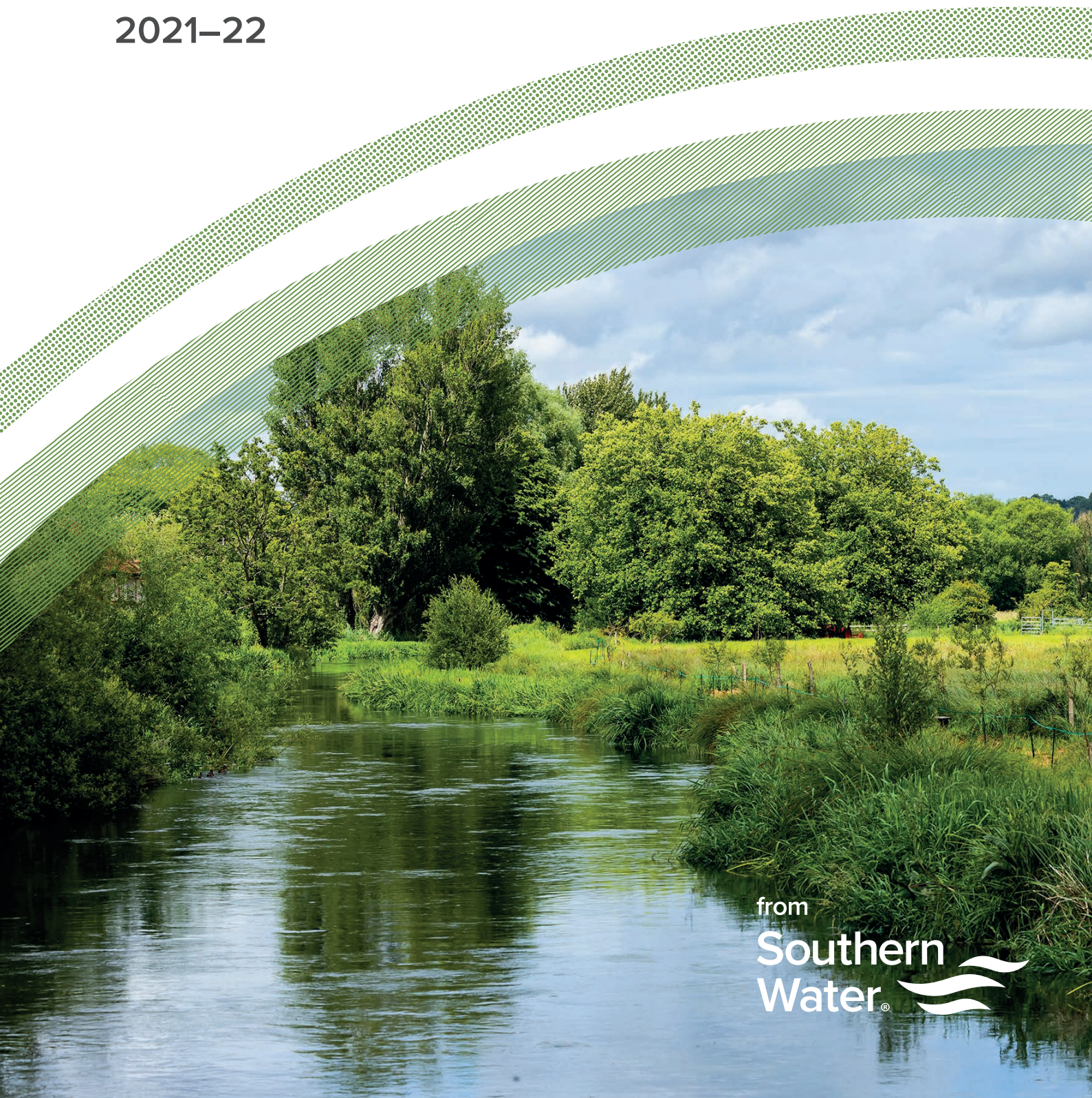




Sustainable Bond Impact Report

2021–22



from
**Southern
Water** 

Welcome to our Sustainable Bond Impact report

In this report, we show how sustainable finance is helping support our capital investments and guarantee a resilient water future for millions of customers across our region.

