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Our strategic priorities

# Water quality and resilience









## **Executive summary**

Our business plan is the right plan for right now and it delivers against our customers' top priority - setting us up to deliver safe and reliable water supplies into the long term.

We have strong support from the DWI but we recognise there are areas of challenge from Ofwat we need to consider.

As we move from K7 to K8, our objectives remain clear – increase the availability and transferability of water resources, ensure safe clean drinking water, encourage efficiency and deliver on leakage.

If we consider our deliverables since our submission in October, fundamentally we have broken the cycle of drought, achieving 100% strategic reservoir capacity for Devon and Cornwall ahead of target, with around 1/3 of the improvement directly because of our interventions, supported by the increased rainfall we have experienced.

This has been a monumental undertaking, from teams across South West Water and our supply chain.

At pace, we have opened 2 reservoirs at Blackpool Pit and Hawks Tor, alongside a number of pump recharge schemes and increased treatment capacity at Rialton.

We are also on track to deliver a 2-phase desalination scheme for Cornwall. This has resulted in us being able to deliver on our 2025 target for Devon a year early with an increase of 30% resource availability. We are on track for a 45% increase in resource availability in Cornwall, with 30% delivered to date.

There are always two sides to the coin, yes it's about diversifying our portfolio of resources but also reducing demand.

We are delivering on our leakage targets. Our comprehensive suite of sector-leading demand reduction schemes, are focused on supporting customers to use less water and save money, with over 500 water saving devices issued every single day. We are also piloting trial tariff schemes to better distribute charges and encourage water efficiency.

And whilst we have protected water resources, water quality continues to be a focus. In 2023/24 we have delivered a step change in quality performance on the Isles of Scilly, with zero failures of water treatment processes for Devon and Cornwall, with the new Bournemouth treatment work schemes in progress. We have a robust action plan in place for Bristol to address the legacy issues we inherited.

Of course, there will be lessons to learn from the heartbreaking Brixham cryptosporidium outbreak in May this year – we are working to fully understand the event, whatever the conclusion, it is our responsibility to deliver safe, reliable and clean drinking water to all our customers.

Our objectives for the 2025-30 plan have not changed, and our performance since our submission puts us in a good position moving into K8.

## Water Quality - areas of alignment

- Support for our lead replacement programme which will reduce the risk of lead exposure for 38,000 customers
- Agreement for the need for our water quality improvement programme at our WTWs, particularly our larger schemes in Bristol, which will improve CRI performance by providing protection against further raw water deterioration
- Agreement for majority of Performance Commitment Levels (PCLs), which are stretching but achievable
- Broad alignment of base allowances so that we can continue to deliver our maintenance programmes across our regions

#### Water Resilience - areas of alignment

- Support for the further development of our Strategic Resource Options (SROs) so that the three West Country Water Resource Group schemes progress towards stage three of RAPID's process
- Additional allowances for water efficiency investment for customers of Devon and Cornwall
- Agreement for majority of Performance Commitment Levels (PCLs), which are stretching but achievable

In our October submission we set out an ambitious plan for drinking water quality and resilience which requires transformative levels of investment to secure clean and sufficient water into the future. This sits alongside our long-term plans for water resources to enable us to meet the challenges of climate change, population growth and current/emerging water quality risks.

The regions we support are very varied and stretch from the Isles of Scilly to Devon, Cornwall, Bournemouth and Bristol.

For all of these regions, water quality and resilience is at the heart of our 25-year long term delivery strategy, which will see us transform our management of water resources by 2050. In the next asset management period (AMP8) we will upgrade water treatment works to meet the latest standards for drinking water, reduce the risk of lead pipes and address emerging contaminants. We will continue to manage our water sources and treatment methods to prevent deterioration in raw water quality. We will also rebalance water supply with demand to reduce the impact of abstraction on sensitive sites and provide a greater level of resilience to drought by developing further new sources.

Our October submission identified the need for £295m of total enhancement expenditure for water quality improvements and £379m for improving water supply resilience. This is in addition to base expenditure of £1.5bn across water resources and water network plus price controls.

It is with a regional context, that we have considered the Draft Determination, key aspects to note are:

- Our K7 water resource availability and water quality performance is tracking as anticipated in our plan
- For Bristol, we welcome the Draft Determination recognition of support for our lead renewal and castiron mains replacement programmes.
- For Bristol, we are representing on the scale of challenge applied to our Strategic WTW's and WTW upgrades.
- For Devon and Cornwall, we welcome the Draft
  Determination recognition of the need for an increased
  focus on demand management through water
  efficiency and metering.
- For Devon and Cornwall, we are representing on scale of challenge to our WTW upgrades as well as the lack of support for our cast iron mains renewal programme. We also disagree with the level of mains renewals from base maintenance funding in our South West region, the investment allocation for our Restormel WTW capacity increase and the limited support for our resilience interconnectors.
- From a regional water resources plan, we welcome the opportunity to further develop our Strategic Water Resource options, and we are representing upon the low levels of enhancement funding for leakage reduction and the need for interconnectors to secure resilient supplies.

