

June 2023

## **Accelerated infrastructure delivery project**

# **Appendix 2: price control deliverables**

## About this document

This appendix sets out the arrangements for customer protections via price control deliverables.

The document sets out, for each approved scheme, a set of price control deliverables. These set out the outputs and outcomes that companies are required to deliver, the reporting and assurance arrangements and how we expect companies to reflect the impact of schemes on performance commitments. The requirements cover both the 2023-25 period and the 2025-30 period. We will update these price control deliverables in our draft and final PR24 determinations to reflect our expenditure allowances for schemes and any updates to our proposed approach to price control deliverables in specific expenditure areas such as storm overflows or smart metering.

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# 1. Anglian Water

## 1.1 Scheme 3: Colchester Reuse

Scheme delivery expectations: Colchester Reuse	
<b>Description</b>	<p>Acceleration of the detailed design (including appropriate monitoring and assessments) and planning of a water re-use scheme, plus the construction of a re-use pilot plant and transfer main by 31 March 2028. The pilot plant will provide an output of 0.5Ml/d and the design and planning activity will be for a full re-use plant that can provide 16.8 Ml/d of water available for use (WAFU) to the South Essex water resources zone (WRZ) when completed. This is a scheme in the company's draft WRMP24 preferred programme with the acceleration enabling the full re-use scheme being able to be delivered two years earlier by 31 March 2030.</p> <p>Detailed design and planning enhancement activities would be over and above normal option investigation, development, and appraisal activity, which is covered through base expenditure allowances. Base allowances include solution design and cost and benefit calculations to have sufficient evidence to feature in final strategic planning frameworks and business plan submissions (See '<a href="#">Our final methodology for PR24 Appendix 9 – Setting expenditure allowances</a>' pages 112–113).</p>
<b>Output measurement and reporting</b>	<p>By 31 March 2025 the company will have completed the following activities:</p> <ul style="list-style-type: none"> <li>• detailed design of the transfer pipeline and pilot plant;</li> <li>• secured planning permission for the transfer pipeline and pilot plant;</li> <li>• appropriate environmental monitoring and assessments to the satisfaction of the environmental regulators;</li> <li>• appointment of delivery partner.</li> </ul> <p>By 31 March 2028 the company will have completed the following activities:</p> <ul style="list-style-type: none"> <li>• constructed the transfer pipeline from Colchester water recycling centre to Ardleigh reservoir which will also be suitable for the full reuse scheme (capacity of 16.8Ml/d);</li> <li>• constructed a pilot plant of 0.5Ml/d capacity to test optimal treatment processes, seasonal and/or weather related changes that will impact the reuse treatment process, build knowledge of the brine discharge expected, complete rigorous water quality testing on the reuse water and facilitate the company providing stakeholder and customer confidence in the solution.</li> </ul> <p>These activities are equivalent to 15.03% of the overall scheme delivery costs of the full Colchester reuse plant.</p> <p>There would be a WAFU increase of 0.5Ml/d in the South Essex WRZ by 31 March 2028 associated with the pilot plant which will be available for non-potable use. Delivery of the outputs will be reported and monitored through the existing APR process.</p>
<b>Conditions on scheme</b>	<p>There is a general expectation that all PR19 funded benefits to meet the supply demand balance will be delivered on time. The company will provide full and free access to the studies and lessons learned from the pilot plant to other water companies and engage the industry on the findings by hosting events. These should include one event during development by 31st March 2025, one event when the pilot plant has been constructed by 31st March 2028 and one event when the pilot plant is operational by 31st March 2030. The updated timing of the benefits of this scheme (WAFU) including any implications for the rest of the programme should be consistently taken account of in the company's final WRMP24.</p>

<b>Assurance</b>	The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met and the outputs of the scheme set out above have been delivered.
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Deliverable	Unit	Forecast deliverables				
		2023/24	2024/25	2025/26	2026/27	2027/28
Detailed design and planning of re-use scheme including pilot plant and transfer main construction.	% complete	2	12	52	90	100

## 1.2 Scheme 4: Nutrient Neutrality

Scheme delivery expectations: Nutrient Neutrality	
<b>Description</b>	The scheme is to deliver nutrient removal at three of the sites identified as discharging into a Special Area of Conservation (SAC) river. The sites are Fakenham WwTW and Dereham WwTW on the River Wensum, and Whitlingham WwTW on the River Yare (Norwich). All three sites are in a nutrient neutrality designated area and the population equivalent for all three sites are above the 2000 population equivalent threshold.
<b>Output measurement and reporting</b>	By no later than 31st March 2025, Fakenham WwTW and Dereham should be commissioned and optimised to ensure compliance with the phosphorus nutrient pollution standard specified in section 96F(2) of the Water Industry Act 1991. The company must reflect all three sites in table 7F (Wastewater network+ - WINEP phosphorus removal scheme costs and cost drivers) of their annual performance report (APR24). The company must forecast any impact of delivering this scheme on the reduction in phosphorus emissions to river catchments relative to the base period in its PR24 business plan submissions.
<b>Conditions on scheme</b>	The acceleration of this scheme will be conditional on the provisions relating to nutrient pollution standards in the Levelling-up and Regeneration Bill being enacted, and the Secretary of State designating under those provisions the catchment areas into which the three WwTWs discharge treated effluent as a phosphorus sensitive catchment area.
<b>Assurance</b>	Independent assessment and assurance of completed feasibility and detailed design work and compliance with the phosphorus nutrient pollution standard specified in section 96F(2) of the Water Industry Act 1991 of these works must be provided to Ofwat as set out below. No later than three months after the dates specified below, assurance must be provided by a third-party and submitted to Ofwat. We will allow companies to re-submit their delivery schedule up until their business plans submissions to provide companies with flexibility to define their final programme timeframes.

Deliverable	Phosphorus nutrient pollution standard	Date of delivery	Detailed design	Level of performance (compliance)	WINEP driver
Fakenham WwTW	0.25mg/L	31st March 2025	31st March 2024	31st March 2025	HD_IMP_NN
Dereham WwTW	0.25mg/L	31st March 2025	31st March 2024	31st March 2025	HD_IMP_NN
Whitlingham WwTW	0.25mg/L	31st March 2027	31st March 2025	31st March 2027	HD_IMP_NN

## 1.3 Scheme 5: Regional overflow reduction plan

<b>Scheme delivery expectations: Regional overflow reduction plan</b>	
<b>Description</b>	<p>Delivering enhancements to combined sewer overflows and wastewater treatment works to meet the relevant Storm Overflow Reduction Plan spill targets with a strong focus on digital solutions. The schemes target a spill reduction of 459 spills per year, of which 188 will be achieved using innovative digital solutions to be delivered as part of the accelerated programme.</p> <p>The programme will accelerate AMP8 WINEP so that the selected storm overflows across the Anglian Water region will achieve the relevant Storm Overflow Reduction Plan spill targets by 1 April 2028, as opposed to the original WINEP completion date 1 April 2030.</p> <p>The company will provide evidence via completed SOAF or SOAF equivalent that all storm overflows are hydraulic root cause prior to commencing implementation of the schemes.</p>
<b>Output measurement and reporting</b>	<p>The schemes will deliver the outcomes of 459 total spills per annum, with 188 of these spills being achieved through digital solutions. The final list of overflows will be provided by Anglian Water at the time of the submission of its strategic business plan in October 2023.</p> <p>The final schemes will include a combined approach including the smart network element and will be required to meet the relevant Storm Overflow Reduction Plan spill targets of less than 10 spills per annum for EnvAct_IMP4 drivers, and less than 2 spills per bathing season for EnvAct_IMP3. EnvAct_IMP2 storm overflow spill frequencies will be reduced to a level that causes no adverse ecological impact and a 10 spill per annum maximum. The delivery of these schemes is to be complete by 1 April 2028.</p> <p>The reduction in spill frequency for overflows included in the acceleration programme will be taken into account when setting the performance commitment level for the PR24 storm overflow spill performance commitment. The approach to setting the performance commitment level for the storm overflow PC is set out in the PR24 final methodology.</p> <p>Delivery of the outputs will be monitored through the existing APR process and the APR must provide the relevant output information for the completed storm overflow schemes; including storage provided, area of surface water separation and spill frequency reduction achieved for the purpose of benchmarking.</p> <p>We will require a final report summarising the outputs that have been delivered, what innovative solutions have been implemented, and how this has been shared across the industry.</p>
<b>Conditions on scheme</b>	<p>The allowance is conditional on the company evidencing to our satisfaction that all funding is for enhancing the functioning of the asset beyond the level set out in its environmental permit or beyond that which could be achieved through maintenance. This test for "compliance" is for the purposes of the regional overflow reduction plan only. Whether a company is actually compliant or not with the conditions in its environmental discharge permits is a matter for the EA, not Ofwat. Similarly, this test should not be read as in any way indicating Ofwat's views on the compliance standards required by section 94 of the Water Industry Act 1991 as supplemented by the provisions of Regulation 4 of the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).</p> <p>The allowance is conditional on the company evidencing to our satisfaction that all funding is for enhancing the functioning of the asset beyond permit compliance. This includes demonstrating that: the company is operating the assets in compliance with its permits, the funding is for enhancing functioning beyond the level which could be achieved through maintenance, and relevant outcomes should not have been already delivered through funding under past enhancement schemes. This test for "compliance" is for the purposes of the Regional overflow reduction plan only. Whether a company is actually compliant or not with the conditions in its environmental discharge permits is a matter for the EA, not Ofwat. Similarly this test should not</p>

	<p>be read as in any way indicating Ofwat's views on the compliance standards required by section 94 of the Water Industry Act 1991 as supplemented by the provisions of Regulation 4 of the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).</p> <p>The company must set out its method of providing this evidence for our approval either before or at the time of the submission of its strategic business plan in October 2023. The evidence must include, but may not be limited to, hydraulic simulation modelling of the asset operation pre and post completion of the enhancement scheme and an explanation of the methodology and assumptions underpinning both sets of modelling. If there is currently no permit in place, then the company should evaluate the enhancement scheme on the basis of an assumed set of permit conditions that may typically be expected, e.g., the pass forward flow being set using formula A. It should provide the reasoning underpinning these assumptions.</p> <p>The company, through the process of progressing final scheme design, must continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions. The company must deliver a best value solution to meet all investment drivers and provide detailed evidence to show how the company has assured itself that the solution chosen is best value, including but not limited to evidence that the company assessed the compliance status of the asset in advance and evaluated options on the basis of that assessment. Insufficient evidence may be grounds for clawback. Where an element of the scheme is to address either maintenance or regain compliance then the company should proportionally allocate cost between base and enhancement and explain that apportionment as allowances will only be made for those elements considered enhancement expenditure, with any residual funds clawed back.</p> <p>As the digital elements will be used in conjunction with a combined solution it is understood that monitoring of the digital element will need to be done through hydraulic model analysis, using scenarios to allocate spill reductions to the specific digital solution parts of the scheme. An independent, third-party assurer will assure, to our satisfaction, that the hydraulic models are fit for purpose for this analysis. The spill reduction target from smart solutions alone is predicted by the company to be 188. The total expenditure for the scheme will be clawed back on a pro rata basis if the smart solution delivery is not fully achieved.</p> <p>The final storm overflow combined solutions (including the smart elements) are required to meet the Storm Overflow Discharge Reduction Plan targets and will be monitored annually through the EA EDM spill return from the year of completion of the schemes.</p>
<b>Assurance of outputs</b>	The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met.

