## Bringing water to life

A STREET

Delivering for our customers, communities and the environment

Green Recovery Annual Report 2025 Appendix



## **Executive Summary**

Delivering on improving public health, protecting the environment and addressing climate change



#### Driven by our values



We want you to bring your best every day. Be open and inclusive, work together and win as one team. Let your passion inspire those around you. Be authentic, make your mark and be you.



We want you to be the one we all look up to. Be trusted. Act with integrity and make good on your promises. Build trust, one relationship at a time. Be rock solid.



We encourage you to be curious and challenge convention. Share ideas with confidence and purpose, and help share our future. Embrace change. Drive progress. Own the challenge. Be the future. South West Water's Green Recovery Initiative, which was developed with and supported by our customers focuses on opportunities to make an even bigger environmental and societal contribution to the South West over and above our stretching 2020–25 business plan.

This is the fourth year of our Green Recovery programme representing the culmination of our most ambitious environmental initiative for 15 years<sup>1</sup>.

Our plan, which was approved by the Regulator, Ofwat, in July 2021 commits to an investment of c $\pm$ 82m to deliver five schemes.

#### (1) Knapp Mill water treatment works advancement

accelerating the upgrade of the Knapp Mill water treatment works near Christchurch

2 Water resource grid enhancement

increasing water supply resilience by supporting water transfers

**3** Smarter, healthier homes

trialling ways to help customers save water, protect customers from the cost of supply pipe failures, and reducing health risks from lead pipes

#### **(4)** Storm overflows

reducing harm from storm overflows and improving river water quality

#### **(5)** Catchment management

using nature-based solutions to improve water quality and enhance natural habitats

Our activities have continued at pace with progress made on each of the five core schemes.

This year has seen us make significant strides in our catchment management activities, surpassing our performance commitment for new land under active management. We remain on track to complete the Knapp Mill water treatment works advancement and water grid enablement programmes and have continued steadily with our smart metering roll out and storm overflows investigations.

Our performance in respect of our Green Recovery Initiative commitments has been subject to assurance, including third-party technical audits from Jacobs, our external technical assurer.

Overall, the Green Recovery initiative has created jobs, enhanced the skillsets of staff, supported our supply chain, boosted the region's economy and protected the environment.

## **Summary Performance**

Delivering alongside our main business plan

## (1) Knapp Mill water treatment works advancement

Work has been progressing well to upgrade Knapp Mill water treatment works with an innovative treatment process. Once complete in March 2026, customers in the Bournemouth area will benefit from the new enhanced ceramic membrane treatment, providing world class drinking water and long-term water supply security.

#### (2) Water resource grid enhancement

Construction of the 20km Prewley to Northcombe dual transfer mains is nearing completion. The installation of the twin pipelines was completed in March 2025 with final reinstatement currently underway.

Engineering works for the Radford Pumped Storage Scheme are progressing to programme with a new National Grid power supply now in place. We're working closely with the Environment Agency to address water quality concerns and have undertaken extensive additional water quality monitoring, modelling and assessments to ensure the necessary abstraction licences can be granted.

#### **3** Smarter, healthier homes

Our smart meter installation programme has continued at pace, successfully installing or upgrading over 60,000 meters in the North Devon area and providing several key learnings for us to incorporate into our future metering programmes.

Despite facing several challenges, our lead renewal programme has remained on track. By delivering exceptional customer engagement we've seen a nearly 60% customer uptake on our offer and over 1,480 renewals completed by March 2025.

#### **(4)** Storm overflows

We have completed 167 SOAF investigations to stage 167, of these 112 have been completed at Stage 2 and of these 8 have been investigated further to Stages 3 & 4.

Due to the timing, delivery and incentives of the Green Recovery programme we have moved all surface water separation schemes into our AMP8 storm overflow delivery plan.

#### **5** Catchment management

We have successfully completed our catchment management activities, outperforming against our target and delivering over 14,000 hectares of improvements since 2022.

# Targets met/on track (a) (1) Knapp Mill water treatment works advancement (b) (2) Water resource grid enhancement

- $(\times)$  (3) Smarter, healthier homes
- $(\times)$  (4) Storm overflows
- ✓ (5) Catchment management

# Key\* Availability Clean water Wastewater Customers Service Environment Resilience Community

#### ⊗ Area of focus

- 🗵 Marginal
  - performance
  - On track
- Outperformance
- Area of excellence

Calendar year incentive.

## Forecast and delivered performance commitment benefits from Green Recovery Programme

Performance commitment	Unit	2024/25 Actual	2024/25 Forecast
Biodiversity – enhancement*	Hectares	14,313	10,000
Installation of AMR meters	Number	64,474	120,872
Leakage*	MI/d	0.52	0.93
Per capita consumption	l/p/d	(0.07)	0.26
Operational carbon	Tonnes	37,406	40,518

The benefits for these Green Recovery commitments are also included within the performance shown within our overarching annual commitment, whereas AMR meters installed and PCC impacts are excluded in the overarching commitment – see pages 210–215 of the APR.