In the region that we serve, our desire to protect and improve the environment sits against a challenging backdrop of climate change and an increasing demand for water due to a growing population. That's why our focus for the use of the proceeds from our sustainable bonds cover three areas of impact where the investment can make a real difference: preventing pollution, improving regulatory compliance and reducing leakage.

Driving down pollution from our wastewater system will help protect not only our customers from incidents, but also the environment from harm.

During 2020–21, our Pollution Incident Reduction Plan (PIRP) helped drive a 7.5% reduction in pollutions and our 2022 PIRP is designed to make further reductions. This latest programme of work has plans to upgrade our control centre, improve the availability of our assets on our treatment works and pumping stations and clean the water network to help prevent leaks. The plan includes digitising our wastewater network to prevent pollution from blockages by installing 22,000 monitors.

Improving surface water management is a key part of reducing pollution from storm overflows. Our work to find and implement innovative solutions to slow and separate run-off from roads, roofs, paved gardens, and built-up areas, is led by our industry-leading Clean Rivers and Seas Task Force.

We want to improve our score for regulatory compliance of drinking water – our CRI score – which is monitored at treatment works, treated water storage facilities and customers' taps. Upgrading our sites is a key part of addressing this, such as the work being carried out at our Otterbourne water supply works (WSW).

Reducing leakage will ensure that less of our treated water is lost, making our network more efficient. We have expanded our 24/7 find-and-fix teams and continue to work hard in this area, reducing leakage in 12 of our 14 water zone areas in 2022.

Lawrence Gosden
Chief Executive Officer



Stuart Ledger
Chief Financial Officer

Dr Toby Willison
Director of Quality and Environment



The water resilience that our investments will give the customers we serve, puts the protection of our natural capital at its centre and ensures that the environment is improved, and biodiversity encouraged. We are using a catchment-based approach, where all local stakeholders work together to look at the best ways to solve local issues. We believe that working in partnership really is the most effective way to move forwards.

The sustainable bonds raised in 2020–21 were for a total value of £1.125 billion. The use of proceeds was to refinance projects completed during the 2015–20 five-year investment period (AMP6) but mainly to support projects during the current programming period 2020–25 (AMP7). Our Sustainable Financing Framework enables us to issue green bonds, social bonds or both and our investors are committed to the environmental, social and governance (ESG) responsibilities that go with these investments.

Giving stakeholders and our customers information transparently and clearly is important to us. Our website contains information about our delivery across the business as well as updates on pollution incidents, flow and spill reporting, wastewater treatment works compliance, regional bathing water compliance results, emissions and river levels.

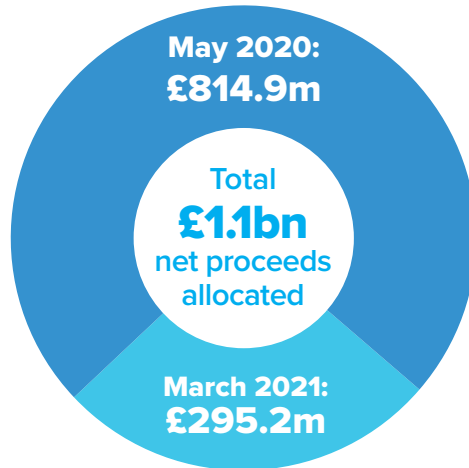
We continue to be committed to keeping our investors informed of progress on the impact of our sustainable bond investments.

Key highlights

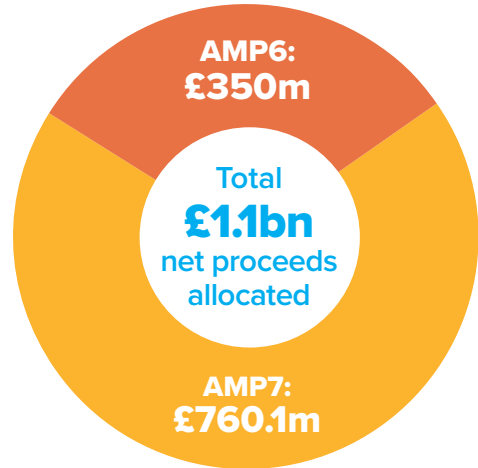
All the sustainable bonds are public issuances and have tenures ranging between six years to 17 years.