Deliverable		Forecast Deliverables						
		AMP7		AMP8				
	Units	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
<b>Scheme Percentage Delivered (cumulative)</b>	%	3	37	71	100	100	100	100
<b>Scheme outputs (cumulative)</b>	Nr of modelled spills reduced through	0	0	0	0	188	188	188

	smart solutions							
<b>Total spill reduction (cumulative)</b>	Number	0	0	0	0	459	459	459

## 1.4 Scheme 7: Smart metering

Scheme delivery expectations	
<b>Description</b>	<p>Bringing forward metering programme from AMP8 as part of the company's proposed best value strategy in its dWRMP24.</p> <p>Installation of 60,000 advanced monitoring infrastructure (AMI) meters – capable of recording and transmitting data at least once every 24 hours to measure supplies of water to premises. This involves new AMI meter installations and replacement of existing meters with new AMI meters as specified below.</p> <p>Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property.</p> <p>AMR meters are meters using automated meter reading (AMR) technology. This enables consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. It does not however enable consumption data to be read by customers (directly or via contractors/agents) and the company at near real time.</p> <p>AMI meters enable consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. Consumption data is transferred to the company through an integrated system of smart meters, communications networks, and data management systems. Such systems have the capability to:</p> <ul style="list-style-type: none"> <li>Record consumption data and allow ready access to this data by customers (directly or via contractors/agents) and the company at near real time, with data updated daily at a minimum, and made available at a minimum granularity of 1 hour intervals, or such greater frequency and/or granularity as reasonably requested by the customer or the customer's contractors/agents;</li> <li>Enable automated leak alarms to be communicated to the customer and company; and</li> <li>Communicate with the internet.</li> </ul> <p>Company should engage and collaborate with other water companies, meter suppliers and other stakeholders across the sector to agree on common standards relating to the data collected from smart meters to ensure data interoperability across the sector.</p> <p>Company must ensure all meters comply with the appropriate regulations governing cold water meters, and that their metering systems comply with their obligations under competition law.</p> <p>At PR24 these smart meters will be funded at the efficient unit rate for this technology as determined during the PR24 process.</p>
<b>Output measurement and reporting</b>	<p>Company must deliver the number and type of meters specified in the table below.</p> <p>Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:</p> <ul style="list-style-type: none"> <li>New AMI meter installations where no meter was previously installed</li> <li>AMI for AMR meter replacements</li> <li>AMI for basic meter replacements</li> </ul>
<b>Assurance</b>	<p>The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the conditions below have been met and the outputs of the scheme set out below have been delivered.</p>
<b>Conditions on scheme</b>	<p>Company must deliver the meters funded at PR19 by 31 March 2025. Transition expenditure funding will be made available for meters installed over and above the PR19 meters set out in the table below.</p>

Deliverable	Unit	Forecast deliverables				
		2020/21	2021/22	2022/23	2023/24	2024/25
PR19 delivery basic meters – unmeasured properties	Number	15,450	16,578	19,247	19,857	20,457
PR19 delivery AMR meters – unmeasured properties	Number	3,924	4,145	4,752	4,902	5,052
PR19 delivery AMI meters – unmeasured properties	Number	24,122	21,633	18,877	17,176	15,747
PR19 delivery basic to AMI meter upgrades	Number	132,552	116,190	220,997	222,697	224,126
PR19 delivery AMR to AMI meter upgrades	Number	7,726	8,098	22,152	22,152	22,152
Acceleration new AMI smart meters installed	Number	-	-	-	-	5,070
Acceleration AMI for AMR replacements	Number	-	-	-	-	5,301
Acceleration AMI for basic replacements	Number	-	-	-	-	49,629

To ensure that the company is not double funded through transition expenditure funding and outperformance payments from its PR19 smart metering performance commitment, the company must not report the meters installed under the acceleration process against its PR19 smart metering performance commitment.

We expect the PR19 forecast deliverables, together with the meters installed in previous control periods, to translate into the baseline trend shown in the table below. This table shows the cumulative number of meters by technology that we expect the company to achieve over the PR19 period excluding the acceleration programme.

Deliverable	Unit	Starting position	Cumulative number of meters by technology, excluding acceleration				
			2019/20	2020/21	2021/22	2022/23	2023/24
Baseline basic meters	Number	1,694,091	1,576,989	1,477,377	1,275,627	1,072,787	869,118
Baseline AMR smart meters	Number	210,040	206,238	202,285	184,885	167,635	150,535
Baseline AMI smart meters	Number	19,364	183,764	329,685	591,711	853,736	1,115,761

There is an expected improvement in performance in AMP7 and into AMP8 delivered through this proposed accelerated activity. The impact on PCC and leakage performance commitments are detailed below. These savings must be excluded from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025 so that the company does not earn outperformance (or avoid underperformance) from this additional investment. Company should report these savings separately in its 2025 Annual Performance Report and reflect them in its PR24 performance commitment levels. These savings should be converted to three-year averages when compared against reporting performance levels in relation to performance commitments.

Performance commitment	Unit	Forecast benefits						
		2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Year								
Per capita consumption reduction	l/h/d (cum.)	-	0.05	0.1	0.1	0.1	0.1	0.1
Leakage reduction	MI/d (cum.)	-	0.087	0.173	0.173	0.173	0.173	0.173

## 2. Northumbrian Water (including Essex and Suffolk)

### 2.1 Scheme 1 New Linford WTWs and Borehole

Scheme delivery expectations: New Linford WTWs and Borehole	
<b>Description</b>	Detailed design of a 7Ml/d scheme as identified in the company's dWRMP24 preferred programme to be construction ready by 2025-26. This brings forward delivery by two years to 2027-28 compared with the dWRMP24. Construction is to include a new wide diameter chalk borehole with a capacity of 3.5 Ml/d, and a new groundwater treatment works to treat water from both the new borehole and an existing (previously redundant) well.
<b>Output measurement and reporting</b>	<p>By 31 December 2024, the company will have secured land lease agreements, completed detailed design for a pilot borehole, production borehole and new treatment works, drilled and tested a pilot borehole and prepared a groundwater investigation report all relating to its New Linford water treatment works. This is equivalent to around 12% of the total project delivery costs.</p> <p>Following this detailed design, the company will deliver upgrades at New Linford water treatment works including upgrading the existing well, constructing a new borehole and bringing a new water treatment works into supply in 2027-28. These will deliver a total water available for use (WAFU) gain for the Essex water resource zone of 6.75 Ml/d (after process losses of 0.25 Ml/d have been accounted for) under a 1-in-500 year drought scenario. The company notes that process losses may be reduced following detailed design so they should be no higher than 0.25 Ml/d. The estimated WAFU is expected to be the same at dry year annual average and dry year critical period. Pre-investment WAFU from the site is 0 Ml/d as it is currently redundant.</p> <p>Delivery of the outputs will be reported and monitored through the existing APR process.</p>
<b>Conditions on scheme</b>	There is a general expectation that all PR19 funded benefits to meet the supply demand balance will be delivered on time. The company should remain on track to deliver its PR19 water enhancement programme in full. The updated timing of the benefits of this scheme (WAFU) including any implications for the rest of the programme should be consistently taken account of in the company's final WRMP24.
<b>Assurance</b>	The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met and the outputs of the scheme set out above have been delivered.

Deliverable	Unit	Forecast deliverables	
		2023/24	2024/25
Detailed design, planning and pilot borehole drilling to deliver a 7Ml/d groundwater scheme	% complete	50	100
Overall project earned value	%	5.9	11.8

Benefit measure	Unit	Forecast benefits						
		2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/20
WAFU benefit to Essex WRZ supply-demand balance	MI/d	0	0	0	0	6.75	6.75	6.75

## 2.2 Schemes 2 (Suffolk Strategic Network and Storage Enhancements Detailed Design), 3 (North Suffolk Winter Storage Reservoir Detailed Design) and 4 (Lowestoft Reuse Detailed Design)

