Annual
Allocation
and Impact
Reporting





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### **Our purpose**

## **Bringing water to life**

Supporting the lives of people and the places they love for generations to come

#### **Our values**



#### **Trusted**

We do the right thing for our customers and stakeholders



#### Responsible

We keep our promises to our customers, communities and each other



#### **Collaborative**

We forge strong relationships, working together to make a positive impact



#### **Progressive**

We are always looking for new ways to improve and make life better

### **Summary**

## Our business model is designed to deliver sustainable shareholder value by providing high-quality environmental infrastructure and customer services.

From 2020 onwards, post the sale of our waste management business, Pennon will be solely focused on delivering excellence in the UK water sector.



#### **Key sustainable** outcomes **Total low-carbon Bathing water compliance** energy generation ('sufficient quality' or higher) (including Viridor) 98.7% 1,816GWh **2018: 98.7%** (unchanged) **2018/19: 1,617GWh** (+12.3%) Leakage (megalitres per day) **Drinking water quality -Bournemouth Water** 99.99% **2018: 84** (unchanged) **2018: 100.00%** (-0.01pts) **Sustainalytics score Drinking water quality -75 South West Water** 2018: 69 (+6) 99.98% **2018: 99.99%** (-0.01pts) **Bathing waters** (classified as 'Excellent') 125 **2018: 118** (+7)

#### **Foreword from Paul Boote**



"Ensuring sustainability is embedded into our business leaves Pennon well placed to meet future challenges whilst continuing to deliver essential services to customers."

**Paul Boote** Group Finance Director Pennon Group plc

2019/20 has been a landmark year for Pennon, culminating in the announcement in March 2020 of the sale of Viridor. The transaction recognises the strategic value that has been created over many years. Going forward, Pennon will continue to pursue operational excellence and growth within the UK water industry.

In May 2018, we published our Sustainable Financing Framework (the Framework) aligned to the Green Loan principles (GLP), the Green **Bond Principles (GBP) and the Social Bond Principles (SBP).** The Framework set out our ambition to raise our finance under the Framework with an initial target to secure 25% of our financing needs in this way.

Following the sale of Viridor the Group's focus is now solely on the UK water industry and delivering an outstanding level of service for our customers and communities we serve, while protecting the environment.

During the year to March 2020 the Group raised £245m of new sustainable finance continuing the success of our sustainable financing framework. We are grateful for the support for our counterparties in making sustainable finance available to the Group meaning a total of £845m of sustainable funding has now been raised since May 2018.

This represented c.30% of our total debt raised in 2019/20 and c.70% of that raised for our subsidiary South West Water Ltd. This builds on our success during the first year and is now embedded into our funding process.

Our sustainability strategy has clear three-year objectives and targets set for the Group, with detailed action plans for implementing these targets. We have made good progress during the year with these targets and continue to invest and focus our efforts on further improvements to our environmental performance.

During 2019/20 the Group's capital investment was c.£340m, of this c.£160m was relating to the water business and supports the early K7 regulatory investment focused on ODI delivery.

As the Group looks to build on the success of the first year we look to improve and develop our reporting, the Group including Viridor, generated 1,816GWh of low carbon energy in 2019/20 primarily related to the power supplied from Viridor's ERF and landfill gas fleet which was a significant achievement in the development and transition of the Viridor business. Meanwhile it consumed (including self supply) 734GWh of energy. This meant that overall the Group was an net exporter of low carbon energy in 2019/20. In light of the sale of Viridor, the Continuing Group will become a net importer of energy. We will continue to focus our efforts to both reduce demand as well as opportunities for self supply through further investment in on site renewable energy.

Carbon reduction has always been a focus to investors and the Group achieved CDP B rating in 2019 (up from C- in 2018). In 2020 our Sustainability Committee approved a Group Climate Change & Carbon Management Strategy including a proposed Science Based Target of 35% carbon reduction (Scopes 1 & 2) by 2030. The strategy and target were developed on the basis of the Group including Viridor and therefore will be reassessed to provide reporting to a new target that will be appropriate for the Continuing Group.



The water sector has a stated goal of Net Zero carbon emissions by 2030<sup>1</sup> and we have been working with colleagues across the sector to develop a Net Zero Roadmap for the water industry. This is due for publication in Autumn 2020 and will set out pathways for how the sector could reach 'Net Zero'.

