looks to the three areas of the plan identified for the coming year:

- **Asset resilience** – to keep our network strong to cope with adverse weather conditions.
- **Three lines of defence** – these are incident prevention, proactive interventions, and pollution response and asset recovery.
- **Escape prevention** – focusing on maintenance and cleaning of pipes.

Water Resource Management Plan (WRMP)

Our latest draft WRMP looks ahead to 2075, guiding us in how we maintain the water supply and protect water sources in the future. We have considered nine alternative pathways from 2035 combining projections of population growth, abstraction reduction and the impacts of climate change, shaping our understanding of the investment needed in our water services.

Drainage and Wastewater Management Plan (DWMP)

Our Drainage and Wastewater Management Plan is our long-term plan for drainage and wastewater services. Future investment in this area is to make sure our networks of sewers, pumps and wastewater treatment works remain robust and resilient for years to come, to meet the needs of our customers and protect the environment.

Clean Rivers and Seas Plan

The Clean Rivers and Seas Task Force is reducing surface water through the six Pathfinder Projects. The work of the task force is shaped by the new Clean Rivers and Seas Plan, showing how and where we are planning to address our use of storm overflows across the South East.

Catchment First

Our Catchment First approach puts the well-being of the environment at the centre of the decisions we make and the services we deliver.

Catchments are areas where water is collected by the natural landscape – there are river water catchments and groundwater catchments.

We are working on projects in partnership with those managing the land, such as farmers, industry and domestic households.

Impact of schemes supported by our sustainable bond investment

Pollution

Reducing pollution to protect customers and the environment

Our work to reduce the number of pollutions follows our annual Pollution Incident Reduction Plans (PIRP). The plans show our strategy for a continued improvement in performance in this area, as well as informing future plans. They show the trends from all sources of pollutions, including blockages, bursts and MEICA (electrical and mechanical).

Our 2023 Pollution Incident Reduction Plan aims to deliver a benefit reduction of between 126-212 pollutions. The plan details three workstreams:

Workstream 1, Asset Resilience

– this workstream includes Platinum Health Check Remedials for 52 sites, which began in April 2022 and the Black Start Programme from January 2023.

Workstream 2, Three Lines of Defence

– this includes the Pumping Station Risk Viewer and improving people and processes under the Human Factors project, both from October 2022.

Workstream 3, Escape

– this workstream covers the Prevention Rising Main Burst Detection Proof of Concept from December 2022, and Root Ingress Surveys and Remedials from January 2023.

There are also three workstreams in the clean water pollution reduction plan. Workstream Two covers leakage from clean water, with increased investment to reduce leakage, 50% of which relates to pressure management and calming the network down to stop bursts.

A key part of our PIRP is the analysis of root causes that was carried out for pollutions in 2022, to inform and target activities until 2025. The analysis identified that the main cause of pollution incidents was issues from pumping station vulnerabilities and higher than expected seasonal rainfall.

As part of the plan, we have been carrying out the proactive maintenance of our sewerage network. We are also digitalising the wastewater network so that we can detect or even predict blockages in the pipes using 23,000 sewer level monitors. The monitors can supply data from targeted areas to a machine-learning tool, enabling blockages to be removed before they cause an issue.



Installing sewer level monitors

Impact of schemes supported by our sustainable bond investment (contd.)

Compliance

Drinking water quality is monitored by the DWI, to ensure customers receive a supply of wholesome drinking water, and it is measured in the CRI score. Our CRI score for 2022 was 6.38, marginally improving on the previous year.

Improvements have been made to the regular maintenance of water tanks to address issues with damp and unused sections of pipe, affecting treatment compliance.

For drinking water taste and odour, we were outside our target of no more than 0.23 contacts per 1,000 population, with a score of 0.24 (2021–22: 0.23). Our score for drinking water appearance was 0.93 contacts per thousand (2021–22:0.87), outside our target of 0.65 contacts.

We have taken steps to improve our performance in this area by:

- improving regular maintenance of water tanks
- continuing our replacement programme over the next seven years, addressing sediment build up in the mains
- planning the installation of carbon treatment at Otterbourne Water Supply Works by 2031 to improve taste and odour of water in some areas of Hampshire.



Water sampling at Otterbourne Water Supply Works



Impact of schemes supported by our sustainable bond investment (contd.)

Leakage

Our leakage teams work around the clock, every day of the year, finding leaks as well as fixing them.

We saw high leakage levels last year following the unprecedented weather conditions during the summer drought in 2022 and the rapid changes in temperatures during the winter.

We are also making improvements by:

- increasing our find-and-fix teams by 20%
- locating leaks using new technologies, such as satellite mapping
- delivering a programme of advanced pressure management schemes.

One way to detect leaks is by using acoustic loggers to 'listen' for leaks. These acoustic loggers work well with metallic pipes and for non-metallic pipes, we can use devices that listen for the flow of water.

Leakage repair



Investment and the governance process

A rigorous review and approval process makes sure strong governance is maintained throughout the sustainable bond allocation process.

Both types of bond can be included in most of our asset expenditure (capex) and our operational expenditure (opex). In accordance with the Southern Water Sustainable Financing Framework, we primarily allocate funds from our sustainable bonds to our projects and programmes of work from our capex portfolio. The process used to allocate funding includes:

- identifying risks
- selecting solutions
- analysis of cost and benefits.