Scheme delivery expectations: Schemes 2, 3 & 4	
<b>Description</b>	<p>Detailed design and planning of a suite of options focused on the Suffolk Strategic Network and Storage Enhancement and the options that are needed to support it. The options that support the Suffolk Strategic Network and Storage 16tilized16nt here are, North Suffolk Winter Storage Reservoir and Lowestoft Reuse.</p> <p>Essex and Suffolk Water currently has a moratorium on new supplies for non-domestic purposes in its Hartismere Water Resource Zone (WRZ) because it is forecasting a significant increase in new non-domestic demand but new supply schemes will not be developed until 2032. The strategic pipeline allows a transfer of water from the Northern Central WRZ to Blyth WRZ and Hartismere WRZ. Initially, this uses the baseline surplus in that zone and in the longer term allows additional water from new resources (i.e. Lowestoft Reuse and / or North Suffolk reservoir) to be 16tilized in the Blyth and Hartismere WRZs.</p> <p>This detailed design brings forward delivery of the Suffolk Strategic Network and Storage Enhancements and Lowestoft Reuse, which are in the dWRMP24 preferred programme, by two years, to 2028 and 2030 respectively. The extent of future sustainability reductions means that both the Lowestoft Reuse and North Suffolk Winter Storage Reservoir are ultimately selected in the draft WRMP.</p> <p>Detailed design and planning enhancement activities would be over and above normal option investigation, development, and appraisal activity, which is covered through base expenditure allowances. Base allowances include solution design and cost and benefit calculations to have sufficient evidence to feature in final strategic planning frameworks and business plan submissions (See 'Our final methodology for PR24 Appendix 9 – Setting expenditure allowances' pages 112-113).</p>
<b>Output measurement and reporting</b>	<p>By 31 March 2025 the company will have completed the following activities:</p> <ul style="list-style-type: none"> <li>• On-site hydraulics and topographical surveys;</li> <li>• Geotechnical investigation reports;</li> <li>• On-site ecological and archaeological surveys (50%);</li> <li>• Network Rail UTX Designs;</li> <li>• 60% of the work required on undertaking formal Environmental Impact Assessments (EIA) and preparing environmental statements for planning approval;</li> <li>• Land agreements (as appropriate).</li> </ul> <p>The design capacity of the strategic pipelines is to deliver 15 MI/d dry year water available for use (WAFU) gain, split between Hartismere WRZ (8.5 MI/d) and Blyth WRZ (6.5MI/d). Detailed design of North Suffolk Reservoir is for a scheme which will deliver 16.2 MI/d water available for use (WAFU) gain for the Northern Central WRZ under a 1-in-500 year drought scenario. Detailed design of Lowestoft Reuse is for a scheme which will deliver 11 MI/d water available for use (WAFU) gain for the Northern Central WRZ under a 1-in-500 year drought scenario.</p> <ul style="list-style-type: none"> <li>• By 31 March 2027 the company will have completed the following activities:</li> <li>• On-site ecological surveys</li> <li>• On-site archaeological surveys</li> <li>• On-site Great Crested Newt survey</li> <li>• Prepared ecological survey report</li> <li>• Completed submission for environmental impact screening</li> <li>• Council assessment of EIA screening (as relevant)</li> <li>• Appeal to secretary of state (if appropriate)</li> <li>• Full EIA and accompanying environmental statements</li> </ul>

	<ul style="list-style-type: none"> <li>• Submission for planning permission including full EIA (if PDR declined at screening)</li> <li>• All relevant land agreements in place</li> <li>• Detailed design complete</li> <li>• Internal technical assurance</li> <li>• Environmental permits secured (where needed)</li> <li>• Construction contract tender prepared</li> <li>• The above activities, up to 31 March 2027, are equivalent to: <ul style="list-style-type: none"> <li>• 11.78% of the overall Suffolk Strategic Network and Storage scheme delivery costs.</li> <li>• 9.50% of the overall North Suffolk Winter Storage Reservoir scheme delivery costs.</li> <li>• 10.88% of the overall Lowestoft Reuse scheme delivery costs.</li> </ul> </li> </ul> <p>Delivery of the outputs will be reported and monitored through the existing APR process.</p>
<b>Conditions on scheme</b>	<p>There is a general expectation that all PR19 funded benefits to meet the supply demand balance will be delivered on time. The company should remain on track to deliver its PR19 water enhancement programme in full. The updated timing of the benefits of this scheme (WAFU) should be consistently taken account of in the company's final WRMP24.</p> <p>Funding is contingent on the continued inclusion of the components of this scheme in future iterations of the company's WRMP. Should any components of this scheme be excluded from future WRMPs the company should cease work on those elements immediately and no further work will be funded.</p>
<b>Assurance</b>	<p>The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met and the outputs of the scheme set out above have been delivered.</p>

Deliverable	Scheme	Unit	Forecast deliverables			
			2023/24	2024/25	2025/26	2026/27
Detailed design and planning	2	% complete	30	60	90	100
	3		30	60	90	100
	4		30	60	90	100

## 2.3 Scheme 7: Berwick Upon Tweed storm overflows

Scheme delivery expectations	
<b>Description</b>	The proposal is to deliver an initial 'Concept and Definition' phase to seek to validate best value solutions to reduce spills and environmental impact at 31 overflows in the Berwick catchment, based on model verification and root cause analysis.
<b>Output measurement and reporting</b>	<p>This proposal is to identify the type of best value interventions that will ultimately be delivered at 31 storm overflows. We expect the company to provide a progress report on the outputs (including future investment requirements at the named overflows) as part of its summer 2024 APR submission, and a final report concluding this concept and definition phase by 31st March 2025.</p> <p>As part of this output, we expect the company to provide evidence on where maintenance activities could reduce the overflow spills, and by how much, and also disclose if any of the Berwick overflows require interventions to make them compliant with environmental permits.</p>
<b>Conditions on scheme</b>	<p>The allowance is conditional on the company demonstrating to Ofwat that all of the named storm overflows have undergone further investigation to determine the root cause of spills and to identify the best value solutions required to address them. This work must be undertaken within AMP7.</p> <p>The allowance is conditional on the company evidencing to our satisfaction that all funding is for enhancing the functioning of the asset beyond permit compliance. This includes demonstrating that: the company is operating the assets in compliance with its permits, the funding is for enhancing functioning beyond the level which could be achieved through maintenance, and relevant outcomes should not have been already delivered through funding under past enhancement schemes. This test for "compliance" is for the purposes of the Berwick storm overflow scheme only. Whether a company is actually compliant or not with the conditions in its environmental discharge permits is a matter for the EA, not Ofwat. Similarly this test should not be read as in any way indicating Ofwat's views on the compliance standards required by section 94 of the Water Industry Act 1991 as supplemented by the provisions of Regulation 4 of the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).</p> <p>The company must set out its method of providing this evidence for our approval either before or at the time of the submission of its strategic business plan in October 2023. The evidence must include, but may not be limited to, hydraulic simulation modelling of the asset operation pre and post completion of the enhancement scheme and an explanation of the methodology and assumptions underpinning both sets of modelling. If there is currently no permit in place, then the company should evaluate the enhancement scheme on the basis of an assumed set of permit conditions that may typically be expected, e.g. the pass forward flow being set using formula A. It should provide the reasoning underpinning these assumptions.</p> <p>The company, through the process of progressing the feasibility work, must continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions. The company must work towards developing a best value solution to meet all investment drivers and provide detailed evidence to show how the company has assured itself that the solution chosen is best value, including but not limited to evidence that the company assessed the compliance status of the asset in advance and evaluated options on the basis of that assessment. Insufficient evidence may be grounds for clawback.</p> <p>Where an element of the scheme is to address either maintenance or regain compliance then the company must proportionally allocate costs between base and enhancement and explain that apportionment, as allowances will only be made for those elements considered enhancement expenditure, with any residual funds clawed back.</p>
<b>Assurance</b>	The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met.



## 3. Severn Trent Water

### 3.1 Scheme 1: Smart metering

Scheme delivery expectations	
<b>Description</b>	<p>Bringing forward metering programme from AMP8 as part of the company's proposed best value strategy in its dWRMP24.</p> <p>Installation of 250,000 advanced monitoring infrastructure (AMI) meters – capable of recording and transmitting data at least once every 24 hours to measure supplies of water to premises. This involves new AMI meter installations and replacement of existing meters with new AMI meters as specified below.</p> <p>Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property.</p> <p>AMR meters are meters using automated meter reading (AMR) technology. This enables consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. It does not however enable consumption data to be read by customers (directly or via contractors/agents) and the company at near real time.</p> <p>AMI meters enable consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. Consumption data is transferred to the company through an integrated system of smart meters, communications networks, and data management systems. Such systems have the capability to:</p> <ul style="list-style-type: none"> <li>Record consumption data and allow ready access to this data by customers (directly or via contractors/agents) and the company at near real time, with data updated daily at a minimum, and made available at a minimum granularity of 1 hour intervals, or such greater frequency and/or granularity as reasonably requested by the customer or the customer's contractors/agents;</li> <li>Enable automated leak alarms to be communicated to the customer and company; and</li> <li>Communicate with the internet.</li> </ul> <p>Company should engage and collaborate with other water companies, meter suppliers and other stakeholders across the sector to agree on common standards relating to the data collected from smart meters to ensure data interoperability across the sector.</p> <p>Company must ensure all meters comply with the appropriate regulations governing cold water meters, and that their metering systems comply with their obligations under competition law.</p> <p>At PR24 these smart meters will be funded at the efficient unit rate for this technology as determined during the PR24 process.</p>
<b>Output measurement and reporting</b>	<p>Company must deliver the number and type of meters in line with the profile specified in the table below.</p> <p>Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:</p> <ul style="list-style-type: none"> <li>New AMI meter installations where no meter was previously installed</li> <li>AMI for AMR meter replacements</li> <li>AMI for basic meter replacements</li> </ul>
<b>Assurance</b>	<p>The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the conditions below have been met and the outputs of the scheme set out below have been delivered.</p>

<b>Conditions on scheme</b>	Company must deliver the meters funded at PR19 and Green Recovery by 31 March 2025. Transition expenditure funding will be made available for meters installed over and above the PR19 and Green Recovery meters set out in the table below.
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Deliverable	Unit	Forecast deliverables				
		2020/21	2021/22	2022/23	2023/24	2024/25
<b>PR19 delivery basic meters – unmeasured properties</b>	Number	690	13	-	-	-
<b>PR19 delivery AMR meters – unmeasured properties</b>	Number	82,658	110,141	62,968	74,245	90,269
<b>Green Recovery delivery AMI meters – unmeasured properties</b>	Number	-	244	31,330	28,484	5,988
<b>Green Recovery delivery basic to AMI meter upgrades</b>	Number	-	2,855	24,921	10,435	2,194
<b>Green Recovery delivery AMR to AMI meter upgrades</b>	Number	-	2,260	25,359	19,211	4,038
<b>Acceleration new AMI smart meters installed</b>	Number	-	-	-	42,000	83,000
<b>Acceleration AMI for AMR replacements</b>	Number	-	-	-	16,800	33,200
<b>Acceleration AMI for basic replacements</b>	Number	-	-	-	25,200	49,800

We expect the PR19 and Green Recovery forecast deliverables, together with the meters installed in previous control periods, to translate into the baseline trend shown in the table below. This table shows the cumulative number of meters by technology that we expect the company to achieve over the PR19 period excluding the acceleration programme.

Meter type	Unit	Starting position	Cumulative number of meters by technology, excluding acceleration				
		2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Baseline basic meters	Number	796,615	797,305	794,463	769,542	759,107	756,913
Baseline AMR smart meters	Number	920,705	1,003,363	1,111,244	1,148,853	1,203,887	1,290,118
Baseline AMI smart meters	Number	-	-	5,359	86,969	145,099	157,319

There is an expected improvement in performance in AMP7 and into AMP8 delivered through this proposed accelerated activity. The impact on PCC and leakage performance commitments are detailed below. These savings must be excluded from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025 so that the company does not earn outperformance (or avoid underperformance) from this additional investment. Company should report these savings separately in its 2025 Annual Performance Reports and reflect them in its PR24 performance commitment levels. These savings should be converted to three-year averages when compared against reporting performance levels in relation to performance commitments.