We continue to refine our climate risks analysis based on latest UK climate modelling to inform the 2021 South West Water Climate Change Adaptation Plan (our current Adaptation Plan and related Water Resource / Drought Management Plans are available on the South West Water website). Further details on the Group's climate change risk management and strategy is included within our 2020 TCFD disclosure (see Pennon Annual Report) and our 2020 CDP submission.

This report provides our allocation and impact reporting under the Framework, detailing the finance raised, how this has been utilised and our performance as measured through the key performance indicators (KPIs).

We continue to link our sustainable financing to our sustainability linked KPIs and associated targets to meet the expectations of our customers and stakeholders.

These are:

- Measurement of our overall Environmental, Social and Governance (ESG) performance as measured through an independent rating provider
- Performance against our target to maintain and improve bathing waters which is a top priority for customers in the South West.

To help develop our sustainable approach and strategy we have engaged DNV GL, a leading provider of risk management and quality assurance, who have provided support in key areas, including the independent opinion on the Framework and Impact Reporting, alongside further assurance on projects as our allocations increase.

In South West Water, 2020 saw the final stages of the AMP6 business plan delivered and the challenges of COVID-19 began to be felt across the world.

At Pennon Group, our people – many of whom are designated key workers - have been working hard to ensure services to customers and communities are maintained despite the challenging circumstances. Their health, safety and wellbeing remains our top priority. We recognise their ongoing efforts during this pandemic and thank them for their service.

As we look forward the impact of the global pandemic has resulted in many changes to the way we work, the way we travel and the way we interact both with colleagues and friends and family, it has seen communities come together to meet these challenging times.

These challenges and changes will likely impact the way we live our lives for years to come. Sustainable businesses will be best placed to help meet these challenges making our work in this field even more vital.

Pennon is focused on the responsible and sustainable provision of essential utility services and environmental infrastructure.

Innovation, new technologies and a holistic approach underpin our commitment to delivering service improvement and long-term value.

More information can be found at southwestwater.co.uk/environment/ working-in-the-environment/ climate-change/

Pennon Annual Report annualreport.pennon-group.co.uk

### Sustainability at the heart of the business

Built around our environmental, social and governance (ESG) framework, our sustainability strategy helps us to focus on the positive impact we can have on the communities we serve, and on the environment that we rely on.



It supports the creation of value – financial, social and environmental – for our shareholders and stakeholders.

We have set clear long-term objectives and three-year targets to enable clear monitoring and continuous improvement of our performance in each of our nine sustainability focus areas. These cover the areas of greatest significance and materiality to our businesses, and range from key global issues of carbon reduction, biodiversity and natural capital stewardship, to local community benefits, employee wellbeing and development, and ensuring good governance, quality services and customer satisfaction.

#### **Our environmental focus areas include:**

- Demonstrating leadership in carbon management and climate change adaptation, and in regulatory compliance and pollution prevention
- Proactively protecting and enhancing healthy places, habitats and biodiversity in our operational areas, especially working in partnership with wildlife trusts and other stakeholders
- Showing leadership in natural capital management and resource productivity.

# Environmental improvement programmes and contributing activities include:

- 100% of Viridor and South West Water's sites and operations covered by ISO 14001 environmental management system accreditation
- Active land stewardship on three special areas of conservation, two special protection areas and nine sites of special scientific interest; with nine SSSI Water Industry Environment Programme schemes approved by Natural England and the Environment Agency
- 25 biodiversity enhancement opportunities identified on priority operational sites
- Priority habitats restoration and management programmes, including blanket bog, purple moorgrass and culm grassland
- Five-year biodiversity plan launched, focusing on: county wildlife sites; fish passage and protection measures; natural flood management; river improvements; peatland restoration; and tree planting
- 48,400 trees planted in 2019/20 strong contribution to our 100,000 trees commitment

continued

• Building natural capital - South West Water land holdings in Dartmoor and Exmoor National Parks will be prioritised for active management, as well as 14 sites in areas of outstanding natural beauty (Cornwall, East Devon, Tamar Valley and the Blackdown Hills).