Sustainable Bonds raised in May 2020 and March 2021

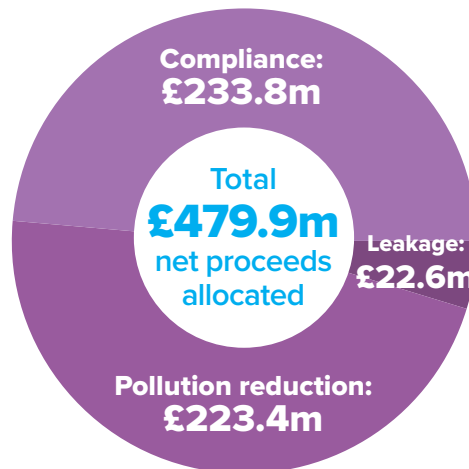
100% allocated across both issuances



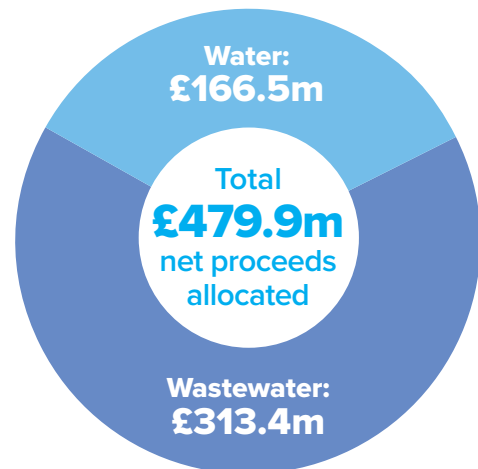
Split of funding per investment period



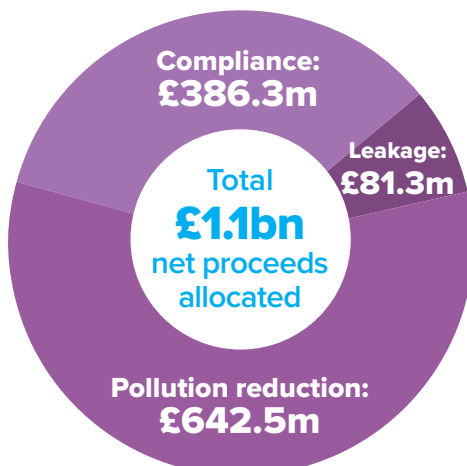
Areas of impact 2021–22



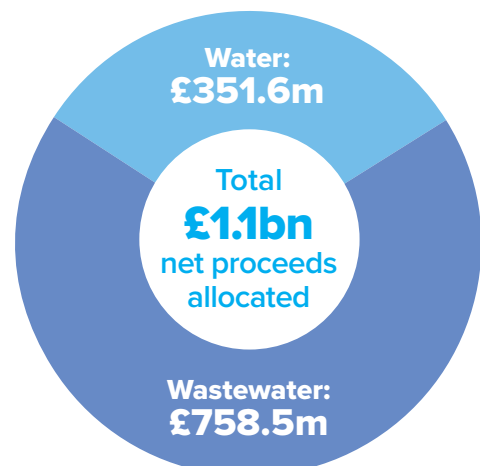
Split of water/wastewater 2021–22



Areas of impact to date



Split of water/wastewater to date



Progress in allocation of sustainable bonds

This report covers the impact of the allocation of projects up to and including 31 March 2022.

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

As at 31 March 2022, 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 commenced in 2021–22 and the remaining 109, were projects which commenced in the prior period 2020–21. The majority of the May 2020 bonds were used to refinance 16 projects from the last finance programming period (AMP6).

In total £1.1 billion has now been allocated to our sustainable bonds, therefore we are pleased to confirm that the three bonds we have issued to date are now fully allocated.

In this report, we cover the impact of the allocation of projects up to and including 31 March 2022.

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 7 of this report.