#### **Reducing operational carbon**

We are committed to reducing the greenhouse gas emissions created by our operations. In 2020, our operations, which included our water and wastewater business in our Southwest region, a well as our Bournemouth Water business, where responsible for emissions totalling 112,675 tCO<sub>2</sub>e.

To monitor our performance and demonstrate to our customers the progress we are making to reduce our greenhouse gas emissions and mitigate climate change, we set ourselves a performance commitment in our 2020–25 business plan. Our commitment was to reduce our operational carbon emissions to 40,518  $tCO_2e$  by 2024/25, moving us closer towards our 2030 target.

Since 2020, we have exceeded our target, lowering our operational carbon emissions by around two-thirds to 37,496 tCO<sub>2</sub>e. The majority of this has been achieved through our switch in April 2022 to 100% REGO-backed renewable electricity to run our sites, pumping stations and offices. We have also reduced our reliance on fossil fuels by switching from using diesel to HVO (hydrotreated vegetable oil) to power our wastewater stand-by generators and have started to roll out fully electric cars and vans to our employees.

#### Net Zero

For details on our Net Zero programme and performance, please see pages 26 to 27 of our 2024/25 Annual Performance Report (APR).

**Programme delivery** 

**Outline design & ECI period** 

## **Green Recovery initiative**

① Knapp Mill water treatment works advancement

We're upgrading the existing Knapp Mill water treatment works with a new state of the art works, including advanced water treatment.

The new treatment process will enhance water quality and meet the requirements of a DWI notice. We're installing innovative ceramic membranes and Granular Active Carbon (GAC) filters to provide an absolute barrier to particles and pathogens present in the River Avon.

We've revised our original plan to include more maintenance on the existing assets on site, which has enabled us to provide a more sustainable solution. Our revised solution will reduce the need for chemical dosing and require smaller amounts of GAC media replacement in the future – dramatically reducing our carbon footprint and whole life costs of water treatment at Knapps Mill WTW.

The full benefit of this project will not be realised until all works are complete and have been commissioned, with supplies to domestic customers due to begin from March 2026.

#### **Our progress**

We're on track to meet our commitment for water to be in supply from the new water treatment works by March 2026, with construction having begun on site in January 2025.

The planning application for the project, submitted in May 2022, received approval in January 2024 however the outcome of the required Section 73 planning application amendment remains pending.

We're working hard to ensure the successful installation of the membrane plant, which is being built off-site and is nearing 95% completion, with delivery expected in summer 2025.

As our construction activities continue, we now move our focus to obtaining a favourable outcome from the Environment Agency and Natural England on our submitted Environmental Permits.

## Construction underway







Activity	DWI milestone	Date
Complete sufficient detailed design to enable construction to proceed	0	31/08/2023
Complete the planning, procurement, construction and installation of new treatment solution to enable wet commissioning	0	30/11/2025
Commission the new/replacement treatment solution into supply via a controlled blending scheme	$\odot$	09/10/2025 to 10/03/2026
Provide all treated water from Knapp Mill via the new treatment solution	0	31/03/2026





## Green Recovery initiative continuedWater resources grid enablement

#### Ensuring a reliable supply of water is a top priority for our customers, which is why we're continually looking for ways to improve the resilience of our water network.

We're addressing the growing demand for water in our Roadford supply area by investing in a new intake pumping station on the River Tamar. The station will pump water from the river back into Roadford Lake during the winter when the river has higher flows. Maintaining the level of the reservoir in this way will reduce the pressure on it, and the river, when demand for water increases during the summer months.

The installation of twin transfer mains between Prewley and Northcombe water treatment works (WTWs) will provide a new strategic link between two key sources in the area, making the region's water supplies more resilient for the future.

#### **Our Progress**

We remain on track to meet our commitment of completing both elements by 31 March 2026.

#### Prewley to Northcombe Transfer Mains Scheme

The project started on site in May 2023 and installation of the twin 500mm diameter pipeline between Prewley to Northcombe Water Treatment Works was completed March 2025. We are now working to reinstate the 10km long working easement, restoring the land to it's pre-scheme condition.

#### **Roadford Pumped Storage Scheme**

The project started on site October 2023 and engineering works are progressing to programme following the receipt of Town & County planning approval and completion of land purchase summer 2024.

The abstraction structure has now been installed along with the foundations and superstructure of the new high lift pumping station at Gatherley. The 4km long 900mm diameter pipeline, fibre and private high voltage power cables are all installed and testing is underway. The New National Grid power supply is in place and there are not considered to be any further significant risks to completing installation of the new 111 MLD infrastructure.

An Environment Agency abstraction licence was issued to SWB February 2024 to support initial commissioning of the new assets and allow temporary use of the installed infrastructure to fill Roadford Lake to ensure our water resources had fully recovered following the 2022 drought.

We are now working to complete construction of the new Gatherley pumping station abstraction site in line with the GRP commitment date of 31/03/2026.





- The new intake structure, looking from the inside, at the new Gatherley intake pumping station.
- The new High Lift Pumping Station Building takes shape at the new Gatherley intake pumping station.
- Trenchless technologies were used across the Prewley to Northcombe Transfer mains scheme to minimise disruption to the public and environmental impact.