## Support for business plan key outputs within the draft determination

Key outputs to 2030 and levels of support within the DD, ranked from High ( ) ( ) to Low ( )

## **Bristol region**

- Completing major upgrades to two major water treatment works supplying the wider Bristol area (Stowey and Littleton)
- Replacing 9,000 lead pipes serving properties
- Reducing water demand by reducing leakage in a region which already has comparatively low rates of leakage and installing 150,000 smart meters

## Isles of Scilly

- 31.5km of sewerage pipes
- 25 new pumping stations
- 3 new treatment plants

## Bournemouth region

- Continuing our programme of major upgrades to treatment works
- Reducing water demand by installing 100,000 smart meters



## Water

- Completing major upgrades to ten water treatment works supplying East Devon, Exeter and Tiverton, as well as improvements to seven further works supplying mid Devon and East Cornwall
- Replacing 88km of cast iron mains that can affect how your water looks
- Reducing water demand by reducing leakage by 15%
- ✓ ✓ Installing 350,000 smart meters
- Investing in 8 new sources of water supply
- Installing 5 new strategic interconnectors schemes and one mains pipe totalling 70km

## **Overview**

Since our business plan submission, we have continued to engage with our customers and our WaterShare+ Panel



Customers' number one priority is to ensure the basic requirement of a clean, safe drinkable water supply is protected and maintained – as it was at PR14 and PR19.

Resilient water supplies are also a must for customers and stakeholders. Our customers accept that from time-to-time usage restrictions may be appropriate. However, they have been clear with us - they do not want us to resort to usage restrictions except in the most severe of events. To achieve this, we need to invest in climate independent sources of water and a more diversified portfolio of raw water sources. Rather than rely on a single approach or solution customers want to see a portfolio of supply options in our water resource plans, with storage solutions and repurposing existing bodies of water considered to be the right solution to address future droughts.

Across all our water supply areas our different customer bases want us to prioritise reduction in leakage, which they rightly see as waste of a precious resource. Customers are generally unaware of the large leakage reductions that we have made over the last twenty years and there is even less awareness that about one third of leakage is from the pipes and plumbing owned by customers. We know that leakage is seen as a waste of water and money – and it is a hurdle to water efficiency messaging. Thus, remaining a priority area for improvement.

Continuing to provide a reliable and safe water supply over the long term in the face of climate change, population growth and existing and new water quality risks, is a real challenge which can only be addressed by significant and sustained investment, as well as working with all the key actors across our water supply catchments. There is an intrinsic and intricate link between the health of these catchments and the availability and quality of water which we abstract and store, before treating to high standards and distributing to c.3.5 million people across our regions.

Our water quality and water resilience plans are the most ambitious plans in the Greater South West in decades and lay the cornerstone of our 25-year plans, which will see leakage reduced by 30%, per capital consumption reduced from c.144 l/p/day to 130 and lead communication and supply pipes eradicated. Our K8 plans have been agreed with the Drinking Water Inspectorate and Environment Agency via our DWI Appendix B and Water Resource Management Plan submissions respectively.

Our plans were costed based on industry best practice and validated by third parties. We applied a 17% efficiency challenge to our enhancement costs (a £137m reduction) and a 13% challenge to base costs ahead of submission.

The remainder of this document covers our water quality and water resilience programmes separately. We highlight the impact of the DD on our ability to deliver against customer priorities and our ask of Ofwat for the final determination.

## **Water quality priority**

## **Our plan**

Our long-term delivery strategy sets out our ambition to deliver high quality drinking water by systematically reducing risks from source to tap, including lead free customer pipes by 2050.

Our K8 plans continue to be founded on protecting the health of our rivers (the source of 90% of our water supply) – increasing investment in our award-winning programmes of agricultural, peatland and forestry land management, along with investment in restoration initiatives. These activities form part of our 'Net zero and environmental gain' priority.

Not all issues can be addressed at source and so we will deliver the most ambitious programme of water treatment upgrades in decades, with one third of our water treatment works being upgraded. To stay ahead of future water quality risks and challenges, we will continue to invest in R&D, through leading university research facilities, aimed at improving our knowledge of emerging contaminants such as forever chemicals and micro plastics.

To address water quality risks created through our network, we will deliver the most ambitious programme of lead pipe replacement in the sector. This investment sits alongside the removal of cast iron distribution mains that we know are causing water discolouration issues for customers.

The investment required totals £295m of enhancement expenditure (post efficiency) during K8, after a challenging efficiency level was applied at 17% (£60m).

Our plan aligns to our priorities in the current AMP period and so we have already made good progress, delivering our Quality First transformation and extending our programme to the Bristol region. This is significantly benefiting unplanned outage performance at our WTWs and it has allowed us to effectively prioritise our K8 investment towards our WTWs with the highest water quality risks. In addition, we have delivered a programme of water quality improvements on the Isles of Scilly, which have reduced CRI impact by five times.