Performance commitment	Unit	Forecast benefits						
		2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Per capita consumption	l/h/d (cum.)	-	0.21	0.62	0.62	0.61	0.61	0.60
Leakage	MI/d (cum.)	-	2.02	6.00	6.00	6.00	6.00	6.00

## 3.2 Scheme 2: Draycote Raise

Scheme delivery expectations: Draycote raise	
<b>Description</b>	Reservoir enlargement option to increase capacity of the existing Draycote Reservoir by 6% (1,400 Ml of extra capacity) by raising the top water level by 0.6m from 93.88m AOD to 94.48m AOD. This will be achieved by raising the overflow weir sill by 0.6m and raising a bridge by 0.6m to retain its existing clearance from the water. The option is an accelerated 9 Ml/d dWRMP24 option starting 2023-24 and delivering in 2026-27.
<b>Output measurement and reporting</b>	By the end of 2024-25 the company will have completed 100% of the feasibility and detailed design work and 42% of construction. Detailed design is estimated to be 14% of the total scheme cost and AMP7 spend is estimated to be 50% of total scheme costs. Construction will be completed in 2025-26 and 9 Ml/d deployable output will be available to the Strategic Grid water resource zone under a DYAA 1 in 500 year drought scenario contributing 9 Ml/d to the zonal WAFU from 2026-27. Delivery of the outputs will be reported and monitored through the existing APR process
<b>Conditions on scheme</b>	There is a general expectation that all PR19 funded benefits to meet the supply demand balance will be delivered on time. The updated timing of the benefits of this scheme (WAFU) should be consistently taken account of in the company's final WRMP24.
<b>Assurance</b>	The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met and the outputs of the scheme set out above have been delivered.

Deliverable	Unit	Forecast deliverables	
		2023/24	2024/25
Detailed design of a reservoir enlargement option	% complete	70	100
Construction	% complete	0	42

Benefit measure	Unit	Forecast benefits						
		2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Deployable output available to the Strategic Grid water resource zone	Ml/d	0	0	0	9	9	9	9

### 3.3 Scheme 9: River water monitoring

Scheme delivery expectations	
<b>Description</b>	Installation of Flow to Full treatment meters to specification required by WINEP U_MON4 driver.
<b>Output measurement and reporting</b>	Number of meters installed. Delivery of each meter is to be verified through the WINEP process.
<b>Conditions on scheme</b>	<p>All meter installations to be included in WINEP for AMP7 through the alterations, or similar, process.</p> <p>Maximum number of installations to completed by 31 March 2025 is set at the number over that approved at PR19 to give full coverage of sites with a permit requirement for flow to full treatment.</p> <p>The company is expected to deliver a minimum of 69 installations. The flow monitors will be installed and certified by 31 March 2025, but the start of reporting of completion of the scheme will be in line with the regulatory obligation date in the WINEP. The company is expected to use the data from these meters within its processes to assure compliance at the earliest opportunity.</p> <p>The PCD unit cost is to be determined as a part of the PR24 process.</p>

Deliverable	Unit	Forecast deliverables				
		2020/21	2021/22	2022/23	2023/24	2024/25
U_MON4 meter installation	Number	-	-	-	-	69

## 4. Southern Water

### 4.1 Scheme 4: Storm Overflows

Scheme delivery expectations																			
<b>Description</b>	<p>Scheme to deliver a reduction in storm overflow spills that impact bathing waters and inland waters, with a strong focus on innovation and maximising learning ahead of AMP8.</p> <p>The programme will accelerate AMP8 WINEP storm overflows in 3 areas - the Solent, the North Kent Coast, and Chichester and Langstone Harbours. A minimum of 30 named overflows will be targeted to reduce spills by at least 420 per annum compared with the 2020-21 average. Outcomes and outputs are detailed in the table below.</p>																		
	<table border="1"> <thead> <tr> <th rowspan="2">Option  (CapEx - £m)</th> <th rowspan="2">Number of overflows in scope</th> <th rowspan="2">Outcome Annual spills reduction  (base year average of 2020 &amp; 2021)</th> <th colspan="3">Output</th> </tr> <tr> <th>Non-permeable Area Managed (hectares)</th> <th>Number of wetlands (#)</th> <th>Sewer relining (km)</th> </tr> </thead> <tbody> <tr> <td>£35</td> <td>30</td> <td>420</td> <td>50 - 80</td> <td>4</td> <td>5 - 7</td> </tr> </tbody> </table>					Option  (CapEx - £m)	Number of overflows in scope	Outcome Annual spills reduction  (base year average of 2020 & 2021)	Output			Non-permeable Area Managed (hectares)	Number of wetlands (#)	Sewer relining (km)	£35	30	420	50 - 80	4
Option  (CapEx - £m)	Number of overflows in scope	Outcome Annual spills reduction  (base year average of 2020 & 2021)	Output																
			Non-permeable Area Managed (hectares)	Number of wetlands (#)	Sewer relining (km)														
£35	30	420	50 - 80	4	5 - 7														
<b>Output measurement and reporting</b>	<p>The programme will deliver schemes to progress the reduction in spills as set out above. We are allowing the acceleration of the 420 spill reductions per year option..</p> <p>The type of interventions that will ultimately be delivered, and at which storm overflow, are to be confirmed through the course of this accelerated scheme. However, we do expect schemes to be delivered before 31 March 2025 that reduce annual spills by at least 420 spills per year, compared to the baseline without the scheme. The reduction in spill frequency for overflows included in the acceleration programme will be taken into account when setting the performance commitment level for the PR24 storm overflow spill performance commitment. The approach to setting the performance commitment level for the storm overflow PC is set out in the PR24 final methodology.</p> <p>We will require progress updates in the annual performance report from Southern Water to confirm what interventions have been commenced or completed at each of the in-scope storm overflows, a description of those interventions, and the forecast and actual spill reductions.</p> <p>We will require a final report by 31 March 2025 summarising the outputs that have been delivered, what innovative solutions have been implemented, and how this has been shared across the industry.</p>																		
<b>Conditions on scheme</b>	<p>The allowance is conditional on the company demonstrating to Ofwat that it has progressed interventions at all of the storm overflows targeted under the £35 million proposal. This can mean investigations, feasibility assessments or full scheme delivery, but must aim to deliver at least 420 spill reductions per year within AMP7, along with delivery of between 50 to 80 hectares of managed non-permeable area, 4 wetlands and between 5km to 7km of sewer sealing. The efficient expenditure allowance will be determined as part of the overall totex assessment at PR24.</p> <p>The allowance is conditional on the company evidencing to our satisfaction that all funding is for enhancing the functioning of the asset beyond permit compliance. This includes demonstrating that: the company is operating the assets in compliance with its permits, the funding is for enhancing functioning beyond the level which could be achieved through maintenance, and relevant outcomes should not have been already delivered through funding under past enhancement schemes. This test for "compliance" is for the purposes of the Southern Water</p>																		

	<p>storm overflow scheme only. Whether a company is actually compliant or not with the conditions in its environmental discharge permits is a matter for the EA, not Ofwat. Similarly this test should not be read as in any way indicating Ofwat's views on the compliance standards required by section 94 of the Water Industry Act 1991 as supplemented by the provisions of Regulation 4 of the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).</p> <p>The company must set out its method of providing this evidence for our approval either before or at the time of the submission of its strategic business plan in October 2023. The evidence may include, but may not be limited to, hydraulic simulation modelling of the asset operation pre and post completion of the enhancement scheme and an explanation of the methodology and assumptions underpinning both sets of modelling.<sup>1</sup> If there is currently no permit in place, then the company should evaluate the enhancement scheme on the basis of an assumed set of permit conditions that may typically be expected, e.g. the pass forward flow being set using formula A. It should provide the reasoning underpinning these assumptions.</p> <p>The company, through the process of progressing final scheme design, must continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions. The company must deliver a best value solution to meet all investment drivers and provide detailed evidence to show how the company has assured itself that the solution chosen is best value, including but not limited to evidence that the company assessed the compliance status of the asset in advance and evaluated options on the basis of that assessment. Insufficient evidence may be grounds for clawback. Where an element of the scheme is to address either maintenance or regain compliance then the company must proportionally allocate costs between base and enhancement and explain that apportionment, as allowances will only be made for those elements considered enhancement expenditure, with any residual funds clawed back.</p>
<b>Assurance</b>	<p>The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met.</p>

<sup>1</sup> Where hydraulic modelling provides a good match to observed performance, this must be used as evidence of the need for enhancement. Where hydraulic modelling does not replicate observed performance, the company must provide and justify a robust alternative approach (for example statistical analysis).

Accelerated infrastructure delivery project – Appendix 2 price control deliverables

Deliverables (for option 3)	Unit	Forecast deliverables									
		2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Storm overflows improved (investigated or schemes delivered)	%	-	-	-	-	100%	-	-	-	-	-
	Number	-	-	-	-	30	-	-	-	-	-
Spills reduced per year across 36 storm overflows	Number	-	-	-	-	-	420	420	420	420	420

## 5. South West Water

### 5.1 Scheme 1: Storm Overflows

Scheme delivery expectations: Storm Overflows				
<b>Description</b>	Deliver enhancements to 15 combined sewer overflows within the Falmouth and Sidmouth catchments to ensure compliance with bathing water quality standards, shellfish water standards and meet the Storm Overflow Discharge Reduction Plan spill target by March 2028.			
	For the Falmouth system, seven overflows are required to address the shellfish statutory WINEP driver (EnvAct_IMP2) and two are associated with the bathing water statutory driver (EnvAct_IMP3). For the Sidmouth system, three overflows are associated with bathing waters and three require spill frequency reductions (driver (EnvAct_IMP4).).			
<b>Output measurement and reporting</b>	The scheme should deliver the outcomes set out above through the enhancement outputs at each site set out below:			
	Site Name	Discharges into or less than 1km upstream of a designated Shellfish Water	Discharges into or less than 1km upstream of a designated Coastal Bathing Water with excellent status	Selected Driver
	FALMOUTH STW_SO_FALMOUTH	Yes	No	EnvAct_IMP2 Shellfish
	QUEEN MARY GARDENS SPS_PSCSOEO_FALMOUTH	No	Yes	Env_Act_IMP3
	SWANVALE SPS_PSCSOEO_FALMOUTH	No	Yes	Env_Act_IMP3
	24 NORTH PARADE_CSO_FALMOUTH	Yes	No	EnvAct_IMP2 Shellfish
	GREENBANK GARDENS_CSO_FALMOUTH	Yes	No	EnvAct_IMP2 Shellfish
	NORTH PARADE_CSO_FALMOUTH	Yes	No	EnvAct_IMP2 Shellfish
	OLD HILL SPS_PSCSOEO_FALMOUTH	Yes	No	EnvAct_IMP2 Shellfish
	PR OF WALES PIER SPS_PSCSOEO_FALMOUTH	Yes	No	EnvAct_IMP2 Shellfish
	GROVE PLACE NO 1 CSO_FALMOUTH	Yes	No	EnvAct_IMP2 Shellfish
	THE HAM SPST_PSCSOEO_SIDMOUTH2	No	Yes	Env_Act_IMP3
	THE HAM SPST_PSCSOEO_SIDMOUTH	No	Yes	Env_Act_IMP3
	THE HAM SPST_PSCSOEO_SIDMOUTH	No	Yes	Env_Act_IMP3