Treated water transfer capacity from Northcombe WTW to Prewley WTW

111 MI/d

Capacity infrastructure to recharge Roadford Lake from River Tamar

#### **Future programme**

Northcombe - Prewley

Main contract awarded 31 May 2023

Start on site (main construction) 1 July 2023

- Construction complete 30 September 2024
- Install a new raw water main connecting Meldon Reservoir with Northcombe works (DWI SWB-2021-00009 Prewley WTW) 31 March 2025

 Install a new treated water main from Northcombe works to Prewley works (DWI SWB-2021-00009 Prewley WTW) 31 March 2025

**Commitment to complete under Green Recovery** 31 March 2026 Future programme

#### **Roadford Pump Storage**

- Main Contract awarded
   30 June 2023
- Abstraction Licence Granted
   28 February 2024
  - Full Planning granted
- 31 April 2024
   Start on site (main construction)
- 1 March 2024
   Construction complete/
- Commissioning 31 December 2025
- Commitment to complete under Green Recovery
- 31 March 2025

Spend £m

0.123



2022/23

13.538

2023/24

18.769

Activity	Ofwat milestone	Prewley to Northcombe Date	Roadford Pumped Storage Date	Prewley to Northcombe Cumulative Spend (£m)	Roadford Pumped Storage Cumulative Spend (£m)	Total Cumulative Spend (£m)
OFWAT financial determination of GRP	$\odot$	31/07/2021	31/07/2021	-	-	÷
Options appraisal complete	$\odot$	31/01/2022	31/01/2022	0.05	0.07	0.12
Outline design complete	$\odot$	31/03/2023	31/03/2023	1.26	2.22	3.61
Gatherley planning and abstraction licence granted	$\odot$		31/12/2023	1.26	2.50	3.76
Start on site (main construction)	$\odot$	01/07/2023	01/03/2024	1.50	3.00	4.50
Required completion date under DWI Notice SWB-2021-00009 Prewley WTW	$\odot$	31/03/2025		15.80	20.11	35.91
Construction works complete	0	31/03/2025	31/12/2026	15.80	27.81	43.61
Commitment to complete under Green Recovery	$\odot$	31/03/2026	31/03/2026	16.03	28.18	44.21

#### Green Recovery initiative continued ③ Smarter, healthier homes

With rising water use and unexpected repair costs from leaking pipes potentially placing significant financial strain on individual households, our Smarter, Healthier Homes programme is delivering targeted investment that provides direct and meaningful benefits to our customers.

The proactive and integrated approach of this project will benefit customers, communities and the environment in the North Devon region by focusing on the following three key areas:

- Installation of smart meters enhancing customer engagement to help manage water use and bills more easily
- Supply pipe 'adoption' trial relieving the worry of sudden unplanned financial demands arising from leaking and/or failed service pipes
- Proactive lead pipe replacement taking a significant step towards eliminating lead supplies across our region.

#### **Our Progress**

We're helping customers to reduce their water use and save money by repairing and renewing water meters. We're also delivering a safer and more resilient supply of water to thousands of homes by proactively replacing lead pipes.

Whilst we've fallen short of our target performance on smart metering installations and lead renewal, we've used the valuable insights we've gained from the programme to help inform our future plans, as well as sharing key learnings with the sector.

#### Smart meter roll out

Our smart meter installation programme has progressed steadily, successfully installing or upgrading over c. 64,000 meters in the North Devon area and providing several key learnings for us to incorporate into future metering programmes.

Disappointingly, despite attempting many different methods of communication with our customers, gaining access to customer properties for internal meter installations has continued to present challenges. We're not alone in this as it is an issue that is reflected across the sector, but it has contributed to a shortfall in successful installations.

We're empowering our customers to manage their usage through our MyAccount online portal, offering guidance and advice on water efficiency and managing bills.

Network connectivity is a rapidly evolving area. The varied geography of North Devon has required a significantly denser communications network than initially anticipated, providing a valuable opportunity to test and understand future infrastructure requirements. Diehl Metering and Netmore, our contracted partners, have rolled out a communication network that successfully connects over 88% of meters each week.

The smart meters that we have installed are already providing valuable insights into customer-side leakage through the detection of low-level water losses, such as dripping taps and leaking toilets. With early visibility of this data, we're now able to proactively engage with customers to address these issues quickly and efficiently and help them avoid unnecessary costs.

## Customer leakage repairs and renewals

North Devon was selected as the trial area due to its suitability as a representative sample of the wider region, enabling us to better understand customerside leakage on a smaller, more manageable scale.

We successfully completed 360 renewals and repairs having found significantly lower volumes of leaks than anticipated.

Whilst we uncovered a significant volume of customerside leaks during smart meter installations, the majority of these were internal and very low-level drips. Similarly, our expectation that we would find a number of leaking lead pipes as part of the lead pipe replacement programme did not come to fruition. Indeed, the trial revealed the opposite, with most lead pipes in the area found not to be leaking. These findings have been shared across the business to help inform the development of our ongoing plans.