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.

Pollution control

Funded projects reducing pollution cover areas such as logger maintenance, sewer rehabilitation and operational asset management at wastewater treatment works (WTW). Specific examples of pollution projects are:

- Hailsham North and Hailsham South WTW – habitats
- Thanet sewers
- AMP6 planned works – Swalecliffe WTW.

Compliance

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

- Burham WSW Stage 1 Improvements
- River Itchen effluent re-use
- Brighton nitrates.

Leakage





Improvements in leakage reduction involve projects covering distribution networks and domestic meter replacement, for example.

Specific projects include:

- Digitalisation of the water network
- Communication pipe replacements (Reactive)
- Supply and demand tranche (Intelligent network).



Our five year strategy

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

This report describes our use of proceeds to date, and the expected sustainability impact of these investments.

The report was assured by DNV and their opinion on this report can be found at southernwater.co.uk/dnv-opinion.

The four core components of the bond principles are:

- 1. Use of Proceeds.
- 2. Process for Project Evaluation and Selection.
- 3. Management of Proceeds.
- 4. Reporting.

We refer to the projects as Sustainable investments, when they fall within one or several Social categories, as well as one or several Green categories. We refer to all the individual capex projects allocation up to now as Sustainable investments, since all have met the criteria for allocation to our sub portfolio of both the Social and Green categories.

Delivering our vision to provide a resilient water future for our communities continues to gain impetus from the allocation of the net proceeds arising from the projects, which have been and continue to be, allocated to investments in Eligible Projects. This is in line with our Sustainable Finance Framework. All the proceeds of these bonds have now been fully allocated. As a large number of projects have been financed, we are reporting on a portfolio level, highlighting two key projects as case studies (see page 14).

Regarding return on investment, the bonds give 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.

Further details on this financing approach can be found in our Sustainable Finance Framework. The Framework was published in 2020 and developed in alignment with the ICMA (International Capital Market Association) principles:

Green Bond Principles

Social Bond Principles

Sustainability Bond Principles

and the Loan Market Association's:

Green Loan Principles

Sustainability Linked Loan Principles

KPIs

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

Committed to:

- Reducing pollution**
incidents to less than 80 by 2025, aiming for zero pollution by 2040.
- Aiming for a score of zero for drinking water compliance**
risk and 100% compliance with Environment Agency standards for treatment works.
- Halving leakage by 2050 and reducing leakage by 15% over the five years from 2020 to 2025.**

The sustainable bonds have been invested in projects across three main areas of impact: pollution prevention, regulatory compliance and leakage reduction.

Our delivery in each of the areas of pollution, compliance and leakage was reported in our Annual Performance Report 2021–22 and shows our performance relating to our goals and the delivery commitments set for us by our regulators.

Pollution prevention

We are committed to reducing pollution incidents to zero by 2040, with a target of less than 80 by 2025.

In 2022, we recorded a 7.5% reduction in Category 1-3 pollution incidents compared to 2021. While this is an improvement, we still have significant improvements to make in this area to reduce from the 372 incidents recorded to reach the Ofwat target of no more than 94 incidents.

This target is equal to 23 incidents per 10,000km of sewer. We had 93.63 incidents per 10,000 km of sewer, based on a total sewer length of 39,900km. This is a reduction compared to 101.52 incidents in 2020–21.



Regulatory compliance

We aim for 100% compliance with Environment Agency standards for treatment works and a score of zero for drinking water compliance.

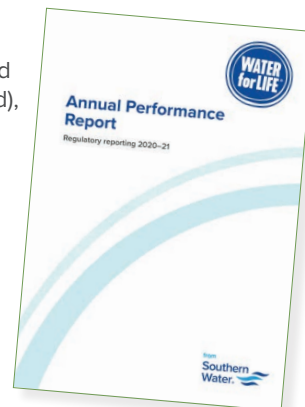
Based on the calendar year, in 2021 our treatment works compliance measures failed to meet the standards at seven sites, compared to ten failing sites in 2020. This was an improvement, giving us a score of 97.94% compliance compared to 97.06% in 2020.