## The Draft Determination

Key outputs to 2030 and levels of support in the DD, ranked from High ( ) to Low ( )

$\bigcirc \bigcirc \bigcirc$	Investment in R&D to improve our knowledge and understanding emerging contaminants e.g. PFAS/ Micro Plastics, as well as completing 33 investigations to improve our understanding of water quality and environmental risks
$\bigcirc \bigcirc \bigcirc$	Making serious headway against our ambition to be lead free by 2050 through the replacement of 38,000 lead pipes for our customers between 2020 and 2030
$\bigcirc \bigcirc \bigcirc \bigcirc$	Continuing to improve water quality for everyone in Bournemouth via upgrades to our WTWs
$\odot$	Expanding our catchment management programme to include 12,500 additional hectares of land for natural water filtration
$\bigcirc$	Managing the risk of raw water deterioration through adaptive treatment at seven works
$\bigcirc$	Replacing 122 km of cast iron mains as we move into phase five of our discolouration strategy
$\bigcirc$	Ensuring world class drinking water that meets stringent water quality standards
<b>⊘</b>	Reducing customer SWB complaints about water quality by 39% and BRL complaints about water quality by 1%
<b>⊘</b>	Completing major upgrades at two of our larger treatment works in Bristol
<b>⊘</b>	Upgrading five treatment works in Devon and Cornwall for water quality and increasing treatment capacity at our strategic treatment works in Cornwall (Restormel) ensuring resilience against future population and tourism growth in our region

#### Areas for further consideration

Our main concerns are largely the level of efficiency applied to our WTW upgrade programmes. For example:

## £59m reduction is applied to our DWI water quality programme.

This level of challenge makes these critical schemes unrealistic to deliver within given allowances being set at -c.50% of engineering costed estimates. A significant proportion of this challenge is applied in Bristol where our historic CRI performance needs to be addressed most.

## £32m challenge to the K8 element of our Littleton WTW scheme in Bristol.

This scheme is the single largest scheme in Bristol with the most efficiency challenge applied. This is due to our phasing of maintenance into K9. This phasing is necessary to deliver all of the water quality improvements in our Bristol region.

## £33m removal of our cast iron mains discolouration improvement programme in our South West region.

This scheme aligns to our discolouration strategy of firstly upgrading WTWs for manganese removal. It is a critical investment for our South West region to improve water quality sustainably. The alternative is to manage discolouration through flushing which we know is short-termism and unsustainable.

These unrealistic efficiency challenges risk encouraging us to explore alternative solutions that are less robust and unacceptable to the DWI. This is clearly an area we would never take such a risk, so we address this challenge through the provision of additional evidence to demonstrate that our costs are efficient and that we have appropriately considered any overlaps with base maintenance.

In some cases, we further demonstrate that the investment need is due to external factors such as raw water deterioration with supporting third party evidence.

We are also concerned by the lack of support for our cast iron mains replacement programme for SWB, despite Ofwat providing full support for the sister programme in our Bristol region. The renewal rates from base maintenance, before enhancement allowances are considered by Ofwat, are much higher than our long-term deterioration and performance models suggest is necessary for SWB.

Whilst these models support a much lower rate for South West Water - they do show this need for our Bristol region which is why we included 0.3% from base maintenance in our submission.

This results in £33m of disallowed costs for cast iron mains renewals. This is a specific programme of mains replacement targeted at assets which we know to be causing discolouration contacts. We evidence this need and separation from base maintenance to justify this investment.

We are pleased that our lead pipe replacement programme is supported in full and that we can make substantial progress into R&D for emerging contaminants and micro-plastics.

Lastly, Ofwat wish to include additional allowance at FD for new operational resilience schemes (£9m). However, our investment plan adequately includes for resilience schemes from SEMD, Cyber Security and through our programme of resilience interconnectors. We do not make additional representation for funding above these levels.

## **Base totex**

Our base allowances in the draft determination for water network plus was +£74m¹ (SWB) and -£82m (BRL) providing a net total of -£9m. However, the introduction of the mains renewals PCD set at 0.3% per annum means this comparison is not on a like for like basis. Our whole-life asset performance models do not support the need for this renewal rate for South West Water and this PCD would put undue constraints on our base maintenance programme.

This net decrease would be more material if Ofwat had not intervened to reduce our business rate forecasts by £73m. We disagree with this adjustment, and we provide evidence to support our forecasts which we know will increase as rates increase formulaically with revenues. Further information on our representation for business rates is included in our Cost & Efficiency representation.

Within our base allowances Ofwat has applied symmetrical cost adjustments claims. These include adjustments for water mains (BRL) and water meter renewals (SWW and BRL) totalling +£63m. Our view is that our plan was underpinned by robust base maintenance models which identified activity levels required to maintain asset serviceability. We will forego the increased allowances for mains and meter renewals and revert to the output levels in our plan.

On balance we believe our business plan was stretching and efficient and we are seeking our Final Determination to align to this.