#### Lead renewal

Despite several delivery challenges, our lead replacement team successfully completed 1,711 renewals up to March 2025. Ongoing issues with complexity and engineering challenges, as well as rising costs has persisted throughout the project meaning we were unable to reach our revised target of 2,600 external lead replacements.

Through exceptional customer engagement we've seen a nearly 60% customer uptake on our offer to replace both external and internal lead supply pipes where found. Of the 4,566 properties approached, we found that 13% had already replaced the pipes themselves. A further 8% were non-contactable with 14% managed by housing associations or landlords. Just 5% refused the offer available to them.

We've used alternative trenchless techniques where possible, such as moling<sup>3</sup> or using a Kobus pipe puller<sup>4</sup>, to minimise the disruption of traditional open-cut approaches and improve our response and restoration service.

Whilst the original lead identification model produced mixed results, it has provided a valuable foundation for further development, with a new machine learning model having been developed in collaboration with the University of Exeter's Centre for Resilience in Environment, Water and Waste (CREWW). This enhanced model, informed by data from the Green Recovery programme and other sources, will be used to help us more effectively target lead pipe renewals in our future programmes, building on the proven success of our street-by-street approach.



## 🕑 c. 2,663

Customers signed up for lead replacement

#### Programme

- Full delivery element started January 2023
- Review of first 1,000m installation 1 April 2023
- Customer data available to view water consumption through MyAccount
   31 March 2025
- AMI installation complete
   31 March 2025
- Lead replacement programme complete 31 March 2025

Spend £m

0.076

2021/22

0.401

2022/23

4.941

2023/24

5.962



Metric	Unit	Value	Further comments
Number of existing basic meter installations replaced with AMI capable smart meters or upgraded to AMI functionality	Number, 000s	64,474	All meters are under the 'Replace external category'
Existing basic meter installations replaced with AMI capable smart meters or upgraded to AMI functionality – outturn costs	£, million	2.596	All costs are under the 'Replace external (domestic) category'
Percentage of household properties within our smart metering trial area covered by the Company communication network	%	89.2	This percentage is based upon reporting gathered by the Company, based on the
Percentage of smart meter installations in the smart meter trial are providing a successful daily transmission of daily data	%	72.2	trial so far. Both of these represent significant increases on last year as a communication network has rolled out

#### Green Recovery initiative continued Storm overflows

We're committed to reducing the need for storm overflows to operate, enabling us to efficiently deliver water quality improvements and enhancing our rivers for generations to come.

Our activities have focused on the following three projects which will inform our future strategy and business plans:

- Increased monitoring of our network extending our overflow monitoring and investigations programme by installing a further 414 Event Duration Monitors (EDMs)
- Inland river bathing water pilot to test implications, costs and benefits of achieving bathing water designation and delivering specific asset enhancements on the Dart and Tavy rivers
- Trialling surface water separation assessing the sustainability of activities to reduce storm overflows during heavy rainfall

#### Our progress Storm Overflows Assessment Framework (SOAF)

Our three-year pilot on the Rivers Dart and Tavy has helped us to build a deeper understanding of these catchments, develop strong local relationships and has informed our long-term strategy on the designation of new river and inland bathing waters across the region. The outcomes of our investigations into water quality within both river catchments will help us to target investment and inform our wider catchment management plans.

All our storm overflows sites are now fitted with EDMs, achieving full network monitoring and allowing near real-time visibility of storm water releases to the environment.

The project remains on track to meet the required delivery of SOAF investigations with 167 stage 1, 112 stage 2, 8 stage 3 and stage 4 investigations completed.

We've successfully completed 21 of the 25 SOAF investigations committed to within the programme case study areas in the Dart and Tavy catchments.

#### Dart and Tavy River Bathing Waters Pilot

Growing recognition of the importance of rivers and inland waters to local communities has led to increased interest in the designation of inland bathing waters in recent years.

Our three-year pilot on the Rivers Dart and Tavy has helped us to build a deeper understanding of these two iconic rivers, building on existing relationships with river users and local communities, and providing a solid foundation that will inform our long-term strategy on the designation of new river and inland bathing waters across the South West region.

Our research has helped us to assess how people use both rivers for recreational activities and the potential economic benefits of bathing water designation. We've also looked at the potential risks to help decide where designated areas could be located.

Working with the Environment Agency and other experts, our in-depth programme of water quality sampling and modelling has helped us to better understand water quality at several locations along both rivers. In combination with sewer level monitors and flow sensors, we've taken a forensic approach to understanding pollution in each catchment to assess potential water quality risks. We've worked closely with local stakeholders and community groups, supporting and encouraging their applications for inland bathing water designation in suitable areas, including the four locations along the Dart Estuary for which the Friends of the River Dart, in partnership with the Dart Harbour Authority, successfully applied. New designations are now in effect along the Dart Estuary, with classifications confirmed by Defra in November 2024, at Steamer Quay in Totnes (classified 'Poor'), Stoke Gabriel ('Sufficient'), Dittisham ('Good') and Warfleet Creek below Dartmouth ('Excellent').