#### Our social focus areas and objectives include:

- · Net gain in our social capital through positive investment and support for local communities, including sponsorship, supply chain partnerships, education services and employee volunteering
- Aiming for the highest standards of health, safety and employee wellbeing in our workplaces
- · Achieving a diverse and productive workforce, reflecting the communities in which we operate, and developing and upskilling our employees through structured programmes and opportunities.

#### Social capital improvement programmes and contributing activities include:

- New Deal plan for 2020-25 to ensure 2025 customer bills are lower than in 2010, and to include extra steps to eliminate water poverty
- Ongoing work with Citizens Advice and social housing associations to support vulnerable customers
- > 25,500 customers are on a support tariff and > 35.000 customers have benefited from one of our other support schemes
- Ongoing Love Your Loo, Think Sink and water efficiency campaigns to prevent blockages and promote good practice, including c.1,300 subsidised or free water butts distributed
- Supporting Refill Southwest: providing hydration stations at public events, permanent community Refill points and distributing reusable water bottles.

#### Our governance focus areas and objectives include:

- · Engaging with our customers, clients and stakeholders, aiming to exceed their expectations, supporting vulnerable customers, and continuously improving our services
- Enabling sustainable supply chain practice and partnerships including human rights, equal opportunities and positive social and
- Environmental values and outcomes
- Strong and transparent governance and a sustainable finance framework, enabling investment, innovation and sustainable growth.

#### **Good governance improvement programmes** and regional contributing activities include:

- Building trust via quarterly WaterShare+ panel meetings in public and a customer annual general meeting from 2020
- Serving a population of 2.2 million
- c.5,300 regional jobs supported via our supply chain, and c.£600 million GVA to Cornwall, Devon and Dorset economies
- Continued participant in the Back the Great South West campaign and its regional growth prospectus
- Ongoing support for the Mayflower 400 initiative, including supporting local social enterprises and promoting Plymouth, Britain's Ocean City.

A clear, strategic and longterm approach to sustainability enhances our business performance, strengthens our resilience, protects our ongoing licence to operate via regulatory compliance and is an integral element of our risk management processes.

### **Sustainable Financing Framework Reporting**

The Group has raised £845m of finance through the sustainable finance framework and the Group continues to find a range of products to meet our sustainable financing goals.

Funding type	Drawn / Undrawn	Amount	Sustainable metric
PLC term loan	Drawn	£210m	SLC
PLC term loan	Drawn	£175m	ESG Score / KPI
PLC term loan	Undrawn	£50m	SLC
PLC RCF	Undrawn	£55m	ESG Score / KPI
SWW leasing	Drawn / Undrawn	£90m	Eligible Green Assets
SWW loan	Drawn	£50m	Eligible Green Assets
SWW loan	Drawn / Undrawn	£70m/£70m	SLC
SWW RCF	Undrawn	£75m	Bathing Water Quality
Total		£845m	

The Framework has allowed the Group to access a variety of instruments which are classified under three headings:

- Term loans from sustainability-linked counterparties (SLC), where the allocation and due diligence is completed by the counterparty before funding is approved.
- Green Financing, where the funding is allocated to eligible green projects under the appropriate guiding principles.
- Sustainability-linked loans and revolving credit facilities (RCFs) linked to specific company agreed KPIs.

This has led to the Group entering into £845 million of Sustainable financing to March 2020. This represented c.30% of our total debt raised in 2019/20 and c.70% of that raised for our subsidiary South West Water Ltd.

As the products are developing, the Group is looking to explore all opportunities whether this is new funding or sustainable deposits.

The development of sustainable and socially responsible deposits has enabled us to start looking into making more informed decisions with regards to how we deposit our cash. This is an area that will be focused on more post-March 2020.

#### Sustainable Financing Framework KPIs

#### **Sustainalytics ESG Score KPI**



We are pleased to see the sustainalytics score improve to our highest rating following our disappointment with the small downturn in 2018. We were confident in our sustainability programme during 2019 and the increase in the score reflects the hard work from all areas of the business in supporting the sustainability focus of the Group.

The Environmental and Social areas of the ESG report have seen positive movements, highlighting some of the areas we have been working on but also identifying areas of the business where we need to review our activities and reporting.

The Governance score has remained broadly in line with last year showing our strong board position which would be expected from a publicly listed company.

We are pleased that both Pennon Water Services and Viridor have achieved the latest ISO45001 accreditation.