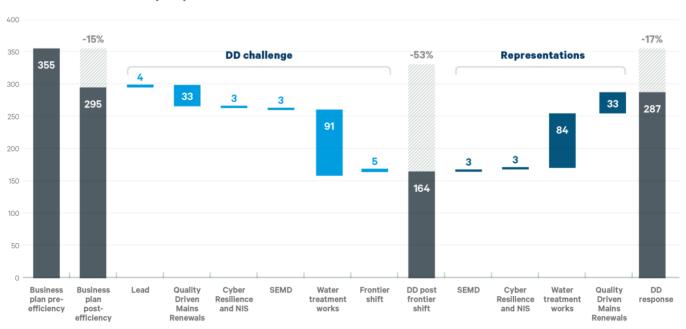
## **Enhancement totex**

Our business plan identified £355m of enhancement totex to deliver our water quality priority. We then applied a 17% efficiency challenge, which gave a totex target value of £295m post efficiency. The draft determination has removed a further £126m (35%), allowing £169m. This equates to £186m reduction (52%) against our pre-efficiency plan. A frontier shift of c.£5m was then applied, which takes this total challenge to £164m or 46% against our pre efficiency plan. An overview of this is provided below.

	Output	BP Totex pre eff*	BP Totex post eff *(submitted)	Totex DD*	% change vs BP post eff	DD Response*
Lead comms and supply pipe replacement	• 38,000 lead pipes	72	60	64	7%	64
Cast iron mains replacement	122km cast iron main	51	43	10	-76%	43
Security and Emergency Measures Directive (SEMD)	<ul> <li>Additional alternative water supply capability</li> <li>Additional emergency power generation capability</li> </ul>	6	5	2	-64%	5
Cyber Resilience and NIS**	•	17	14	11	-20%	14
Water treatment work upgrades / new builds	<ul> <li>7 major upgrades / new build</li> <li>7 PAC treatment facilities</li> <li>2 chemical dosing upgrades</li> <li>1 new GAC process</li> </ul>	199	173	82	-53%	167
Total		355	295	169	-43%	292
Total post Frontier Shift		355	295	164	-44%***	287

<sup>\*</sup> Includes Accelerated delivery

#### **Enhancement totex - Water quality**



<sup>\*\*</sup>Cyber Resilience and NIS: note that this does not include £1m allocated to retail

<sup>\*\*\*-54%</sup> variance from business pre-efficiency

## **Price control deliverables (PCDs)**

We are accepting of PCDs linked to our Water Quality improvement programme. In general, they seem logical and the timelines are aligned to your delivery plans. However, we ask Ofwat to consider the following adjustment for Taste, Odour and Colour PCD.

PCD	Adjustment / why
Taste, Odour and Colour	We propose adjustments to Ofwat's non-delivery payment rate for Taste, Odour and Colour.
and Colour	We recommend that payment rates are tied to the value of each scheme, rather than the average scheme value. This will ensure companies have strong incentives to deliver both large and small schemes.

## **Performance Commitment levels**

Ofwat's targets align to our business plan, with the exception of water quality contacts, where Ofwat has changed the end target level (BRL) and the glide path to the final target (SWB). We do not agree with these changes to our plan because the profile does not match the enhancement expenditure profile and the level of stretch is beyond what we believe to be achievable from our investments. Furthermore, Ofwat's changes do not account for the new definition of this measure.

Ofwat also makes several changes to ODI design which we do not agree with as they create unreasonable penalty risks. We cover these further in our Outcomes representation.

## Adjustments required in the final determination

Our water quality enhancement programme delivers a combination of large discrete schemes and specific programmes of activity. Examples include new process upgrades at our Water Treatment Works, and a large-scale lead pipe replacement programme.

In all cases, we have agreed the solution with the DWI and we have developed our schemes in-line with best practise engineering solution development and costing. These were then validated by an independent third party. This information was provided to the DWI and summarised for Ofwat in our business plan submission.

For this reason, we are unable to accept efficiencies of the magnitude and we are providing this additional evidence in our representation so that are costs are large restated to our business plan submission.

Following receipt and consideration of this evidence we ask Ofwat to:

#### Adjustments to base expenditure in the WN+ price control

Area	Adjustment / why	£m
Business rates	Align to our forecast to remove cashflow risks	+73
Symmetrical CACs	Removal of these additional costs from Ofwat which we included for in our base modelling originally	-56
Leakage CAC	Recognition of this cost adjustment claim given our frontier leakage performance and need to adopt the long-term best value approach to leakage management	+10
		+27

## Adjustments to enhancement expenditure

Area	Adjustment / why	£m	
WTW Upgrades	Overturn the deep dive challenges through the provision of additional evidence		
Strategic WTWs	Overturn the deep dive challenge in appreciation that the base allocation for Littleton is phased into AMP9 and returning a lower level of efficiency that was applied to Bratton Fleming and Stowey WTWs in receipt of additional information (as above)	+49	
Cast iron mains (SWB)	Reinstatement of our cast iron mains programme recognising this is a specific enhancement programme to manage discolouration contacts over a longer term planning horizon	+33	
SEMD	We are representing our original £5m Plan but correcting for a misallocation between water and waste. We are moving £1m from Waste to Water.	+1	
		+118	

## **Adjustments to PCLs**

PC	Adjustment / why	From (29/30)	To (29/30)
Water quality contacts (SWB)	Ofwat adjusted the in-period profile. The SWB profile was linked to our planned water treatment works upgrades – we expect enhancements to materialise after 2028-29.	0.87	0.87
Water quality contacts (BRL)	Ofwat's revisions for the BRL would result in the region being instructed to deliver upper quartile levels of service (with no additional investment to meet these PCLs).	0.62	0.82

## **Adjustments to PCDs**

PC	Adjustment / why
Taste, odour and colour	We recommend that payment rates are tied to the value of each scheme, rather than the average scheme value. This will ensure companies have strong incentives to deliver both large and small schemes.