	<b>FORTESCUE_CS0_SIDMOUTH</b>	No	No	EnvAct_IMP4
	<b>MANSTONE LN_CS0_SIDMOUTH</b>	No	No	EnvAct_IMP4
	<b>TIPTON ST JOHN SPS_CSOEO_SIDMOUTH</b>	No	No	EnvAct_IMP4
	<p>Delivery of the outputs will be monitored through the existing APR process and the APR must provide the relevant output information for the completed storm overflow schemes; including storage provided, area of surface water separation and spill frequency reduction achieved for the purpose of benchmarking. We have estimated a delivery profile and spill reduction profile for the scheme. The company should provide a committed delivery and spill reduction profile in response to this consultation.</p> <p>The reduction in spill frequency for overflows included in the acceleration programme will be taken into account when setting the performance commitment level for the PR24 storm overflow spill performance commitment. The approach to setting the performance commitment level for the storm overflow PC is set out in the PR24 final methodology. We will require a final report summarising the outputs that have been delivered, what innovative solutions have been implemented, and how this has been shared across the industry.</p>			
<b>Conditions on scheme</b>	<p>The allowance is conditional on the company evidencing to our satisfaction that all funding is for enhancing the functioning of the asset beyond permit compliance. This includes demonstrating that: the company is operating the assets in compliance with its permits, the funding is for enhancing functioning beyond the level which could be achieved through maintenance, and relevant outcomes should not have been already delivered through funding under past enhancement schemes. This test for "compliance" is for the purposes of the South West Water storm overflow acceleration scheme only. Whether a company is actually compliant or not with the conditions in its environmental discharge permits is a matter for the EA, not Ofwat. Similarly this test should not be read as in any way indicating Ofwat's views on the compliance standards required by section 94 of the Water Industry Act 1991 as supplemented by the provisions of Regulation 4 of the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).</p> <p>The company must set out its method of providing this evidence for our approval either before or at the time of the submission of its strategic business plan in October 2023. The evidence must include, but may not be limited to, hydraulic simulation modelling of the asset operation pre and post completion of the enhancement scheme and an explanation of the methodology and assumptions underpinning both sets of modelling. If there is currently no permit in place, then the company should evaluate the enhancement scheme on the basis of an assumed set of permit conditions that may typically be expected, e.g. the pass forward flow being set using formula A. It should provide the reasoning underpinning these assumptions.</p> <p>The company, through the process of progressing final scheme design, must continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions. The company must deliver a best value solution to meet all investment drivers and provide detailed evidence to show how the company has assured itself that the solution chosen is best value, including but not limited to evidence that the company assessed the compliance status of the asset in advance and evaluated options on the basis of that assessment. Insufficient evidence may be grounds for clawback. Where an element of the scheme is to address either maintenance or regain compliance then the company must proportionally allocate costs between base and enhancement and explain that apportionment, as allowances will only be made for those elements considered enhancement expenditure, with any residual funds clawed back.</p>			
<b>Assurance of outputs</b>	The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met.			

Deliverable	Unit	Forecast Deliverables						
		AMP7		AMP8				
		2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
<b>Total storm overflows improved (cumulative)</b>	Number	0	0	4	9	15	15	15
<b>Total spill reduction per annum</b>	Number	0	0	110	220	330	330	330

## 5.2 Scheme 3: Nutrient Neutrality

Scheme delivery expectations: Nutrient Neutrality	
<b>Description</b>	The scheme is to deliver nutrient removal at five of the sites identified as discharging into SAC rivers. The sites are Axminster Kilmington WwTW, Tatworth WwTW, Bodmin WwTW, Camelford WwTW, and Scarletts Well WwTW. All five sites are in a nutrient neutrality designated area and the population equivalent for all sites are above the 2000 population equivalent threshold.
<b>Output measurement and reporting</b>	By no later than 31st March 2025, all five sites should be commissioned and optimised to compliance with the phosphorus nutrient pollution standard specified in section 96F(2) of the Water Industry Act 1991. The company must reflect all five sites in table 7F (Wastewater network+ - WINEP phosphorus removal scheme costs and cost drivers) of their annual performance report (APR24).  The company must forecast any impact of delivering this scheme on the reduction in phosphorus load to river catchments relative to the base period in their PR24 business plan submissions.
<b>Conditions on scheme</b>	The acceleration of this scheme will be conditional on the provisions relating to nutrient pollution standards in the Levelling-up and Regeneration Bill being enacted, and the Secretary of State designating under those provisions the catchment area(s) into which the WwTWs discharge treated effluent as a phosphorus sensitive catchment area.
<b>Assurance</b>	Independent assessment and assurance of completed feasibility and detailed design work and compliance with the phosphorus nutrient pollution standard specified in section 96F(2) of the Water Industry Act 1991 of these works must be provided to Ofwat as set out below. No later than three months after the dates specified below, assurance must be provided by a third-party and submitted to Ofwat. We will allow companies to re-submit their delivery schedule up until their business plans submissions to provide companies with flexibility to define their final programme timeframes.

Deliverable	Total P-permit	Date of delivery	Feasibility	Detailed design	Level of performance (compliance)	WINEP driver
<b>Axminster Kilmington WwTW</b>	0.25mg/L	31st March 2025	30th September 2023	31st March 2024	31st March 2025	HD_IMP_NN
<b>Tatworth WwTW</b>	0.25mg/L	31st March 2025	30th September 2023	31st March 2024	31st March 2025	HD_IMP_NN
<b>Bodmin Nanstallon WwTW</b>	0.25mg/L	31st March 2025	31st December 2024	30th June 2024	31st March 2025	HD_IMP_NN
<b>Camelford WwTW</b>	0.25mg/L	31st March 2025	31st December 2024	30th June 2024	31st March 2025	HD_IMP_NN
<b>Scarlett's Well WwTW</b>	0.25mg/L	31st March 2025	31st December 2024	30th June 2024	31st March 2025	HD_IMP_NN

## 5.3 Scheme 11: Colliford smart metering

Scheme delivery expectations	
<b>Description</b>	<p>Bringing forward metering programme from AMP8 as part of the company's proposed best value strategy in its draft WRMP24.</p> <p>Installation of 40,116 advanced monitoring infrastructure (AMI) meters – capable of recording and transmitting data at least once every 24 hours to measure supplies of water to premises. This involves new AMI meter installations and replacement of existing meters with new AMI meters as specified below.</p> <p>Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property.</p> <p>AMR meters are meters using automated meter reading (AMR) technology. This enables consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. It does not however enable consumption data to be ready by customers (directly or via contractors/agents) and the company at near real time.</p> <p>AMI meters enable consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. Consumption data is transferred to the company through an integrated system of smart meters, communications networks, and data management systems. Such systems have the capability to:</p> <ul style="list-style-type: none"> <li>• Record consumption data and allow ready access to this data by customers (directly or via contractors/agents) and the company at near real time, with data updated daily at a minimum, and made available at a minimum granularity of 1 hour intervals, or such greater frequency and/or granularity as reasonably requested by the customer or the customer's contractors/agents;</li> <li>• Enable automated leak alarms to be communicated to the customer and company; and</li> <li>• Communicate with the internet.</li> </ul> <p>Installation of 29,866 flow regulators. Flow regulators are devices which are fitted to the base of the water meter to regulate water flow supplied to property and reduce peak demand.</p> <p>Company should engage and collaborate with other water companies, meter suppliers and other stakeholders across the sector to agree on common standards relating to the data collected from smart meters to ensure data interoperability across the sector.</p> <p>Company must ensure all meters comply with the appropriate regulations governing cold water meters, and that their metering systems comply with their obligations under competition law.</p> <p>At PR24 these smart meters will be funded at the efficient unit rate for this technology as determined during the PR24 process.</p>
<b>Output measurement and reporting</b>	<p>Company must deliver the number and type of meters in line with the profile specified in the table below.</p> <p>Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:</p> <ul style="list-style-type: none"> <li>• New AMI meter installations where no meter was previously installed</li> <li>• AMI for AMR meter replacements</li> <li>• AMI for basic meter replacements</li> </ul>
<b>Assurance</b>	<p>The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the conditions below have been met and the outputs of the scheme set out below have been delivered.</p>
<b>Conditions on scheme</b>	<p>Company must deliver the meters funded at PR19 and Green Recovery by 31 March 2025. Transition expenditure funding will be made available for meters installed over and above the PR19 and Green Recovery meters set out in the table below.</p> <p>Company must provide sufficient and convincing evidence at our action plan review meeting in July 2023 that they are on track to deliver their PR19 enhancement programme.</p>

Deliverable	Unit	Forecast deliverables				
		2020/21	2021/22	2022/23	2023/24	2024/25
PR19 delivery AMR meters – unmeasured properties	Number	11,896	12,607	11,944	-	-
PR19 delivery basic to AMR meter upgrades	Number	9,572	7,821	10,400	10,616	11,223
Green Recovery delivery AMI meters - unmeasured properties	Number	-	-	-	11,534	9,936
Green Recovery delivery basic to AMI meter upgrades	Number	-	200	5,300	31,200	20,800
Green Recovery delivery AMR to AMI meter upgrades	Number	-	-	-	9,000	9,000
Acceleration AMI for AMR replacements	Number	-	-	-	4,477	4,477
Acceleration AMI for basic replacements	Number	-	-	-	15,580	15,580
Acceleration flow regulators	Number	-	-	-	14,933	14,933

We expect the PR19 and Green Recovery forecast deliverables, together with the meters installed in previous control periods, to translate into the baseline trend shown in the table below. This table shows the cumulative number of meters by technology that we expect the company to achieve over the PR19 period excluding the acceleration programme.