#### **Sustainalytics score**



#### **Bathing waters KPI**

Our Sustainability-linked RCFs and loans have been aligned to improvements in our ESG score or to independent company-specific targets such as our Bathing Water Quality. We are pleased to report another successful year with an increase in 2019 to 125 bathing waters being classified as excellent

Bathing Waters are of significant importance to our customers and to the local economy, given the importance of tourism in the region. It is therefore important for South West Water to commit to protecting bathing water quality.

From the £2 billion investment in 'Clean Sweep' during the early 1990s to the award-winning Upstream Thinking programme developed in the early 2000s, South West Water's investment has seen a steady improvement in the number of our bathing waters classified as 'excellent' and an overall improvement in bathing water quality across the region.

Independent monitoring of bathing waters is conducted by the Environment Agency on a weekly basis from May to September each year, with each location classified as either excellent, good, sufficient or poor based on

measurements taken over a period of up to four years.

#### Bathing waters classified as 'Excellent'



#### **The Framework**

Pennon Group developed a Sustainable Financing Framework in 2018, known henceforth as, "the Framework", in alignment with the ICMA Green Bond Principles (GBP)<sup>1</sup>, Social Bond Principles (SBP)<sup>2</sup> and the LMA Green Loan Principles (GLP)<sup>3</sup>. Under the Framework, Pennon Group has issued sustainable finance to support investment across the Group's activities.

Investments made by Pennon are targeted at improving a broad spectrum of outcomes. This Framework supports the financing of our water, wastewater and waste management investments across the Group resulting in activities that demonstrate our environmentally and socially sustainable outcomes.

Whilst focusing on the environmental impacts of the Group's actions, we understand the many and often significant social benefits of various projects. Aligned with the published Sustainability Bond Guidelines 2017 the Group, where possible, will look to demonstrate positive outcomes in all areas.

Pennon Group's activities are expected to focus on, but not be limited to, the following categories from the GBP and GLP.

#### Pollution prevention and control

including waste water treatment,
 reduction of air emissions, greenhouse
 gas control, soil remediation, waste
 prevention, waste reduction, waste
 recycling and energy/ emission-efficient
 waste to energy, value added products
 from waste and remanufacturing, and
 associated environmental monitoring.

Sustainable water and wastewater management – including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban draining systems and river training and other forms of flooding mitigation.

**Climate change adaptation** – including information support systems, such as climate observation and early warning systems.

This Allocation and Impact reporting for 2020 set out our progress throughout the year and provides an update on our performance up to March 2020.

 $<sup>1 \</sup>quad \hbox{Green Bond Principles (ICMA): $https://www.icmagroup.org/green-social-and-sustainability-bonds}\\$ 

<sup>2</sup> Social Bond Principles (ICMA): https://www.icmagroup.org/green-social-and-sustainability-bonds

<sup>3</sup> Green Loan Principles: http://www.lma.eu.com/news-publications/press-releases?id=146

#### **Impact and Allocation Reporting**

The Framework sets out our commitment to annual reporting which provides investors and counterparties with information on the selected projects including, once projects are operational, data such as actual energy saved or improvements in water quality. Quantification of additional environmental and sustainable benefits of the selected projects will also be provided where possible.

We are in the early stages of allocating the funds to specific areas of the business and are now seeing the benefits of this investment and how this can be quantified.

The funds have been allocated to the following categories and these have been detailed in the following areas:

- Water Treatment works, including Mayflower Water Treatment Works
- Wastewater Treatment Works
- Upstream Thinking/Downstream Thinking
- Bathing and shellfish water investment.

A total of £140.0m was released from the Green reserve account for South West Water in the year to March 2020, this included £60m for the Mayflower Water Treatment Works and the remaining funds allocated to the areas above. This was the first allocation of funds to South West Water projects and all projects were linked to the Green Loan Principles categories as detailed under the Framework.



# Sustainable Water and Wastewater Management

# Total allocation £74.75million

including £60m for the Mayflower Water Treatment Works.

Water Treatment Works upgrades and repairs will help to improve and maintain the quality of water in our network.

#### **Water Treatment Works**

Our compliance with water quality standards are reported each year with our target to achieve greater than 99.98% we remain currently at 99.98%.