## **Water resilience priority**

## **Our plan**

The past five years have shown how rapidly the climate is changing and how unforeseen events such as the global pandemic can test our water resilience.

Our population is growing, and we estimate over half a million more people will live and work in our region by 2040. This is on top of the population growth that the South West has experienced over the past 10 years, with the region experiencing one of the highest net migration levels in the UK.

Our long-term delivery strategy sets out our ambition to meet future demand and boost resilience, balancing the needs of customer and communities with those of the environment through careful management of our catchments. To do this we need to:

- Create greater capacity through a diverse portfolio of water resources, strategic regional resources and interconnectors to create one large, flexible regional grid of connected resources which can be directed to where they are most required from time to time.
- Protect and boost river flows, reducing abstraction from sensitive locations and optimising releases from our reservoirs to manage river flows throughout the year. Rainwater harvesting and nature-based storage solutions play an important role in this future.
- Reduce water demand, more than offsetting the increase in demand from half a million more people living in our region by 2040. To do this we will need to reduce leakage still further and support customers to use less water, meeting Environment Act targets of a 50% reduction in leakage by 2050 (from 2018 levels) and per capita consumption levels of 110 litres/person/day (compared to c.144 litres currently).

Our K8 plans include £379m of enhanced expenditure (post efficiency) in a mix of activities to boost supplies and reduce demand.

## **Boosting supplies through:**

- New sources investing in new supply options to offset reductions in water availability driven by climate change and our goals for enhancing the environment.
- Flexible, regional supplies building more regional reservoirs and interconnection, facilitating greater transfer and recycling.

## **Reducing demand through:**

- Reuse and recycling delivering innovative schemes to harvest rainwater and reuse final effluent.
- Reducing leakage from 2025 we will deliver year on year reductions in leakage levels, saving over 21 million litres per day across all zones by 2050, a 50% reduction compared to 2017/18 levels.
- Metering and efficiency delivering a metering strategy that supports customers in using less water alongside initiatives to improve home and business water efficiency Increasing supplies.

Our plan aligns to our priorities in the current AMP period and so we have already made good progress and by 2025, we will have increased available water resources by c.45% in Cornwall and c30% in Devon since 2020.

## The Draft Determination

Key outputs to 2030 and levels of support in the DD, ranked from High (✓✓✓) to Low (✓)

- Developing 4 new water supply schemes equivalent to over 100 million litres per day. This includes developing both the Mendips Quarry and Poole Harbour regional supply schemes and developing and commencing construction of the new Cheddar 2 reservoir. It is also in addition to the substantial new water resources currently being developed or recently brought online (Blackpool Pit, South Cornwall desalination plant etc).
- Reducing household consumption by 14.6 million litres per day and business consumption by 3.3 million litres per day through water efficiency initiatives
- Reducing SWB business demand (a reduction of 4% from 2024-25) through our water efficiency audits at businesses and schools alongside our smart metering programme
- Installing circa 600,000 new smart meters across our regions to enable us to pinpoint water wastage. This, combined with facilitating new innovative tariffs for fairer charges, is the first step to customer transparency of usage and understanding of usage drivers as well as supporting customers to actively manage their water budgets
- Reducing SWB leakage by a further 19.3 million litres per day (being a 19% reduction from 2024-25 and 33% reduction from 2017-18) and further sector leading levels of BRL leakage (a 21% reduction from 2024-25 and 32% reduction from 2017-18)
- Installing 5 new strategic interconnector schemes and one mains pipe, totalling 70km, plus upgrades to existing networks (increased pump capacity) to enable us during a drought and other resilience challenges, to move 60% more water between our South West Water supply zones
- Over 50 million litres per day of reductions in licensed abstraction volumes from environmentally sensitive rivers and schemes underway to deliver the glidepath reaching 223 million litres per day across our longer term planning period

#### Areas for further consideration

Our main concerns are the level of efficiency and challenge applied to our larger supply schemes and interconnectors.

• £69m (>60%) reduction in enhancement cost allowances for leakage are a major concern.

Leakage is a key area of focus for our customers and so too our regulators, including Ofwat. The funded allowance is incongruent with the level of focus and importance placed on reducing leakage.

The selective nature of Ofwat's unit rate modelling artificially reduces the allowances associated with leakage improvement and departs from the adoption of a long-term best value leakage management approach for our regions. In K7 we observe a fourfold increase in our leakage costs and we have been extremely challenging on ourselves to minimise the costs passed through to customers in this area by applying a significant efficiency challenge. A further £60m challenge makes the delivery of our leakage targets unachievable.<sup>1</sup>

## £21m (65%) challenge against our primary supply scheme at Restormel WTW

This scheme is the only scheme that delivers notable benefit in the 2030 period and is critical to shoring up supplies in K8. This level of challenge is unrealistic to deliver against and stems from the use of WAFU benefit cost modelling which we believe is inappropriate for such a scheme. We also demonstrate that this is new additional capacity and is not to manage growth which is base funded.