Meter type	Unit	Starting position	Cumulative number of meters by technology, excluding acceleration				
		2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Baseline basic meters	Number	711,439	701,867	693,846	678,146	636,330	604,307
Baseline AMR smart meters	Number	146,520	167,988	188,416	210,760	212,376	214,599
Baseline AMI smart meters	Number	-	-	200	5,500	57,234	96,970

There is an expected improvement in performance in AMP7 and into AMP8 delivered through this proposed accelerated activity. The impact on PCC and leakage performance commitments are detailed below. These savings must be excluded from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025 so that the company does not earn outperformance (or avoid underperformance) from this additional investment. Company should report these savings separately in its 2025 Annual Performance Reports and reflect them in its PR24 performance

commitment levels. These savings should be converted to three-year averages when compared against reporting performance levels in relation to performance commitments.

Performance commitment	Unit	Forecast benefits						
		2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Per capita consumption	l/h/d (cum.)	0.1	0.2	0.4	0.4	0.4	0.4	0.4
Leakage	MI/d (cum.)	0.06	0.125	0.250	0.250	0.250	0.250	0.250

## 5.4 Scheme 12: Supply pipe leakage

Scheme delivery expectations	
<b>Description</b>	Replacing up to 9,760 customer supply pipes to reduce customer side leakage by 1.6 Ml/d by the end of 2024-25. The proposal is an extension to the South West Water green economic recovery scheme across the Devon, Cornwall and Bournemouth regions.
<b>Output measurement and reporting</b>	Number of leaking supply pipes replaced to be reported annually parallel with the APR.
<b>Conditions on scheme</b>	To ensure that the scheme does not impact on existing performance commitments, the company must exclude the impact of the scheme on leakage and per capita consumption from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025.
<b>Assurance</b>	Independent assessment and assurance of completed leaking supply pipe replacements and the leakage benefit in this period as set out below must be provided to Ofwat.

Deliverable	Unit	Forecast deliverables				
		2020/21	2021/22	2022/23	2023/24	2024/25
Leaking supply pipes replaced	Number	0	0	0	4,835	4,835

There is an expected improvement in performance in AMP7 and into AMP8 delivered through this proposed accelerated activity. The impact on leakage performance commitments are detailed below. These savings must be excluded from PR19 performance reporting so that the company does not earn outperformance (or avoid underperformance) from this additional investment.

Deliverable	Unit	Forecast benefits						
		2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Leakage	Ml/d (annual)	0.8	1.6	1.6	1.6	1.6	1.6	1.6

## 6. United Utilities Water

### 6.1 ENV2: Accelerating habitats improvement in the Eden catchment

Scheme delivery expectations: Nutrient Neutrality	
<b>Description</b>	The scheme is to deliver nutrient removal at six sites identified as discharging into SAC rivers. The sites are Appleby WwTW, Brampton WwTW (Carlisle), Kirkby Stephen WwTW, Warwick Bridge WwTW, Carlisle WwTW and Penrith WwTW. All six sites are in a nutrient neutrality designated area and the population equivalent for all six sites are above the 2000 population equivalent threshold.
<b>Output measurement and reporting</b>	<p>By no later than 31st March 2026, Appleby WwTW, Brampton WwTW, Kirkby Stephen WwTW and Warwick Bridge WwTW should be commissioned and optimised to ensure compliance with the phosphorus nutrient pollution standard specified in section 96F(2) of the Water Industry Act 1991.</p> <p>By no later than 31st March 2028, Carlisle WwTW should be commissioned and optimised to ensure compliance with the phosphorus nutrient pollution standard specified in section 96F(2) of the Water Industry Act 1991</p> <p>By no later than 31st March 2029, Penrith WwTW should be commissioned and optimised to ensure compliance with the phosphorus nutrient pollution standard specified in section 96F(2) of the Water Industry Act 1991</p> <p>The company must reflect all six sites in table 7F (Wastewater network+ - WINEP phosphorus removal scheme costs and cost drivers) of their annual performance report (APR24).</p> <p>The company must forecast any impact of delivering this scheme on the reduction in phosphorus load to river catchments relative to the base period in their PR24 business plan submissions.</p>
<b>Conditions on scheme</b>	The acceleration of this scheme will be conditional on the provisions relating to nutrient pollution standards in the Levelling-up and Regeneration Bill being enacted, and the Secretary of State designating under those provisions the catchment area into which the WWTWs discharge treated effluent as a phosphorus sensitive catchment area.
<b>Assurance</b>	Independent assessment and assurance of completed feasibility, detailed design, environmental impact assessment screening, planning permission and compliance with the phosphorus nutrient pollution standard specified in section 96F(2) of the Water Industry Act 1991 of these works must be provided to Ofwat as set out below. No later than three months after the dates specified below, assurance must be provided by a third-party and submitted to Ofwat. We will allow companies to re-submit their delivery schedule up until their business plans submissions to provide companies with flexibility to define their final programme timeframes.

<b>Deliverable</b>	<b>Total P-permit</b>	<b>Date of delivery</b>	<b>Tender and procurement process (x)</b>	<b>Detailed design, environmental impact assessment screening and planning permission</b>	<b>Level of performance (compliance)</b>	<b>WINEP driver</b>
<b>Appleby WwTW</b>	0.25mg/L	31st March 2026	31st March 2024	31st March 2025	31st March 2026	HD_IMP_NN
<b>Brampton WwTW (Carlisle)</b>	0.25mg/L	31st March 2026	31st March 2024	31st March 2025	31st March 2026	HD_IMP_NN
<b>Kirkby Stephen WwTW</b>	0.25mg/L	31st March 2026	31st March 2024	31st March 2025	31st March 2026	HD_IMP_NN
<b>Warwick Bridge WwTW</b>	0.25mg/L	31st March 2026	31st March 2024	31st March 2025	31st March 2026	HD_IMP_NN
<b>Carlisle WwTW</b>	0.25mg/L	31st March 2028	31st March 2025	31st March 2026	31st March 2028	HD_IMP_NN
<b>Penrith WwTW</b>	0.25mg/L	31st March 2029	31st March 2025	31st March 2026	31st March 2029	HD_IMP_NN

## 6.2 ENV3: Delivering improvements to storm overflows

Scheme delivery expectations: Delivering improvements to storm overflows	
<b>Description</b>	<p>Deliver enhancements to combined sewer overflows and wastewater treatment works to ensure compliance with Storm Overflow Discharge Reduction Plan targets. The scheme accelerates a specific subset of AMP8 WINEP; reducing spill frequency for 135 storm overflows resulting in a modelled spill reduction of over 8000 storm overflow spills. The schemes will utilise over 275,000m<sup>3</sup> of traditional grey storage and approximately 55ha separation.</p> <p>It is expected that the improvements at the 135 storm overflows to achieve the Storm Overflow Discharge Reduction Plan targets will be delivered no later than 31 March 2030.</p>
<b>Output measurement and reporting</b>	<p>The scheme should deliver the outcomes set out above through the enhancement outputs of each site set out in annex 1 of appendix 2.</p> <p>Storm overflow solutions that are found to be not required following further investigation and design work may be swapped with alternative sites with Environment Agency and Ofwat approval up until the submission of the PR24 business plan. Any alternative site must be demonstrated to have greater environmental and customer benefit than the scheme it replaced.</p> <p>Delivery of the outputs will be monitored through the existing APR process and the APR must provide the relevant output information for the completed storm overflow schemes; including storage provided, area of surface water separation and spill frequency reduction achieved for the purpose of benchmarking. We have estimated a delivery profile and spill reduction profile for the scheme. The company should provide a committed delivery and spill reduction profile in response to this consultation.</p> <p>The approach to setting the performance commitment level for the storm overflow PC is set out in the PR24 final methodology. We will require a final report summarising the outputs that have been delivered, what innovative solutions have been implemented, and how this has been shared across the industry.</p>
<b>Conditions on scheme</b>	<p>The allowance is conditional on the company evidencing to our satisfaction that all funding is for enhancing the functioning of the asset beyond permit compliance. This includes demonstrating that: the company is operating the assets in compliance with its permits, the funding is for enhancing functioning beyond the level which could be achieved through maintenance, and relevant outcomes should not have been already delivered through funding under past enhancement schemes. This test for "compliance" is for the purposes of the United Utilities Delivering improvements to storm overflows scheme only. Whether a company is actually compliant or not with the conditions in its environmental discharge permits is a matter for the EA, not Ofwat. Similarly this test should not be read as in any way indicating Ofwat's views on the compliance standards required by section 94 of the Water Industry Act 1991 as supplemented by the provisions of Regulation 4 of the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).</p> <p>The company must set out its method of providing this evidence for our approval either before or at the time of the submission of its strategic business plan in October 2023. The evidence must include, but may not be limited to, hydraulic simulation modelling of the asset operation pre and post completion of the enhancement scheme and an explanation of the methodology and assumptions underpinning both sets of modelling. If there is currently no permit in place, then the company should evaluate the enhancement scheme on the basis of an assumed set of permit conditions that may typically be expected, e.g. the pass forward flow being set using formula A. It should provide the reasoning underpinning these assumptions.</p>

	The company, through the process of progressing final scheme design, must continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions. The company must deliver a best value solution to meet all investment drivers, and provide detailed evidence to show how the company has assured itself that the solution chosen is best value, including but not limited to evidence that the company assessed the compliance status of the asset in advance and evaluated options on the basis of that assessment. Insufficient evidence may be grounds for clawback. Where an element of the scheme is to address either maintenance or regain compliance then the company should proportionally allocate cost between base and enhancement and explain that apportionment as allowances will only be made for those elements considered enhancement expenditure, with any residual funds clawed back.
<b>Assurance of outputs</b>	The company must commission an independent, third party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met.