There is still a significant gap between where we are and where we need to be for water quality compliance, measured by the Compliance Risk Index (CRI) score. Our score for 2021–22 was 6.69. This was an increase on the previous year (2020–21: 4.53), as a result of an increased score at service reservoirs and consumer taps and failures at our Burham WSW in November 2021.

Leakage reduction

We want to halve leakage by 2050 and reduce it by 15% by 2025.

Improvements have been made in several areas to reduce leakage. In 2021–22, we recorded a three-year rolling average leakage rate of 94.9 MI/d (2020–21: 98.5 MI/d), falling outside the target set for us by our regulator of 93.9 MI/d. Our in-year leakage figure was 96.8 MI/d (2020–21: 98.4 MI/d), against a target of 89.3 MI/d.



Metrics as submitted to Ofwat in our Annual Performance Report 2021–22

How we deliver

Pollution reduction – our Pollution Incident Reduction Plan (PIRP)

Updated each year, our PIRP for 2022 forecast that this third year of the plan aimed to deliver a 60% reduction in total pollutions and a 58% reduction in serious pollution incidents.

The plan to reduce pollution incidents for 2022 included:

- upgrade our control centre
- improve the availability of our assets on our treatment works and pumping stations
- adapt our assets to deal with wetter weather fix problems proactively, before they become an issue
- upgrade our wastewater pumping stations clean the network and prevent leaks
- install 22,000 monitors, enabling a proactive digital network.



Water Resources Management Plan (WRMP)

The plan will make sure we have enough water across our region, when and where it's needed, for people, businesses and the environment. Looking ahead to 2075, the plans include reducing leakage and saving water, in the face of significant water supply challenges. We consulted the public and our stakeholders on our draft Water Resources Management Plan 2024 from November 2022.

Water for Life – Hampshire programme

We are consulting on how to create greater resilience during drought in the Hampshire area, with our Water for Life – Hampshire programme. We need to invest in new water sources for the regions, to protect the unique chalk stream rivers. The programme looks at how we source, treat and supply water across this area.

Clean Rivers and Seas Task Force

The task force is responsible for delivering six pathfinder projects over the next two years, as well as delivering a regional plan to reduce storm overflows between now and 2030. The work demonstrates our commitment to drive down the use of storm overflows by finding new and innovative solutions to deliver infrastructure that's more resilient and adaptable, such as the use of Sustainable Drainage Solutions (SuDS).

Catchment work

We have 98 groundwater catchments, 10 river catchments and four reservoir catchments in our region. We are working in catchments using a sustainable approach, to address the causes of water quality and quantity issues. This means we can take a much longer-term view of how to deliver more natural solutions to address the challenges we face.

Embedding natural capital considerations into our investment decision-making process

Impact of schemes supported by our sustainable bond investment

Pollution reduction: Allocated amount £223.4 million

Our work to reduce pollution incidents continues.

We published in our 2021–22 Annual Report that our work targeting operational pollutions resulted in a 27% reduction compared to 2020. However, the number of pollutions related to spills following heavy and intense storms, has offset this number. As pumping stations are the largest contributor to our pollution incidents, they will be the focus of attention to improve in this area, together with treatment works.

Our Pollution Incident Reduction Plan (PIRP) guides work to reduce pollution incidents. Updated annually, the third published in 2022 describes five programme areas for the next phase of work:

- Wastewater pumping station upgrades
- Wastewater pumping station/wastewater treatment works asset availability
- Wastewater pumping station and network cleansing and escape prevention
- Pollution from spills reduction programme
- Strategic projects

We are using a variety of actions aimed at reducing incidents by:

- Improving asset resilience – this includes carrying out health checks on water pumping stations and water treatment works
- Trusted monitoring and analysis – our spills reporting system, ASPIRE, is an example of this
- Customer participation and network – such as targeted campaigns for blockage reduction
- Human error reduction – our Clever Nelly training-needs analysis tool checks knowledge and identifies gaps for training opportunities.

Three strategic programmes are driving improvements in the area of pollution reduction, these are the digitisation of our network (see the case study on page 14), updates to our control room and planned preventative maintenance.