## £5m (33%) challenge for our supply interconnector at Whitecross

Whitecross is essential to our Wimbleball WRZ to deliver abstraction reductions in East Devon. The use of WAFU to benchmark the cost efficiency of the scheme is not appropriate when WAFU is not the primary driver.

 $<sup>^{\</sup>rm 1}$  We have updated our leakage costs based on our latest WRMP modelling from June 2024, which reduces SWW leakage costs by c£4m

## £21m (30%) challenge for our resilience interconnector programme

This programme is driven by the need to make our water systems more resilient to shocks and stresses by enabling us to transfer water around our network more effectively. It reduces the number of customers who are supplied solely by one single WTW's. We demonstrate the need for these schemes through water quality and climate data and we show that these schemes are the most cost-beneficial from a long list of unconstrained options considered in our WRMP.

• £7m reduction to our metering programme
In our view, an additional allowance should be made to allow for the relative immaturity of the South West Water and Bristol Water smart metering infrastructure (SMI) network compared to the industry when assessing expenditure. We believe that other companies have previously received funding for SMI through enhancement expenditure.

The impact of these changes to enhancement totex is to set unrealistic expenditure allowances and we are concerned that we will be driven towards least cost rather than long term best value solutions. Even then, the least cost solutions will not be able to deliver the savings required at the funded allowance

We are however pleased that SRO scheme development was updated by £8.43m to reflect the latest information shared with RAPID at the time of business plan submissions. We ask Ofwat to do the same for the latest SRO development costs by increasing SWB allowances by £6.80m for this additional investment, and an increase of £2.90m to be held in additional contingency funding. This brings our DD response on development costs to £70.25m, and for contingency to £19.68m in total.

Water efficiency allowances have also been increased by +£9m, which reflects our efficient unit rates compared to the industry benchmark. The additional allowance is accompanied by more stretching PCC targets.

## **Base totex**

Our base allowances in the draft determination for water resources was +£2m² (SWB) and -£14m (BRL) providing a net reduction of -£12m. We do not make representation on this reduction.

We observe that Ofwat has incorrectly applied the allowed Canal & River Trust cost adjustment claim. They have done this in two ways: Firstly, Ofwat appear to have allowed the total gross value of the claim (£12.7m) whereas we believe this should be the lower net value of the claim (£11.5m). Secondly, these costs are different from our abstraction charges of £4.7m which Ofwat appear to have overwritten in their "DD-expenditure-allowances-summary-tables". The net change is  $\pm \pm 3.5$ m.

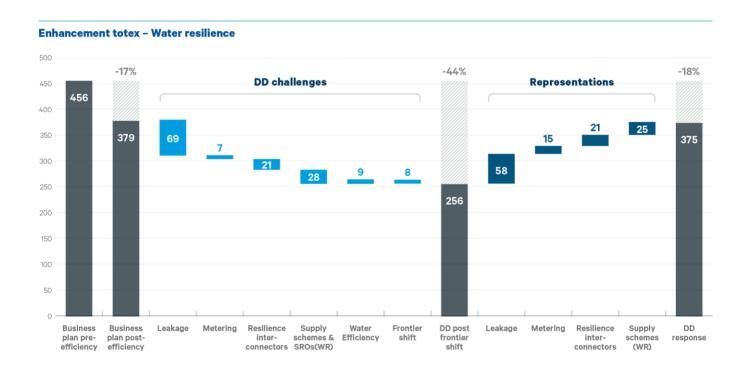
We correct for both of these inaccuracies in the resubmission of our tables

## **Enhancement totex**

Our business plan identified £456m of enhancement totex to deliver our water resilience priority. We then applied a 17% efficiency challenge, which gave a totex target value of £379m post efficiency. The draft determination has removed a further £116m (30%), allowing £263m. This equates to £193m reduction (42%) against our pre-efficiency plan. A frontier shift of c£8m was then applied, which takes this total challenge to £256m or 44% against our pre efficiency plan.

	Output	Bp Totex pre eff	BP Totex post eff	Totex DD	% change vs BP post eff	DD response
Leakage	<ul><li>19% reduction SWB from 2024-25 forecast</li><li>21% reduction BRL from 2024-25 forecast</li></ul>	119	99	30	-70%	88
Metering	• 600,000 smart meters	106	88	81	-9%	96
Resilience Inter connectors	• 5 connectors (70km)	85	70	50	-30%	71
Strategic Resource Options (SROs)	Developments costs for Cheddar II, Poole Harbour, Mendip Quarries	66	55	63	15%	63
Supply schemes including	Studies, scheme development and new sources of supply	74	61	25	-59%	51
Water Efficiency	<ul> <li>HH schemes including household/schools visits and incentive schemes</li> <li>NHH schemes including audits, rainwater harvesting and water saving devices</li> </ul>	6	5	14	165%	14
Total		456	379	263	-30%	383
<b>Total post Frontier</b>	Shift	456	379	256	-33%*	375

<sup>\*-44%</sup> variance from business pre-efficiency



## **Pice control deliverables**

We are accepting of the majority of PCDs linked to our Water Supply and Resilience programme. In general, they seem logical, and the timelines are aligned to your delivery plans.