One of the forms of investment is the use of Granular Activated Carbon (GAC) processes. These were delivered in AMP6 and we are providing water quality benefits by reducing the risk of pesticides, taste, smell and disinfection by-products.

Improving further the quality of water supplies has continued during the 2015-20 with South West Water investing around £20m in new GAC processes at treatment sites across the region. We have completed schemes at Tamar and Northcombe Water Treatment Works (WTW) serving areas of North Cornwall and North Devon and during 2018/19 at Tottiford WTW, which supplies areas in South Devon and was commissioned during 2018/19. This builds on previous similar investments at water treatment works across our operating areas over the last 15 years: Drift and Wendron WTWs (West Cornwall), Restormel WTW (Mid Cornwall), Allers WTW (Tiverton) and Pynes WTW (Exeter).

In Bournemouth Water, GAC schemes are also being delivered at Alderney WTW and Knapp Mill WTW. There is significant investment in the Bournemouth area as we are replacing the old slow sand filtration processes with ceramic microfiltration and GAC, similar to Mayflower WTW which has recently been commissioned in the Plymouth area.

GAC technology brings multiple benefits for water supplies. It is a specially engineered porous material with a large internal surface area – just one teaspoon has the same surface area as a football pitch. Due to its large surface area and special surface chemistry, it can remove natural and man-made organic matter sometimes presenting in our water resources such as residual agri-chemicals and the natural precursors of taste and smell in supplies. The activated carbon material is used in granular form in filter beds through which water is passed to remove trace impurities during the water purification process.

Our GAC schemes are designed to complement existing treatment technologies and are often installed alongside other modern treatment technologies such as Ultraviolet (UV) disinfection. UV disinfection uses UV light to destroy harmful bacteria and viruses sometimes found in untreated waters.

Completion of all of the GAC schemes described here will mean that the majority of our customers (approximately 75%) will benefit from the additional protection provided from GAC technology.

#### **Impact and Allocation Reporting**

continued

#### **Sustainable Water and Wastewater Management**

#### **Water Treatment works**

continued

#### Mayflower Water Treatment Works – 2020 update

Mayflower went into supply continuously on 3rd August 2020 and we are in the process of steadily increasing the output flow, which is blending with Crownhill WTW to ensure a gradual transition for our consumers – this will take at least three months. During September 2020, approximately 30% of Plymouth's drinking water supply was from Mayflower WTW. The treatment has been stable since going into supply and we are continuing to optimise the treatment process during this time.

During the commissioning stage the facility was the first plant to feature a new iSCADA platform, this uses over 3000 data inputs from the plant, SCADA (Supervisory Control and Data Acquisition) technology provides the means to monitor and control distributed system from a central location, however Mayflower have integrated a new technology, iSCADA which allows the plant to be monitored and managed remotely in the field. It effectively creates a 3D view of the plants operation, monitoring flows both in and out which can be adjusted to ensure that demand is met efficiently and any changes can be made in a timely manner to reduce wastage.

Challenges during commissioning to ensure all the relevant data was available meant additional time was required to ensure as much data as possible was being provided to create new ways of working at this "state of the art" facility.

The new system was tested rigorously in this important process and has provided useful lessons that will be utilised when completing new facilities in our Bournemouth area over the next AMP period.

The monitoring and remote connectivity mean the plant can be shutdown and restarted in around 30 minutes, which is more efficient than other more traditional water treatment processes and will mean disruption to supply can be minimised. The facility was consistently providing 10MI/d capacity during commissioning and is now recording an average daily output of 20MI/d to be blended with the Crownhill WTW supply. Mayflower is designed to treat up to 90MI/d, once the blending is completed over the next few months, Mayflowers treatment is expected to reach 55MI/d showing the significant future proofing capacity factored in and the ability to increase and decrease flow quickly will mean efficient water treatment in line with forecasted requirements in the future without further investment, this has seen a reduction in the amount of water needing to be stored making the process more effective.