We're actively working with the Environment Agency to identify any of our assets that may impact on water quality in these locations so we can address any issues in a timely manner. We're supporting the exchange of data and information with local stakeholder groups and organisations to deliver further in-depth water quality investigations and to assist in the development of catchment action plans.

While the River Tavy is popular with kayakers, anglers and swimmers, we're not aware of any local groups currently intending to apply for bathing water designations on this river.

## Investigations to assess the costs and benefits of inland river bathing water designations

Our comprehensive water quality monitoring and modelling programme – developed in consultation with the Environment Agency and other experts – has focused on assessing the level of microbial contaminants at key locations along the lower Dart that are popular bathing waters.

Over 1,000 bacteriological samples have been taken at various diffuse and point sources of pollution including from rural land use, storm overflows and wastewater treatment works, supplemented by in-situ water quality monitors deployed across the catchment. An additional 50 bacteriological samples were submitted for Microbial Source Tracking Analysis at the National Laboratory Service (NLS), which found that bacteria in the River Dart, and its estuary, are derived from a wide array of animal sources including livestock, wildlife, dogs and humans, with significant variability depending on sample location and climatic conditions. Further analysis of the water quality data has been used to validate the source apportionment and exposure risk model developed by Professor Sean Comber at the University of Plymouth. The model accurately predicts bacterial levels at Dart Riverside in the lower Dart catchment based on rainfall, season, agricultural land use, storm overflow EDMs, and readings from in-river sensors.

These studies will be used to inform a statutory bathing investigation, which will be undertaken for the Steamer Quay Bathing Water, newly designated in May 2024.

## Development of partnerships, stakeholder and customer engagement

We know that engaging with customers and stakeholders, to develop our plans in a collaborative way, delivers mutual benefits for society and the environment. Building stronger relationships enables us to gain valuable insights to inform our decisionmaking, fostering a more sustainable and responsible approach to drive our performance forwards and improve our reputation.

Our stakeholder engagement programme for the Dart has provided an ongoing platform for collaboration with local groups including the Friends of the Dart, with ~2,000 members, and the newly established Bidwell Brook Partnerships.

Working with highly experienced engagement specialists at Stantec and AECOM, our robust and effective rolling programme of engagement has encompassed a wide range of methods to connect with targeted audiences, including direct correspondence, one-to-one meetings, workshops, dissemination events, research collaborations and many other formal and informal conversations. By using an on-street engagement platform, 'Hello Lamp Post', to capture public perceptions of the river, we've supported local groups to improve their understanding of river usage throughout Dartington and at key locations along the Estuary.

Continued engagement and education has emerged as a critical enabler of success for the pilot project and across other delivery programmes.

We're now working with local delivery partners, alongside our Sewer Misuse Team and operational colleagues, to design and deliver a broad programme of activities in Dartington to raise community awareness and understanding of water management challenges, including correct disposal of plastics and



Microbial Source Tracking Analysis by the NLS found bacteria in the River Dart and its estuary are derived from a wide array of animal sources.

other potential pollutants (wet wipes, cotton buds etc.), as well as potential solutions.

Working closely with the South Devon Catchment Partnership and Estuary Forums across South Devon, we're establishing a best practice approach for water quality monitoring, surface water management and collaborative working.

The high-quality data and modelling derived from the pilot is capturing interest from academia and research bodies. We're establishing knowledge exchange processes to share our findings and support research programmes at the University of Exeter and CEFAS, as well as the Innovate UK-funded Bactiquick project on the Bidwell Brook, led by the University of Portsmouth.

By working collaboratively with catchment partners, we've been able to align our monitoring data with that being collected by others in the area, underscoring our expertise and solidifying our role as a key contributor to the emerging Catchment Monitoring Strategies. As members of the Dart Catchment Partnership, we're playing an active role in supporting the development of their new Dart Catchment Action Plan including adding the Dart as a pilot catchment for our new Natural Catchment Management Plans (NCMPs) programme.

We're working closely with stakeholders and the local community to help them understand the complex data from the pilot and explore how we can share water quality information directly with river users and the wider public in a timely and useful manner. Using a range of activities including WaterFit Live and 'Your Beach, Your Say', as well as via our ongoing community engagement activities, we're increasing engagement with the public about this important issue.

Strong local support has enabled us to raise awareness about how factors such as water source, time and weather conditions can affect the risks recreational water users can face from pollution. We now share water quality data in advance of significant or high-profile events to help organisers to make more informed decisions about water quality and any health risks.

#### Designing and delivering solutions

Data from the pilot project, storm overflow EDMs and other South West Water sources is being used to identify assets which may be affecting water quality at popular bathing water locations. We're carrying out detailed investigations of these assets to understand the root causes, allowing us to prioritise investment by developing targeted, sustainable solutions.

Having completed our pilot investigations, we're turning our focus to undertaking a comprehensive and detailed study of the drainage and wastewater systems across the Dart catchment. We're focusing on assets where we have evidence of a connection to the newly designated bathing waters, or where other important drivers exist. Work will include analysis of storm overflow performance and function data, infiltration and impermeable area surveys, and hydrological modelling of local surface water systems to map overland flows.