However, we ask Ofwat to consider the following adjustments:

PCD	Adjustment / why
Water supply	We have recommended that a PCD is not applied to our ROA17 Littlehempston scheme, as this is an 'adaptive pathways' scheme which could change in scope and timing as a result of the WRMP process.
Metering	We propose several amendments to the PCD for metering, including the removal of operability metrics for smart meters and simplification of metrics to measure delivery of meter upgrades. These changes will ensure that the PCD more accurately reflects the performance of current meter technology and incentivises efficient delivery.
Leakage	For Bristol Water, we recommend the introduction of a new PCD output for communication and supply pipe renewals, to reflect the significant programme of work we are undertaking. We also propose changes to the profile of delivery for mains renewal across both Bristol and South West Water to align with our investment and delivery plans.
Strategic interconnectors	We propose a minor adjustment to the timing of PCD outputs for one of our strategic interconnector scheme.

#### **Performance Commitments**

Under water resilience, the performance commitment levels proposed by Ofwat in the DD largely align with our view of stretching but achievable targets. Pleasingly, the targets for leakage, PCC and business demand align to the targets set in the revised WRMP, and water supply interruptions has been set on industry forecast common levels – which we support.

However, the incentive rates associated with these performance commitments present an unreasonable downside risk when applied in Ofwat's ODI framework. This is most notable for leakage.

Mains repairs has been set a more ambitious target (for BRL) and we struggle to understand the intervention that have Ofwat have made to this measure. It appears Ofwat have tried to make adjustment for enhancement expenditure, which we understand and support the premise of, but the practicalities of implementing this for mains repairs is challenging.

For example, mains renewal activity will not always directly correlate to the prevention of a mains bursts. This is because we cannot accurately forecast exactly which individual watermain will burst and when – if we could, then we would stop them all. Instead, we use complex statistically based deterioration models to account for the likely overlap which was appropriately considered when we set our targets.

Lastly, Ofwat made several changes to ODI design which we do not agree with as they create unreasonable penalty risks. We cover these further in our Outcomes representation and reiterate our concerns especially for leakage.

# Adjustments required in the final determination

We stand by our original plan, which we believe to be the right plan to meet the challenges of today and to deliver the first stepping stone of our strategic 25-year plans.

In our Draft Determination Ofwat has set highly unrealistic expenditure allowances (reducing enhancement totex allowances by almost half) whilst setting more stretching targets with disproportionate levels of penalties attached; and also constraining the opportunity for programme efficiencies through overly restrictive PCDs.

It is easy to see that as a package, this combination of factors simply does not stack up.

At these levels we will either need to spend significantly above the DD allowance, creating financeability issues and reducing returns to investors below levels assumed by Ofwat in the DD; or fail to deliver all of the outputs which customers expect us to deliver and which we have agreed with the Environment Agency through our WRMP.

Our concern is that we will be driven to provide least cost rather than long term best value solutions such as find and fix activities to reduce leakage rather than comms pipe replacement.

To correct for these issues, we have submitted additional evidence through our representations which we think provides Ofwat with the information it needs to:

## Adjustments to base expenditure in the WR price control

Area	Adjustment / why	£m
Canals CAC	Correct for the application of our canals cost adjustment claim – addressing the error introduced by Ofwat when assigned this to the incorrect data line.	+3.5
		+3.5

## Adjustments to enhancement expenditure

Area	Adjustment / why	£m
Water Supply Schemes	Restore to our water supply programme – we accept minor changes to scheme costs but disagree with Ofwat's modelling for Whitecross and Restormel. We provide additional evidence to correct flaws in Ofwat's modelling and assumptions around base expenditure overlap.	
Leakage	Agree high allowances for enhancement leakage investment for the following reasons: the selective nature of the unit rate modelling underestimates allowances, the proposed costs by Ofwat do not support the adoption of long term best value leakage management, and to secure alignment with our WRMP remodelling.	+58
Resilience interconnectors	Restore our allowances for our resilience interconnector programme – we provide additional evidence to support the need and the benefits provided in the form of a regional water grid which provides agility and future proofing against the impacts of climate change.	+21
Metering	Increase our metering programme allowance due to the additional smart metering infrastructure costs that we face compared to those who have already developed their infrastructure within the current AMP.	+15
		+120

## **Adjustments to PCLs**

PC	Adjustment / why	From (29/30)	To (29/30)
Mains repairs (BRL only)	Ofwat appear to have assumed the same burst benefit of a main replaced when targeting a burst main and a main replaced that is not necessarily bursting but is causing water quality issues. We do not agree with this assumption.	119.8	128.2

## **Adjustments to PCDs**

PC	Adjustment / why
Water supply	We have recommended that a PCD is not applied to our ROA17 Littlehempston scheme, as this is an 'adaptive pathways' scheme which could change in scope and timing.
Metering	We propose several amendments to the PCD for metering, including the removal of operability metrics for smart meters and simplification of metrics to measure delivery of meter upgrades. These changes will ensure that the PCD more accurately reflects the performance of current meter technology, and incentivises efficient delivery.
Leakage	For Bristol Water, we recommend the introduction of a new PCD output for communication and supply pipe renewals, to reflect the significant programme of work we are undertaking. We also propose changes to the profile of delivery for mains renewal across both Bristol and South West Water to align with our investment and delivery plans.
Strategic interconnectors	We propose a minor adjustment to the timing of PCD outputs for one of our strategic interconnector scheme.