Our Clean Rivers and Seas Task Force is leading work to find new and innovative solutions to reducing the use of storm overflows. The task force has built strong partnerships across the region to successfully deliver a set of pathfinder projects over the next two years. These projects in Deal, the Pan Parishes, Margate, Whitstable (Swalecliffe), Sandown and Fairlight look at ways to slow the flow of surface water, for example using sustainable drainage solutions (SuDS), making better use of existing infrastructure and using nature-based solutions, such as soakaways and rain gardens.

Protecting customers, communities and the environment from pollution incidents

Reducing pollution incidents to zero by 2050



Impact of schemes supported by our sustainable bond investment continued

Compliance: Allocated amount **£233.8 million**

We provide wholesome drinking water to 2.6 million customers across the region we serve.

Compliance measures ensure the water is clean and safe, as well as monitoring its taste and odour. The projects supported promote improved drinking water quality and greater operational efficiency.

For treatment works compliance, we are continuing to focus on areas where we know improvements need to be made:


- Our 'intensive care' processes continue to improve the management of sites.
- Our drinking water is assessed by the drinking water inspectorate (DWI) to measure risks from compliance failures, making sure we have high quality drinking water with little taste or odour. We reported last year that 99.97% of our water samples met all the necessary standards, however our CRI score – measuring risk to drinking water quality – remains high.

While we met our target for drinking water taste and odour of 0.23 contacts per 1,000 population, we were outside our drinking water appearance target of 0.74 contacts, with 0.74 contacts per 1,000 population. This means that while less than 1 in 4,000 people contacted us about drinking water taste and odour, one person in 1,333 got in touch with us about their drinking water appearance.

To make improvements in this area, we are continuing to:

- identify water service risk, our HazRev programme is making improvements to water supply works
- invest in site improvements, such as the upgrade to Otterbourne water supply works (more about this project can be found in our case study on page 14)
- improve our capacity through our people and processes.

Work also continues with our mains cleaning (flushing) programme. The programme started in early September and it focused on specific areas. We reported last year that we managed to flush 4.3% of our water network during 2021–22, which is a total of 590km of pipes.



Providing wholesome drinking water to 2.6 million customers

Leakage: Allocated amount £22.6 million



We want to keep more water in supply.

We want to reduce leakage by half by 2050 and meet our Ofwat targets for leakage.

Our efforts to drive down leakage in 2022 were challenged by the hot summer and heavier rains, creating an increase in demand for water and more leaks due to burst pipes.

The majority of funds allocated here relate to the replacement of stop taps and communication pipes that were previously causing leakage.

We are also making improvements by:

- increasing the capacity of our 24/7 find-and-fix teams continuing the next phase to use advanced pressure management, helping to reduce bursts by ensuring less fatigue in the pipework
- replacing mains as part of a programme in this area
- using technology such as acoustic loggers to detect and pinpoint leaks.

Increasing the capacity of our 24/7 find-and-fix teams to reduce leakage

Investment and the governance process

Our sustainable bond allocation is made after following a rigorous review and approval process, ensuring strong governance is maintained.

Eligibility for funding is described in the ICMA's Green Bond principles and the Social Bond principles. Most of our asset expenditure (capex) and operational expenditure (opex) is eligible for the Green Bond categories and the Social Categories described in these principles. In accordance with our Southern Water Sustainable Financing Framework, we have decided to allocate funding to our capex portfolio only.

The process for allocating bonds to projects follows a process of:

- risk identification
- solution selection
- cost and benefit analysis.

It is our Investment Committee that reviews and approves projects meeting a certain value threshold, before final approval by the Board. Business cases are presented, giving the costs and benefits for each investment, with these business cases being scrutinised prior to approval by boards or 'gateways'. All capital expenditure

is approved by the relevant Steering Group and the level of management approval is determined by project value and our schedule of delegated authority. Our Board approves the annual capex budgets as well as the plans covering the five-year financial programming period (AMP).

The whole capital programme is overseen by our water and wastewater strategy groups. The groups make sure projects deliver the best customer outcomes. The projects are monitored at each gateway, and this continues over the whole project life cycle until each project is completed.