As a result of the new designations on the Dart, we've brought forward investment plans for all overflows within 1km of the new bathing waters with improvements to be delivered by March 2030. Potential solutions, informed by the information gathered by the pilot project, will include both 'green' and 'blue' solutions including nature-based solutions, natural flood management, wetlands, SuDs, drainage network solutions, rainwater catchment solutions, surface water separation, as well as more traditional 'grey' storage solutions. Any interventions undertaken will need to ensure that we see no more than 10 spills per year by 2035 and no more than two spills during the bathing season at each overflow, even in the wettest years.

In Dartington, we're working with long-standing partners including the Westcountry Rivers Trust (WRT), the Dartington Estate, Devon County Council, the Bidwell Brook Partnership and others to assess the potential for nature-based solutions in the Dart Catchment around Totnes, to reduce the use of storm overflows in the area and further protect water quality on the river.

Slowing down and managing water naturally can help to prevent or reduce the use of storm overflows, whilst supporting wildlife, reducing flood risks and enhancing the local landscape. As we work to fully understand the challenges and opportunities in Dartington, we will ensure that we develop solutions in agreement with local residents, landholders and community groups.

#### Next steps

The monitoring and modelling approach developed for the pilot has significant potential for replication both across other catchments, within the wider Pennon Group and across the water sector. With the River Dart emerging as a flagship for inland bathing water designation, we're well placed to establish ourselves as a leader in the industry for water quality assessments of this type.

We're now building from a solid foundation of expertise, experience and resources with the valuable learning generated from the pilot supporting our efforts to design and deliver a programme of continuous river monitoring to help us fully understand our impact on the environment, as set out in the Environment Act 2021.

#### Surface water separation trials

Due to the timing, delivery and incentives of the Green Recovery programme we have moved all surface water separation schemes into our AMP8 storm overflow delivery plan. South West Water will not therefore recover any costs in this area from the Green Recovery Initiative.



#### Future programme

#### Summer 2022 into 2023

River water quality monitors and storm overflow monitors deployed and data gathering begins

Ongoing stakeholder and community engagement

Trial of the Window on the Environment platform

#### Winter 2023 into 2024

Full review of all findings including cost benefit analysis

Programmes to improve river water quality Spring 2025 Report on findings published and decision

on support for bathing water designations on the Dart and Tavy rivers

Water quality monitoring, modelling and investigation on the Dart and its key tributaries

Ongoing stakeholder and community engagement and educational activities Design and begin delivery of solutions taking a Green First approach

Completion of the SOAF investigations programme

## Spend £m

2021/22

1.121

2022/23

1.300

2023/24

2.212

#### Green Recovery initiative continued (5) Catchment management

Our Catchment Management Green Recovery programme is focused on enhancing biodiversity in the places people love while improving water quality and increasing the resilience of our catchments with their headwaters in Dartmoor. Additional benefits for the community include an increase in local jobs and skills.

By expanding on previous schemes, including our award-winning land management programme, 'Upstream Thinking', we've used our existing knowledge of catchment risks and ongoing WINEP investigation findings as a guide for our plans to undertake 10,000 hectare improvements on moorland, farmland and at South West Water owned locations within the Dartmoor National Park.

#### Activities include:

- Peatland restoration on areas with some of the most severe damage and degradation on Dartmoor. Improving water quality and increasing storm water storage capacity
- Working with landowners and farmers to adapt farming practices – to protect raw water quality and availability through partnership delivery
- Natural flood management and nature recovery – improving biodiversity and enhancing natural habitats across South West Water owned locations within the Dartmoor National Park.

#### Our progress

We have successfully completed our catchment management activities, outperforming against our target and delivering over 14,000 hectares of improvements since 2022.

#### **Catchment Schemes**

Our partnerships with the Devon Wildlife Trust (DWT) and Westcounty Rivers Trust (WRT) have had far-reaching benefits with 11,709 hectares of active catchment management completed by the end of the four-year programme across the various Drinking Water Protected Area (DWPA) catchments within Dartmoor National Park and Tavy Area of Outstanding Natural Beauty (AONB).

Working with landowners and farmers to adapt farming practices and implement on-farm interventions, the programme has improved water quality whilst creating biodiversity and natural flood management (NFM) improvements. As well as enabling farmers within the target area to strengthen their understanding of the benefits that improved soil, nutrient and habitat management can have for both their business and the environment.

Our work to date, and that of our partners, has helped to establish a level of trust with the farming community which, if nurtured, will prove invaluable as we progress delivery of our catchment priorities over the next five years. The complimentary nature of the works undertaken by DWT and WRT enabled us to expand our reach with uptake from landowners significantly higher than anticipated and word of mouth proving highly instrumental.

#### Peatland Restoration

The upland peatlands in the South West are recognised by the International Union for the Conservation of Nature (IUCN) as the most vulnerable in the UK to the impacts of climate change. Restoration of these areas is crucial to countering the impact of historic human activity which has resulted in them degrading and drying out, releasing carbon and showing a decline in biodiversity.