All projects meeting a certain value threshold are reviewed, with business cases being presented for approval by boards or gateways, including details of the costs and benefits for each investment.

The projects are then approved by our Investment Committee, before receiving the Board's final approval. The Board approves the plans for the

five-year programming period – the AMP (Asset Management Period) – as well as the annual capex budgets.

The relevant Steering Group approves all capital expenditure with the project value and our schedule of delegated authority determining the level of management approval. It is our water and wastewater strategy groups which oversee the whole capital programme. At each gateway, the projects are monitored, with monitoring continuing over the whole project life cycle until each project is completed, making sure projects deliver the best customer outcomes.

The majority of our capital expenditure qualifies for inclusion under the ICMA criteria. Excluded from these criteria are certain types of expenditure including personal costs, fines and legal costs associated with pollution incidents, as well as financing costs which includes costs associated with raising finance.

Assets that fall within the Eligible Sustainable Portfolio are financed and refinanced by Southern Water, using the debt raised from our Sustainable Finance Framework. This framework has been reviewed by DNV which has issued a Second Party Opinion.

Our sustainable bond impact process

Evaluation

- Cost and benefit analysis of business cases
- ICMA's green bond principles applied

Measuring outcomes

- Outcomes of each area measured in performance commitments set by regulators in our Outcome Delivery Incentives (ODIs)

Reporting impact

- Sustainable Bond Impact Report
- Annual Report
- Interim Report
- Website

Approval

- Board
- Investment Committee
- Steering Groups
- Water and Waste Strategy Groups

Project selection and allocation

Projects are assessed for their eligibility before inclusion in the project portfolio.

The assessment is made by a committee made up of members of the Treasury, Strategy and ESG teams. The committee looks at the eligibility criteria and information showing the likely impact of the project. A score is attributed to each project by assessing the project's purpose, type, alignment to ICMA Social and Green principles, as well as its contribution to our environmental and social ambitions.

Following this assessment, projects are allocated to the bonds if they meet the minimum social and environmental criteria.

The value of the project is also taken into account. The project must have a capex addition value of above £500,000 in the year. This value includes an allocation of corporate overheads but does not include capitalised interest.

As mentioned above, the bond proceeds were fully allocated as of 31 March 2022 so there are no new projects requiring allocation. As part of the process to make sure there is no duplication of use

of proceeds, allocated projects are shown in the capex portfolio reporting system and unique project identifiers and a second part review ensures there is no duplication.

The amounts raised from each Bond and the allocated amounts as at the reporting period of 31 March 2023 are shown in the table **below**. The three main areas of impact are also indicated in the table.

How the proceeds are managed

Eligible projects will be financed or refinanced by the proceeds, with funds initially being placed as deposits with money market funds or bank counterparties in accordance with our Treasury Policy. We will make sure that funds are not used for any projects that are contrary to our sustainable financing framework.

The table below shows that we had allocated all the sustainable bond proceeds received as of 31 March 2023 (as no new bonds have been issued since last year) in the year to 31 March 2022, i.e. as per last year's report, therefore the table below remains unchanged.

Sustainability Bond Allocations 1 and 2 Summary

Issued	May 2020	May 2020	Mar 2021		
Reference	A12	A13	A14		
ISIN	XS2180916525	XS2180916871	XS2325617939		
Nominal O/S £m	375	450	300		
Loan type	Sustainable Bond	Sustainable Bond	Sustainable Bond		
Coupon	2.375%	3.000%	1.625%		
Maturity	May 2028	May 2037	March 2027		
	£m	£m	£m	Total £m	
Net proceeds	370.6	444.3	295.2	1,110.1	
Refinancing of capex projects from AMP6	350.0	–	–	350.0	
New capex projects AMP7	20.6	259.6	–	280.2	
Total allocated as at 31 March 2021	370.6	259.6	–	630.2	
Allocated from the year to 31 March 2022	0.0	184.7	295.2	479.9	
Total allocated as at 31 March 2022	370.6	444.3	295.2	1,110.1	
Allocated %	100.0%	100.0%	100.0%	100.0%	
Impact allocation by impact area b/f	£m	£m	£m	£m	
Pollution reduction	258.7	160.4	–	419.1	
Regulatory Compliance	74.6	£77.8	–	152.4	
Leakage	37.3	£21.4	–	58.7	
Impact allocation 2021–22	£m	£m	£m	£m	Cumulative allocation
Pollution reduction	–	86.0	137.4	223.4	642.5
Regulatory Compliance	–	90.0	143.8	233.8	386.3
Leakage	–	8.7	13.9	22.6	81.3
Total allocated as at 31 March 2022	370.6	444.3	295.2	1,110.1	1,110.1
Impact allocation by portfolio b/f	£m	£m	£m	£m	
Water	82.4	102.7	–	185.1	
Waste	288.2	156.8	–	445.1	
Impact allocation 2021–22	£m	£m	£m	£m	
Water	–	64.1	102.4	166.5	351.6
Waste	–	120.6	192.8	313.4	758.5
Total	370.6	444.3	295.2	1,110.1	1,110.1



Southern Water
Southern House
Yeoman Road
Worthing
West Sussex
BN13 3NX
Registered no: 02366670
southernwater.co.uk

from
**Southern
Water** 

The logo graphic for Southern Water features three stylized, wavy lines of varying lengths, suggesting water or waves.