The integration of iSCADA has been a huge success at Mayflower, the ability of being able to access SCADA remotely has providing many benefits:

- Decreased number of operators required on site
- Decreased number of vehicles movements
- Decreased downtime.

iSCADA has also provided an increased monitoring for demands. From this, Mayflower can either increase or decrease flows. This has lead to the construction of a new pumping station, Lopwell pumping station was constructed to supply water to Mayflower WTW, the purpose of this was to reinstate the River Tavy as a raw water source, to supplement the existing Burrator Reservoir and River Tamar raw water sources. The Plymouth area for a long time has seen low natural water resources and the need to distribute water around the area to meet demand. Mayflower is meeting the targets set for the new facility and the new pumping station will combine water resources in the area to continue to meet increased demand. This will help meet a number of regulatory, customer and operational risks.

Find out more at southwestwater.co.uk/mayflower



## **Sustainable Water** and Wastewater **Management**

## **Total allocation** £49.3million

South West Water's wastewater treatment works consented discharges are governed by either 'numeric' or 'descriptive' permits. Numeric consents place measurable numeric conditions on the final effluent. whereas descriptive permits may impose narrative conditions upon equipment used and /or impacts upon the environment which must be prevented.

#### **Wastewater Treatment Investment**

We report performance annually for percentage compliance with each of these categories of permit as well as percentage compliance with permit on a population equivalent basis.

South West Water has invested significantly in wastewater treatment, both in the network and improving the quality of the water being released back in to our rivers and other waterways.

Some of these improvements involve the use of additional processes which remove more ammonia and phosphates from the water which can be harmful to the environment.

Capital maintenance refurbishment of some of our sites will help maintain and improve our permit compliance.

During AMP6 we installed 15 Phosphorus reduction schemes costing c.£12.5m and two ammonia reduction schemes costing £3.7m.

For AMP7 we will be installing 30 Phosphorus reduction schemes with a current investment planned of c.£29.9m. We are also carrying out a full scale trial of an innovative new method for reducing phosphorus using algae at one site, which if successful could lead to new chemical free processes being installed late in AMP7 or AMP8.

For ammonia removal we have eight schemes in AMP7 with a total investment of c.£8,6 of which will require biological process enhancements and two that relate to increased storage of storm sewage to reduce ammonia loadings on the receiving watercourses.

In AMP7 there are also 13 wastewater treatment works with schemes identified to increase flow to treatment, so reducing intermittent spills to the environment. There is also a requirement to build increased storm storage at 59 sites, which will also reduce intermittent spills to the environment. This will require significant investment and see improvements to our wastewater system.

With regard to UV disinfection, we have a continual programme of refurbishment to maintain compliance, rather than improve compliance. That said we do in AMP7 have a programme of work to completely replace the UV system at Plymouth Central as the plant is coming to the end of its useful life.



# Sustainable Water and Wastewater Management

# Total allocation £3.7million

Upstream Thinking is reducing diffuse pollution and agricultural run-off into the region's rivers, estuaries, bathing waters and reservoirs.

# Upstream Thinking and Downstream Thinking Investment

There are two main strands of work for Upstream Thinking:

- 1. Working with the agricultural community to promote and support environmentally safe farming
- 2. Restoring wetlands and peat bogs.

Downstream Thinking is a catchmentbased approach to alleviating sewer flooding from our wastewater networks helping to accommodate more house building and reducing pollution of watercourses.

We have invested over £20m in building the resilience of the drinking water supply in these catchments through Upstream Thinking, and this has been more than doubled by partnership match funding.

Over the last five years, we have engaged with farmers managing over 70,000 hectares, delivered over 864 farm plans and follow-up grants worth £1.72m, and restored 1,059 ha of peatland on Exmoor, Dartmoor and Bodmin moors.

Working in partnership with other agencies and the community,
Downstream Thinking incorporates a range of activities including retrofitting
Sustainable Drainage Systems (SuDS),
Natural Flood Management (NFM),
targeting sewer misconnections, and tackling sewer misuse.

The long-term benefits of Upstream Thinking include:

- Reducing the resources (i.e. chemicals) needed to intensively treat water
- Increasing biodiversity
- Reducing energy use for water treatment
- Potentially delaying the need to upgrade water treatment works
- Less contaminated water reaching our bathing and shellfish waters
- Increased catchment storage in wetlands and mires adds to the baseflow of river water supplies
- Flood risk mitigation through peak flow reductions
- Protection of groundwater supplies, reservoirs and other water supply assets.
- Total reductions of nutrients like phosphorous and Nitrates entering our rivers and estuaries
- Carbon capture and storage.