We used peatland damage maps from the University of Exeter, supported by ground surveys, to identify suitable areas for restoration within the green recovery area and the scale and intensity of works required.

We have led the South West Peatland Partnership (SWPP) delivering more than 832 hectares of peatland restoration across 12 sites up to March 2025, resulting in the peatland restoration carbon saving is estimated to be around 273,699 tonnes of  $\rm CO_2$  equivalent saved over the next 50 years.

We've also recorded an increase in wildlife diversity, including an uplift in the number of breeding snipe species of dragonflies and bog vegetation.

As a result of our restoration activities, the creation of new habitats has initiated the development of favourable eco-hydrological conditions that will enhance the resilience of these areas to climate change.

The complexities of working on top of the moors in all weathers presented a number of challenges which, alongside the need for additional ordnance surveys and controlled detonations, slowed our progress. This saw us fall slightly short of our target for March 2025 however our restoration activities continue at pace.

Funding for our peatland restoration activities was secured through the Dartmoor Peatland Partnership organisations, the Duchy of Cornwall and the National Trust, with additional funding from Natural England.

#### **Biodiversity improvements**

South West Lakes Trust (SWLT) have delivered a total of 1709 hectares of biodiversity improvements on the Burrator Estate and at Venford Reservoir, with a further 23 hectares of landholding improved across 46 South West Water operational sites.

### Burrator Estates including SWLT management area, tenanted lands and commons

Interventions have been delivered across woodland, moorland and water habitats, with an army of volunteers proving vital to the whole project, dedicating a total of 1,724 hours.

Projects within the broadleaf woodlands have included the removal of invasive conifers, coppicing and creating glades and rides, and planting two new orchards. Within the moorland habitats leaky dams have been created in key locations along with enhanced grazing management, bracken and scrub control. Woody debris has been fixed into the river Meavy which will activate during heavy flows, slowing the flow of water.

#### Venford Catchment Interventions

Habitats surveys undertaken at the outset of the Green Recovery Initiative have been used to guide the interventions undertaken by SWLT within the Venford catchment, including the removal of conifer forestry and subsequent restocking with moorland edge and woodland species. Alongside other activities, this work will provide a corridor for wildlife with more food and shelter for species which prefer this type of habitat. A new boardwalk has been installed, preventing further erosion from visitors and allowing more wetland plants to grow, helping to slow the flow of water. Volunteers have begun removing invasive rhododendrons from the woodlands to reduce its spread across the site.

#### South West Water Operational Sites

We're working hard to encourage biodiversity and improve catchment resilience at our operational sites with over 100 locations identified across Dartmoor National Park. Using site assessments looking at location, existing habitats and designations, amongst other factors, 46 sites were prioritised for interventions and improvements including grassland management, pond and hedgerow creation and the installation of leaky wooden dams to restore wet woodland and provide natural flood management. Large scale interventions were carried out during the dormant winter periods to have the most minimal impact on wildlife.





14.313

**Biodiversity – Enhancement Hectares** 



2024/25

Target (10,000)





- Dartmoor, Tavy Head: Completed restoration indicated by the pools of water shown in the middle of the image. Copyright Quantock and Exmoor.
- Photo credit: Barney Agar Volunteers removing Rhododendron at South West Water's Avon dam site.
- Photo credit: Barney Agar SWB Leaky wooden dams installed in woodland associated with Lustleigh Sewage Treatment Works.

#### **Future programme**

- Delivery partners delivered 366 hectares of catchment management activities. 31 March 2022
- Delivery partners delivered a further 3,414 hectares of catchment management activities.
   31 March 2023
- Delivery partners delivered a further 3,364 hectares of catchment management activities.
   31 March 2024
- Deliver partners delivered a further 7,169 hectares of catchment management activities 31 March 2025

#### Spend £m

0.926

3.591

2022/23

0.277

1.018





## Financial Expenditure by Green Recovery area

The following table shows actual expenditure to date for 2021/22 and 2022/23 as well as forecast expenditure profile for the delivery of the remaining three years of our Green Recovery programme. All values are in 2017/18 prices.

#### 1 Knapp Mill WTW

Expenditure	2021/22 £m	2022/23 £m	2023/24 £m	2024/25 £m	Total £m
Capital expenditure Operating expenditure	1.096	1.368 –	7.793	17.113 -	27.370
Totex	1.096	1.368	7.793	17.113	27.370
Determination	2.770	5.678	8.114	8.315	24.877
Difference	1.674	4.310	0.321	(8.798)	(2.493)

The start of the project was delayed due to protracted planning delay which actually took two years to overcome and included a federal by the Planning authority to the Secretary of State.

#### 2 Grid enablement

Expenditure	2021/22 £m	2022/23 £m	2023/24 £m	2024/25 £m	Total £m
Capital expenditure Operating expenditure	0.113	2.950	10.864	14.591 –	28.518 -
Totex	0.113	2.950	10.864	14.591	28.518
Determination	2.527	5.181	7.405	7.588	22.701
Difference	2.414	2.231	(3.459)	(7.003)	(5.817)

The project is on track to deliver the programme by March 2026, despite having a slower than expected start.