	Forecast Deliverables						
	AMP7		AMP8				
Deliverable	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
<b>Scheme Percentage Delivered (cumulative)</b>	0	3	10	23	77	96	100
<b>Total Storm Overflows Improved (cumulative)</b>	0	5	15	32	101	128	135
<b>Reduction in Storm Overflow Spills (cumulative)</b>	0	276	881	1943	6443	8043	8406

## 6.3 ENV4: Reducing the frequency of storm overflow discharges in Windermere catchment

Scheme delivery expectations – Reducing the frequency of storm overflow discharges in Windermere catchment.					
<b>Description</b>	<p>Deliver enhancements to combined sewer overflows and wastewater treatment works to ensure compliance with Storm Overflow Discharge Reduction Plan targets. The scheme accelerates a specific subset of AMP8 WINEP; reducing spill frequency for 4 storm overflows discharging into the Windermere catchment, resulting in a spill reduction of 100 per annum compared to the modelled spill frequency. The schemes will utilise over 8,700m<sup>3</sup> of traditional grey storage and approximately 0.7ha of surface water separation.</p> <p>It is expected that the improvements at the 4 storm overflows to achieve the Storm Overflow Discharge Reduction Plan targets will be delivered no later than 31 March 2028.</p>				
<b>Output measurement and reporting</b>	The scheme should deliver the outcomes set out above through the enhancement outputs of each site set out below:				
	<b>Overflow Name or Location</b>	<b>Primary Driver</b>	<b>Secondary Driver</b>	<b>Tertiary Driver</b>	<b>Solution Deliverable</b>
	<b>AMBLESIDE WwTW</b>	EnvAct_IMP4			10 Spills per annum
	<b>Near Sawrey WwTW</b>	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4	10 Spills per annum
	<b>Elterwater pumping station (ELTER) (LAK0025)</b>	EnvAct_IMP2	EnvAct_IMP4		10 Spills per annum
	<b>Hawkshead Pumping Station (Site ID HWKSH) (LAK0107)</b>	EnvAct_IMP2			WFD
	<p>Delivery of the outputs will be monitored through the existing APR process and the APR must provide the relevant output information for the completed storm overflow schemes; including storage provided, area of surface water separation and spill frequency reduction achieved for the purpose of benchmarking. We have estimated a delivery profile and spill reduction profile for the scheme. The company should provide a committed delivery and spill reduction profile in response to this consultation.</p> <p>The approach to setting the performance commitment level for the storm overflow PC is set out in the PR24 final methodology. We will require a final report summarising the outputs that have been delivered, what innovative solutions have been implemented, and how this has been shared across the industry.</p>				
<b>Conditions on scheme</b>	<p>The allowance is conditional on the company evidencing to our satisfaction that all funding is for enhancing the functioning of the asset beyond permit compliance. This includes demonstrating that: the company is operating the assets in compliance with its permits, the funding is for enhancing functioning beyond the level which could be achieved through maintenance, and relevant outcomes should not have been already delivered through funding under past enhancement schemes. This test for "compliance" is for the purposes of the Windermere catchment scheme only. Whether a company is actually compliant or not with the conditions in its environmental discharge permits is a matter for the EA, not Ofwat. Similarly this test should not be read as in any way indicating Ofwat's views on the compliance standards required by section 94 of the Water Industry Act 1991 as supplemented by the provisions of Regulation 4 of</p>				

	<p>the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).</p> <p>The company must set out its method of providing this evidence for our approval either before or at the time of the submission of its strategic business plan in October 2023. The evidence must include, but may not be limited to, hydraulic simulation modelling of the asset operation pre and post completion of the enhancement scheme and an explanation of the methodology and assumptions underpinning both sets of modelling. If there is currently no permit in place, then the company should evaluate the enhancement scheme on the basis of an assumed set of permit conditions that may typically be expected, e.g. the pass forward flow being set using formula A. It should provide the reasoning underpinning these assumptions.</p> <p>The company, through the process of progressing final scheme design, must continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions. The company must deliver a best value solution to meet all investment drivers, and provide detailed evidence to show how the company has assured itself that the solution chosen is best value, including but not limited to evidence that the company assessed the compliance status of the asset in advance and evaluated options on the basis of that assessment. Insufficient evidence may be grounds for clawback. Where an element of the scheme is to address either maintenance or regain compliance then the company should proportionally allocate cost between base and enhancement and explain that apportionment as allowances will only be made for those elements considered enhancement expenditure, with any residual funds clawed back.</p>
<b>Assurance of outputs</b>	The company must commission an independent, third party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met.

	Forecast Deliverables						
	AMP7		AMP8				
Deliverable	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Scheme Percentage Delivered (cumulative)	0	0	0	51	100	100	100
Total Storm Overflows Improved (cumulative)	0	0	0	2	4	4	4
Reduction in Storm Overflow Spills (cumulative)	0	0	0	51	100	100	100

## 6.4 ENV10: Bathing Waters

Scheme delivery expectations: Bathing Waters						
<b>Description</b>	<p>Deliver enhancements to combined sewer overflows and wastewater treatment works to ensure compliance with Storm Overflow Discharge Reduction Plan targets, bathing Water standards and WFD standards.</p> <p>The scheme accelerates a specific subset of AMP8 WINEP to reduce spill frequency for 15 overflows; improving 1 bathing water from poor to sufficient status, provide protection of sufficient status at 5 bathing waters at risk of poor status and provide improvement at 1 shellfish bed. The schemes predicts a spill reduction of over 800 per annum based on modelled spill frequencies utilising around 45,000m<sup>3</sup> of traditional grey storage and approximately 6ha separation.</p> <p>It is expected that the improvements at the 15 storm overflows to achieve the Storm Overflow Discharge Reduction Plan targets will be delivered no later than 31 March 2028.</p>					
	<p>The scheme should deliver the outcomes set out above through the enhancement outputs of each site set out below:</p>					
<b>Output measurement and reporting</b>	<b>Overflow Name or Location</b>	<b>Primary Driver</b>	<b>Secondary Driver</b>	<b>Tertiary Driver</b>	<b>Quaternary Driver</b>	<b>Solution Deliverable</b>
	<b>BOTHEL</b>	EnvAct_IMP4				10 Spills per Annum
	<b>Dearham WwTW</b>	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4		3 Spills per Bathing Season, 10 Spills per Annum
	<b>GILCRUX WwTW</b>	EnvAct_IMP2	EnvAct_IMP4			10 Spills per Annum
	<b>Plumbland</b>	EnvAct_IMP4				10 Spills per Annum
	<b>Prospect Oughterside</b>	EnvAct_IMP4				10 Spills per Annum
	<b>ALLERBY</b>	EnvAct_IMP4				10 Spills per Annum
	<b>CROSSCANONBY WwTW</b>	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4		3 Spills per Bathing Season, 10 Spills per Annum
	<b>Maryport Sewage PS</b>	EnvAct_IMP4				10 Spills per Annum
	<b>Haverigg PS</b>	BW_IMP1	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4	3 Spills per Bathing Season, 10 Spills per Annum
	<b>31 Abbotsmead Approach CSO</b>	EnvAct_IMP4				10 Spills per Annum
	<b>Ferry PS</b>	SW_IMP	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4	3 Spills per Bathing

						Season, 10 Spills per Annum
	<b>Graving Dock Pumping Station (Site ID 04525) (BRW0100)</b>	SW_IMP	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4	3 Spills per Bathing Season, 10 Spills per Annum
	<b>Harbour Yard Pumping Station (Site ID 04524) (BRW0101)</b>	SW_IMP	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4	3 Spills per Bathing Season, 10 Spills per Annum
	<b>St Bees PS</b>	EnvAct_IMP3	EnvAct_IMP4			3 Spills per Bathing Season, 10 Spills per Annum
	<b>Skippool PS (Poulton PS)</b>	EnvAct_IMP3	EnvAct_IMP4			3 Spills per Bathing Season, 10 Spills per Annum
<p>Delivery of the outputs will be monitored through the existing APR process and the APR must provide the relevant output information for the completed storm overflow schemes; including storage provided, area of surface water separation and spill frequency reduction achieved for the purpose of benchmarking. We have estimated a delivery profile and spill reduction profile for the scheme. The company should provide a committed delivery and spill reduction profile in response to this consultation.</p> <p>The reduction in storm overflow spills is compared to baseline 2021 spill frequency and will be taken into account when setting the performance commitment level for the PR24 storm overflow spill performance commitment. The approach to setting the performance commitment level for the storm overflow PC is set out in the PR24 final methodology.</p> <p>We will require a final report summarising the outputs that have been delivered, what innovative solutions have been implemented, and how this has been shared across the industry.</p>						

<b>Conditions on scheme</b>	<p>The allowance is conditional on the company evidencing to our satisfaction that all funding is for enhancing the functioning of the asset beyond permit compliance. This includes demonstrating that: the company is operating the assets in compliance with its permits, the funding is for enhancing functioning beyond the level which could be achieved through maintenance, and relevant outcomes should not have been already delivered through funding under past enhancement schemes. This test for "compliance" is for the purposes of the United Utilities bathing waters scheme only. Whether a company is actually compliant or not with the conditions in its environmental discharge permits is a matter for the EA, not Ofwat. Similarly this test should not be read as in any way indicating Ofwat's views on the compliance standards required by section 94 of the Water Industry Act 1991 as supplemented by the provisions of Regulation 4 of the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).</p> <p>The company must set out its method of providing this evidence for our approval either before or at the time of the submission of its strategic business plan in October 2023. The evidence must include, but may not be limited to, hydraulic simulation modelling of the asset operation pre and post completion of the enhancement scheme and an explanation of the methodology and assumptions underpinning both sets of modelling. If there is currently no permit in place, then the company should evaluate the enhancement scheme on the basis of an assumed set of permit conditions that may typically be expected, e.g. the pass forward flow being set using formula A. It should provide the reasoning underpinning these assumptions.</p> <p>The company, through the process of progressing final scheme design, must continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions. The company must deliver a best value solution to meet all investment drivers, and provide detailed evidence to show how the company has assured itself that the solution chosen is best value, including but not limited to evidence that the company assessed the compliance status of the asset in advance and evaluated options on the basis of that assessment. Insufficient evidence may be grounds for clawback. Where an element of the scheme is to address either maintenance or regain compliance then the company should proportionally allocate cost between base and enhancement and explain that apportionment as allowances will only be made for those elements considered enhancement expenditure, with any residual funds clawed back.</p>
<b>Assurance of outputs</b>	The company must commission an independent, third party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met.