There have been some great successes over the upstream thinking programme showing collaborative working with partners and the community to meet the combine objectives of these groups.

The following points offer a concise summary of the accomplishments during AMP6:

- All UST2 projects completed and ODIs exceeded
- 5,713 acres of restored or created habitat (46% above ODI target of 3,213 acres)
- 864 Farm Water and Environment Plans created (23% above ODI target of 700).

Cumulative starting position on AMP7 ODI of 73,150 ha of active catchment management within the farm plan areas (15% above the Ofwat target of 63,209 ha). This was made possible as South West Water achieved fast track status from Ofwat for our 2020-2025 Business Plan, allowing us to get a headstart on our plans.

In addition to grant distribution, workshop organisation and event hosting by the UST Delivery Partners throughout AMP6, the work that contributed to the ODI achievements over the last five years has included:

- 2,721 acres of mire restoration on Exmoor, Dartmoor and Bodmin moor, supported by a £2m grant from Defra
- 1,114 acres of culm restoration by Devon Wildlife Trust
- 1,878 acres of other habitat managed, restored or created for biodiversity and water outcomes
- 246 farm improvement grants to farmers – worth £1.72m and doubled by their own match-funding contributions
- 24,461 trees planted; South West Water's first contribution towards the Water UK commitment to plant 11 million trees nationally.

# Upstream Thinking

More information can be found at southwestwater.co.uk/environment/upstream-thinking/

#### Upstream Thinking Case Study: Rights of Way Repairs

The Rights of Way repairs program launched at the beginning of UST2 in 2015, the Headwaters of the Exe catchment management programme focused on improving water quality and other ecosystem services in the upper part of the River Exe catchment, most of which lies within Exmoor National Park.

The Upper Exe catchment primarily comprises farmland and moorland areas, with woodlands along many of the watercourses. The main uses for land within the catchment are upland farming, forestry and game shoots. Recreation and access are also very important in this catchment.

#### **Benefits**

This exercise was used to target restoration works to paths with the highest risk of erosion and pollutant run-off - usually those which run steeply downhill towards watercourses or those which run in close proximity and parallel to watercourses, with potential to wash sediments and other pollutants into rivers during times of flood. As well as achieving its primary aims of improving water quality and supply, the programme also delivered numerous other benefits which dovetail neatly with the outcomes of South West Water's long-term business plan, including resource protection and wider ecosystem services. The programme helped to build resilience to extreme conditions and climate change, particularly through addressing increased run-off and associated diffuse pollution arising from compaction and damage to tracks and rights of way.

In wider terms, the project has also proved advantageous to the local community in terms of recreation and tourism, and creating volunteering opportunities.

#### **Results**

Working closely with local contractors and Westcountry Rivers Limited, ENPA met and exceeded their initial target, successfully restoring 6km of continuous path, with overall improvements to rights of way extending over 17km.

The nature of the land within the catchment meant that, on several other occasions, additional assistance was sought. In 2018, ENPA teamed up with the Commando Helicopter Force to move 60 tonnes of local stone needed for repair work along the Two Moors Way near Simonsbath









Before & after – footpath restoration: Two Moors Way near Simonsbath

Before & after – section of path adjacent to the River Barle

# Sustainable Water and Wastewater Management

# Total allocation £17.4million

There are 137 designated shellfish waters in England, 24 of which are in South West Water's region. The Environment Agency estimates that industry associated with shellfish production in the south west is worth £5.35million a year.

# Bathing and Shellfish Water Investment

South West Water has invested around £78million to improve shellfish water quality since 2000 across the region.

Customers in our region continue to place a high priority on protecting the environment from flooding and reducing storm overflow discharges from our wastewater treatment works and sewerage network which may impact on rivers, shellfish and bathing waters.

Again, a basket of measures are required to ensure these expectations are realised from protection of our treatment facilities through to the management of our wastewater network and catchment based initiatives designed to alleviate sewer flooding and protect the environment.

The aim of our Shellfish Waters programme is to meet legislative requirements to protect or improve designated shellfish waters (SFW) in order to support shellfish life and growth, contributing to the quality of shellfish products produced in commercial shell fisheries.

This investment will help us deliver our commitment for reducing storm overflow discharges and in doing so, support our regional community and economy.