#### **3** Smarter, healthier homes

Expenditure	2021/22 £m	2022/23 £m	2023/24 £m	2024/25 £m	Total £m
Capital expenditure Operating expenditure	0.070	0.340	3.965	4.635	9.010
Totex	0.070	0.340	3.965	4.635	9.010
Determination	1.938	3.972	5.676	5.816	17.402
Difference	1.868	3.632	1.711	1.181	8.392

Smarter, Healthier Homes is on track to deliver the full programmes by March 2025. Whilst the projects and spend are now focused into the final year, the delivery models are established and resourced to meet the programme outputs.

#### **4** Storm Overflows

Expenditure	2021/22 £m	2022/23 £m	2023/24 £m	2024/25 £m	Total £m
Capital expenditure Operating expenditure	0.082	2.959	1.043	1.648 -	5.732
Totex	0.082	2.959	1.043	1.648	5.732
Determination	-	-	-	-	-
Difference	(0.082)	(2.959)	(1.043)	(1.648)	(5.732)

Although there has been spend in 2024/25, the project allowance was dependant on the Pollution target in 2024/25 being met, which has not been achieved, therefore no allowance is awarded for this project, but costs have still been included to fund this activity within K7 base allowances.

#### **5** Catchment management

Expenditure	2021/22 £m	2022/23 £m	2023/24 £m	2024/25 £m	Total £m
Capital expenditure Operating expenditure	0.853	3.042	0.222	0.791	4.908 -
Totex	0.853	3.042	0.222	0.791	4.908
Determination	1.002	2.054	2.936	3.008	9.000
Difference	0.149	(0.988)	2.714	2.217	4.092

The project shows an underspend for the AMP due to receiving a grant of £13,441,601, to support the funding of this project.

## Assurance

## Jacobs

#### 1. Green Recovery Initiative

South West Water (SWW) has compiled its Annual Performance Report for the period 01 April 2024 to 31 March 2025 (APR25). SWW requested Jacobs to provide third line independent technical assurance of the Performance Commitments being reported for SWW and Bristol Water (BRL) for its APR25 submission. This activity included assurance of SWW's Green Recovery Initiative submission. The objective of the assurance activity was to provide an independent opinion on the robustness of a number of information sets.

Jacobs carried out limited assurance in accordance with the International Standard on Assurance Engagements (UK) 3000 Assurance Engagements other than Audits or Reviews of Historical Financial Information ("ISAE (UK) 3000 revised"). The Standard requires that we obtain sufficient, appropriate evidence on which to base our conclusion.

Audits and assurance has been completed on a sample basis for the following elements of SWW's Green Recovery Initiative:

⊘ Knapp Mill water treatment works advancement

- ⊘ Water Resource grid enablement
- ⊘ Green recovery water
- O Green recovery − wastewater
- O Catchment management (Upstream Thinking)

#### 2. Key findings

#### 2.1 Knapp Mill water treatment works advancement

We assessed progress against agreed milestones such as completion of detailed design, civil and M&E construction, commissioning and handover. The reported data and commentary were consistent with the audit information reviewed. All milestones and key deliverables were progressing, with some challenges acknowledged. Performance reflects the increased expenditure in 2024/25. No material weaknesses were identified in the reporting process.

#### 2.2 Water Resource grid enablement

We reviewed schemes for Roadford reservoir (pumped storage scheme) and

Prewley to Northcombe WTW main construction. Our sample-based end-toend data checks did not identify any issues. In addition to financial evidence, photographic evidence of the progress of the schemes was also presented during the audit. Completion of the Prewley to Northcombe main is consistent with our audit of Table 10A.1. No actions were identified.

#### 2.3 Green recovery - water

We found some data inconsistencies generally relating to completion of some data tables (where some data tables required '000s, and others required the full numbers). We found a small amount of information from a contractor had not been included. These findings were corrected after the audits which we confirmed through updates. No other data concerns were identified during spot checks and data validation.

#### 2.4 Green recovery – wastewater

The primary data source is the finance system Ellipse which is audited by the financial auditor and has been reconciled. There is high confidence in this data. We found no material issues but suggest some non-material actions around the assumptions used to split costs between wastewater treatment and biosolids and actions to make the audit trail more robust.

#### 2.5 Catchment management (Upstream Thinking)

SWW is reporting 10,218 hectares for Upstream Thinking projects and 7,169 hectares for Green Recovery projects. This is a cumulative output in the final year of reporting, Year 5 total being 144,120 hectares.

Performance exceeds targets and the outperformance payment band. No material issues or concerns were identified during the audit.

#### 3. Conclusion

Our audits of the principal schemes within the Green Recovery Initiative did not identify any material issues with how SWW is reporting its progress against the deliverables for Green Recovery. We identified some non-material issues which were progressed post audit.

Sajid Hussain

Head of Water Strategy & Regulation