## **Summary**

Our water quality and water resilience plans are the most ambitious plans in the Greater South West in decades. Our plans allow us to address the water quality risk in our Bristol and South West region, whilst also shoring up water resources for future generations.

We have developed a plan that delivers what our customers want, and it is plan that tackles the challenges of today whilst setting us up to deliver for the long term.

Our plans have strong DWI and EA support through extensive consultations to date - we are closely aligned on need for investment.

Our base maintenance expenditure allowances are broadly agreeable. However, the introduction of mains renewals PCD set at 0.3% per annum means this comparison is not on a like for like basis. We do not see the evidence that the sector has previously been funded for this rate of renewal and our whole-life asset performance models do not support the need for this renewal rate for South West Water. Although they do show this need for our Bristol region which is why we included 0.3% from base maintenance in our BP submission.

The high level of enhancement challenge is an area we ask Ofwat to reconsider. To support this, we provide the additional evidence requested to reinforce the investment need, demonstrate our robust optioneering process and provide confidence our costs are efficient.

Performance commitment target levels align well to our plan and our WRMP – with the exception of the water quality contacts and mains repairs, for which the level of stretch is unachievable. Our principle concerns for performance commitments centre around the incentive rates being proposed by Ofwat which are at odds with our business plan rates and in doing so present an unreasonable downside risk. This is most notable for leakage.

Lastly, we are accepting of the majority of PCDs linked to our Water Quality and Resilience programmes. Metering is the only area requiring a significant change from Ofwat's proposal. Other than that, we suggest only minor modifications to the remainder, so that they better represent and track our delivery plans.

#### Areas for further consideration

#### Ofwat intervention Representation Optioneering and cost efficiency challenges have been The evidence for this was provided to the DWI applied to the bulk of our DWI water quality programme. and summarised for Ofwat. This level of challenge is in addition to the 17% efficiency We now provide this in full - including details of challenge we set ourselves and combine to make these our condition surveys to address the base critical schemes unrealistic to deliver within given overlap challenge. allowances of -c.50%. → Further info: Cost & Efficiency Our WTW improvement schemes in our Bristol region are most affected by this intervention. 2. Expectation that 0.3% of mains should be renewed each We demonstrate that we have not been year and funded from base expenditure. financed for this level of renewal in the past and that levels as high as 0.3% are not needed across Devon and Cornwall. This is partly due to the timing of our S19 mains renewal programme being later compared to other companies. → Further info: Cost & Efficiency 3. Our leakage performance leads the sector and Our leakage allowances are heavily challenged and for Bristol and our customers value continued adopting lower costs would lead us into a leakage strategy improvements. that is not the best long-term approach to leakage management for customers. We demonstrate that our leakage investment Similarly, our leakage cost adjustment claim in Bristol was programme is the best-value for customers over rejected despite our frontier performance. the long term and why these costs should be allowed based on a 25-year NPV comparison. Turther info: Cost & Efficiency We believe Ofwat's incentive rates are poorly 4. Ofwat's incentive rates create an unbalanced ODI framework with disproportionately high penalties for evidenced and at odds with our own customer leakage, PCC and WQ Contacts. research. We demonstrate why it is more appropriate to use our rates.

Turther info: Outcomes

representation

For example, introducing a penalty of £6,800 per customer

contact for cloudy water (discoloured) appears

unreasonable.

#### Areas for further consideration

#### Ofwat intervention

5. We are generally accepting of the PCDs for our Water Quality and Resilience programme. Typically, they are logical and aligned to our delivery programme. However, they require minor, but important, modifications to make them work.

> For Smart Metering, the PCD creates a disproportionately punitive position. We estimate that we could incur penalties amounting to c£30m by simply delivering our programme as intended at submission.

### Representation

Minor adjustments are required across a number of PCDs to align to our delivery plans and/or to track meaningful metrics.

For metering – we believe that we are appropriately incentivised by other regulatory mechanisms to deliver our metering programme on time and producing the right data. This is essential to reduce PCC and deliver our longterm WRMP plan.

→ Further info: Cost & Efficiency

Ofwat proposed alternative forecast for business rates which These lower forecasts present a cash flow 6. are £73m lower than our internal forecasts.

These costs are largely (90%) recovered at the end of period customer bills. but present a cash-flow risk.

challenge which should be allowed for upfront in

Given that these rates increase formulaically with higher revenues it makes sense to correct them now to prevent this risk.

→ Further info: Cost & Efficiency

7. Ofwat have introduced additional base allowances through symmetrical cost adjustment claims.

> We understand and appreciate the intention of these allowances, but we confirm that our original business plan submission had appropriately considered these aspects.

We ask that these additional allowances are foregone to keep bills affordable for customers and to prevent any potential double counting.

→ Further info: Cost & Efficiency