The 2010 Shellfish Waters Directive placed a new obligation on SWW to 'endeavour to meet' the Shellfish Waters Regulations 'Guideline' Standard.

The company has an ongoing programme of investigations that look to feed into the planning and delivery of our AMP7 and future considerations.

The outcomes lead to a mixture of sustainable natural solutions and larger capital investment projects which have included UV disinfection installations, additional storm water storage and sewage treatment upgrades.

The business has made a performance commitment to improve the company Environmental Performance Assessment (EPA) score from 2\* to 3\* by the end of AMP6 and to achieve 4\* status by the end of AMP7.

In AMP6 the new Bathing Water quality standard required the company to meet at least 'Sufficient' standard under the revised bathing water directive (rBWD) which is approximately twice as stringent as the Mandatory pass standard under the previous BWD. We have worked hard to challenge the specific requirements with the Environment Agency to ensure that the investment requirement is well evidenced and that where there is uncertainty, investigations are carried out first.

The AMP6 investment will support the outcomes of the investment plan in 'Benefiting the Community' and 'Protecting the Environment'. Outputs include:

- Reduced overflow discharges frequencies/volumes through storm water storage or surface water separation
- UV disinfection of wastewater effluent
- Event/Duration monitoring of overflow discharges
- Water quality investigations to inform future investment.

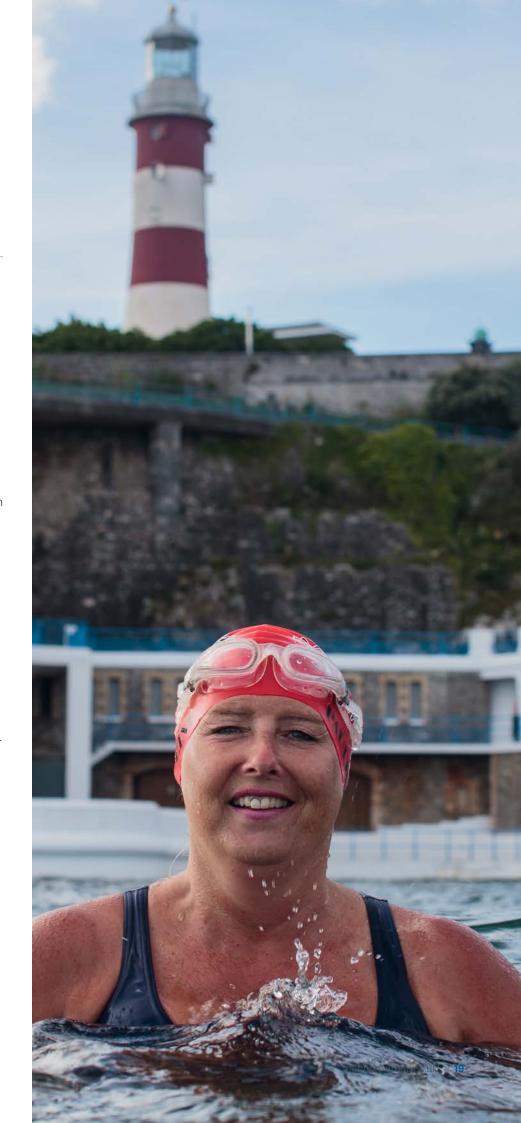
Our 2020 target to achieve 100% compliance with the rBWD at bathing waters that can be impacted by the operation of our assets was met.

There was £42m included at PR14 in the Business Plan for Plymouth Bathing Waters, which was accepted by Ofwat and this project has now been completed, it has allowed significant upgrades to its wastewater infrastructure across Plymouth to further improve water quality in the Plymouth Sound and protect bathing water quality at Plymouth Hoe East and West beaches, both of which have been rated 'Excellent' every year since the tougher new standards were introduced in 2015.

The capital investment included improving key storm overflows across the city, removing surface water from the sewerage network in Cattedown and increasing stormwater storage capacity in Stonehouse.

Ultraviolet disinfection technology has also been installed on the storm overflow at Plymouth Central Wastewater Treatment Works. This is the largest UV treatment plant of its type for intermittent storm overflow discharges in the UK.

As noted earlier in the report, bathing water quality is a key objective of the company and has seen improvements in the number of excellent classified bathing waters in the last three years. This helps to support the local economy and the tourism industry in the South West.





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