Under the ICMA criteria, the majority of our capital expenditure qualifies for inclusion. Certain types of expenditure are specifically excluded from the ICMA criteria, including personal costs, fines and legal costs associated with pollution incidents, as well as financing costs which includes costs associated with raising finance.

Southern Water finances and refinances assets that fall within the Eligible Sustainable Portfolio, 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

For allocation to the bonds, the projects need to meet a minimum number of social and environmental criteria.

A committee made up of members of our Treasury, Strategy and ESG teams, assess projects for their eligibility to be included in the project portfolio using eligibility criteria and information about the project's likely impact. In order to attribute an assessment score to each project, they take into account the project's: purpose, type, alignment to ICMA Social and Green principles, contribution to our environmental and social ambitions.

Eligible projects need to have a capex addition value of above £500,000 in the year, and the capital project values include an allocation of corporate overheads but do not include capitalised interest.

The allocation process this year looked at capex projects from AMP7 (the period 2020–25). There was a mixture of projects identified and allocated in 2020–21 with further spend in the

period and newly commenced projects in the period 2021–22.

Projects that are allocated are flagged in our capex portfolio reporting system, to ensure there is no duplication in future allocations.

The table below summarises the amounts raised from each Bond and the allocated amounts as at 31 March 2022, as well as the allocation into our three main areas of impact.

Management of proceeds

Eligible projects or programmes of work meeting our eligibility criteria will be financed or refinanced by the proceeds.

Funds will initially be placed as deposits with money market funds or bank counterparties in accordance with our Treasury Policy, if there is any occasion where proceeds from an issuance cannot immediately be allocated to finance, or refinance projects.

We will ensure these funds are not used for any projects or programmes of work that are contrary to our sustainable financing framework.

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

Case studies

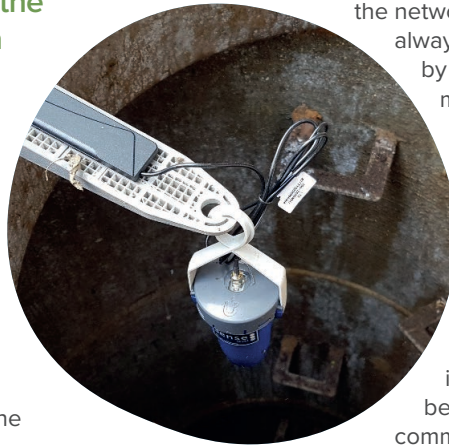
Case study 1

Pollution reduction

Sewer level sensors Digitisation of wastewater network Amount: £4.53 million

It can be difficult to detect blockages in wastewater networks until they cause pollution in the surrounding area, but a sewer level sensor the size of a baked bean tin can change all that.

In 2022, we put in place a £15 million project to strategically deploy 22,000 of these sensors across our wastewater network by December. The sensors were placed in manholes to keep measuring the water level in the sewage pipes using radar.



The sensors send the data back to machine learning and analytics tools which learn from the data to be able to detect blockages along the network of pipes. The results are always interpreted and checked by our team of analysts before mobilising any necessary crews to clear blockages. This is a proactive way of working which enables us to plan ahead, making it more efficient and cost effective.

The project will enable us to deliver our targets for sewer flooding and pollution incidents faster and better, benefitting our customers, the community and the environment.

Case study 2

Compliance

Otterbourne Case study Capital maintenance Amount: £25 million

Our Otterbourne water supply works was in need of a significant upgrade to ensure a resilient water supply for customers across Hampshire and the Isle of Wight for many years to come.

Three phases for the upgrade of work were outlined, with a total budget of £25 million. The majority of the civil construction and mechanical and electrical installation was completed by the end December 2022, with work on the major connections and roads and drainage planned for early 2023.



Throughout the project, there was a strong emphasis on collaborative working, regularly bringing all key stakeholders together to minimise the impact of the operation of the site during the works or any delays on the project.

Customers across Hampshire and the Isle of Wight will benefit from a resilient supply of water and the project will protect and improve the environment long into the future.



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from
**Southern
Water** 

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