Deliverable	Forecast Deliverables						
	AMP7		AMP8				
	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Scheme Percentage Delivered (cumulative)	0	0	0	0	100	100	100
Total Storm Overflows Improved (cumulative)	0	0	0	0	15	15	15
Reduction in Storm Overflow Spills (cumulative)	0	0	0	0	834	834	834



## 7. Yorkshire Water

### 7.1 Scheme 6: Inland bathing water improvement scheme – Wharfe Ilkley

Scheme delivery expectations	
<b>Description</b>	<p>Deliver enhancements to combined sewer overflows and wastewater treatment works to support achieving the bathing water quality standards at the inland site of Ilkley Wharfe on or before 31 March 2026.</p> <p>Enhance the performance of storm overflows within 5km upstream of the designated monitoring point to meet the target of one spill per season on average. Further enhance Yorkshire Water’s Grassington, Draughton, Beamsley and Ilkley Sewage Treatment Works to contribute towards achieving the required bathing water quality.</p> <p>Additional investments will be delivered to discharges downstream of the statutory sampling point to safeguard public health.</p>
<b>Output measurement and reporting</b>	<p>The scheme should deliver the enhancement outputs at each site set out below,</p> <ul style="list-style-type: none"> <li>• Bridge Lane CSO – screen</li> <li>• Addingham SPS (2 no.) overflows – storage and screen</li> <li>• Low Mill Lane CSO – storage and screen</li> <li>• Middleton CSO – storage and screen</li> <li>• Rivadale CSO – storage (in addition to 3404m<sup>3</sup> of storage commissioned in AMP7)</li> <li>• Ilkley STW – increase flow to full treatment to take increased pass forward flow from network</li> <li>• Draughton STW – tertiary treatment</li> <li>• Grassington STW – tertiary treatment</li> <li>• Beamsley STW – tertiary treatment</li> </ul> <p>The tertiary treatment at Draughton, Grassington and Beamsley are works in addition to the UV irradiation commissioned June 2022.</p> <p>The additional investments necessary to secure public health downstream of the sample point are,</p> <ul style="list-style-type: none"> <li>• Ilkley STW - tertiary treatment &amp; increased storage for the '6*DWF' storm overflow line.</li> </ul> <p>Delivery of the output will be monitored through the existing APR process. This is expected to provide the relevant output information for the completed storm overflow schemes; including, for example, storage provided, area of surface water separation and spill frequency reduction achieved for the purpose of benchmarking.</p> <p>The reduction in spill frequency for overflows included in the acceleration programme will be taken into account when setting the level for the PR24 storm overflow spill performance commitment. The approach to setting the performance commitment level for the storm overflow PC is set out in the PR24 final methodology. The spill count for 2021, for each CSO, using 12-24h count method in given below. We have estimated a delivery profile and spill reduction profile for the scheme taking the performance on scheme completion as 10 spills p.a. per CSO. This covers the performance of the asset for the whole year and not just the bathing water season.</p>

	Site Name	WaSC Supplementary Permit Ref.	Counted spills using 12–24h count method
1	ILKLEY/STW/3XDWF OVERFLOW	27/19/0045 2	84
2	ILKLEY/STW/6XDWF OVERFLOW	27/19/0045 3	72
3	BRIDGE LANE/CSO	27/19/0058 1	5
4	ADDINGHAM/NO 1 SPS/PRELIMINARY TREATMENT-STW/3XDWF OVERFLOW	2482 1	48
5	ADDINGHAM/NO 1 SPS/PRELIMINARY TREATMENT-STW/6XDWF OVERFLOW	2482 2	65
6	LOW MILL LANE 179/CSO	27/19/0092 1	7
7	ILKLEY MIDDLETON/CSO	27/19/0052 1	31
8	RIVADALE VIEW/CSO	3166(SS) 1	47
		Total	359
<b>Conditions on scheme</b>	<p>The funding is conditional on the delivery of the outputs stated, but may not be limited to these outputs. Should the outputs be deemed unnecessary then a proportion of scheme cost allowance for each non-delivered output, as set out below, will be returned to customers.</p> <p>Any penalty for late delivery of the defined output will be administered through environmental legislation enforced by the Environment Agency in the form of fines for non-compliance.</p> <p>The outputs can be replaced with alternative options on agreement with Ofwat and EA. The company, through the process of progressing final scheme design, should continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions.</p> <p>The scheme costs allowance will be determined as a part of the PR24 final determination. This will be the efficient cost for the scheme and will take into consideration the delivery of all works to deliver the outcome. It is expected that the efficient cost benchmark will be determined using relevant cost drivers, e.g. volume of storage, capacity of tertiary treatment process as set out in the company's PR24 business plan.</p>		
	<b>Scheme output</b>	<b>Completion date</b>	<b>% of Cost allowance</b>
	Bridge Lane CSO – screen	March 2026	1%
	Addingham SPS overflow – storage and screen	March 2026	10%
	Low Mill Lane CSO – storage and screen	March 2026	1%
	Middleton CSO – storage and screen	March 2026	4%
	Rivadale CSO – storage	March 2026	21%

	<b>Ilkley STW – increased FFT</b>	March 2026	28%
	<b>Ilkley STW – tertiary treatment</b>	March 2026	8%
	<b>Ilkley STW – storage</b>	March 2026	10%
	<b>Draughton STW – tertiary treatment</b>	March 2026	6%
	<b>Grassington STW – tertiary treatment</b>	March 2026	6%
	<b>Beamsley STW – tertiary treatment</b>	March 2026	6%
	<p>The allowance is conditional on the company evidencing to our satisfaction that all funding is for enhancing the functioning of the asset beyond permit compliance. This includes demonstrating that: the company is operating the assets in compliance with its permits, the funding is for enhancing functioning beyond the level which could be achieved through maintenance, and relevant outcomes should not have been already delivered through funding under past enhancement schemes. This test for "compliance" is for the purposes of the Wharfe Ilkely scheme only. Whether a company is actually compliant or not with the conditions in its environmental discharge permits is a matter for the EA, not Ofwat. Similarly this test should not be read as in any way indicating Ofwat's views on the compliance standards required by section 94 of the Water Industry Act 1991 as supplemented by the provisions of Regulation 4 of the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).</p> <p>The company must set out its method of providing this evidence for our approval either before or at the time of the submission of its strategic business plan in October 2023. The evidence must include, but may not be limited to, hydraulic simulation modelling of the asset operation pre and post completion of the enhancement scheme and an explanation of the methodology and assumptions underpinning both sets of modelling. If there is currently no permit in place, then the company should evaluate the enhancement scheme on the basis of an assumed set of permit conditions that may typically be expected, e.g. the pass forward flow being set using formula A. It should provide the reasoning underpinning these assumptions.</p> <p>The company, through the process of progressing final scheme design, must continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions.</p> <p>The company must deliver a best value solution to meet all investment drivers and provide detailed evidence to show how the company has assured itself that the solution chosen is best value, including but not limited to evidence that the company assessed the compliance status of the asset in advance and evaluated options on the basis of that assessment. The improvements to processes at the sewage treatment works should make a contribution to the required improvement in river water quality that is appropriate to the impact of the discharge in relation to all sources of pollution. An expected output from the investment also includes reporting on the relative contribution of all the sources of background bacteria across the entire length of bathing water site. The bathing waters should be assessed before and after the enhancement works, with an attribution to each of the individual sewage treatment works.</p> <p>Insufficient evidence may be grounds for clawback. Where an element of the scheme is to address either maintenance or regain compliance then the company should proportionally allocate cost between base and enhancement and explain that apportionment as allowances will only be made for those elements considered enhancement expenditure, with any residual funds clawed back.</p>		
<b>Assurance of outputs</b>	The company must commission an independent, third party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met.		

Deliverable	Unit	Forecast Deliverables						
		AMP7			AMP8			
		2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
No. of improvement schemes at sewage treatment works	Number				4			
Total storm overflows improved	Number	0	0	0	8	0	0	0
Total spill reduction per annum	Number	0	0	0	279	279	279	279

## 7.2 Scheme 9: Coastal bathing water improvement

Scheme delivery expectations	
<b>Description</b>	Deliver enhancements to the Wheatcroft combined sewer overflow to meet the storm overflow spill target for coastal bathing water of an average of two spills per bathing water season, on or before 31 March 2025.
<b>Output measurement and reporting</b>	<p>The scheme should deliver the outcomes as set out above through the enhancement outputs of a storage solution and screen at Wheatcroft CSO.</p> <p>The reduction in spill frequency for overflows included in the acceleration programme will be taken into account when setting the level for the PR24 storm overflow spill performance commitment. The approach to setting the performance commitment level for the storm overflow PC is set out in the PR24 final methodology.</p> <p>The spill count for 2021, for WHEATCROFT/CSO (QR.27/27/0029) is 54 using 12-24h count method. We have estimated a delivery profile and spill reduction profile for the scheme taking the performance on scheme completion as 10 spills p.a. per CSO. This covers the performance of the asset for the whole year and not just the bathing water season.</p> <p>Delivery of the output will be monitored through the existing APR process. This is expected to provide the relevant output information for the completed storm overflow schemes; including, for example, storage provided, area of surface water separation and spill frequency reduction achieved for the purpose of benchmarking.</p>
<b>Conditions on scheme</b>	<p>The funding is conditional on the outcome being delivered by the stated output to the stated deadline. Should the output not be delivered the scheme cost allowance will be returned to customers. Any penalty for late delivery of the defined output will be administered through environmental legislation enforced by the Environment Agency in the form of fines for non-compliance.</p> <p>The outputs can be replaced with alternative options on agreement with Ofwat and EA. The company, through the process of progressing final scheme design, should continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions.</p> <p>The scheme cost allowance will be determined as a part of the PR24 final determination. This will be the efficient cost for the scheme and will take into consideration the delivery of all works to deliver the outcome. It is expected that the efficient cost benchmark will be determined using relevant cost drivers, e.g. volume of storage, as set out in the company's PR24 business plan.</p> <p>The allowance is conditional on the company evidencing to our satisfaction that all funding is for enhancing the functioning of the asset beyond permit compliance. This includes demonstrating that: the company is operating the assets in compliance with its permits, the funding is for enhancing functioning beyond the level which could be achieved through maintenance, and relevant outcomes should not have been already delivered through funding under past enhancement schemes. This test for "compliance" is for the purposes of the Wheatcroft CSO scheme only. Whether a company is actually compliant or not with the conditions in its environmental discharge permits is a matter for the EA, not Ofwat. Similarly this test should not be read as in any way indicating Ofwat's views on the compliance standards required by section 94 of the Water Industry Act 1991 as</p>

	<p>supplemented by the provisions of Regulation 4 of the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).</p> <p>The company must set out its method of providing this evidence for our approval either before or at the time of the submission of its strategic business plan in October 2023. The evidence must include, but may not be limited to, hydraulic simulation modelling of the asset operation pre and post completion of the enhancement scheme and an explanation of the methodology and assumptions underpinning both sets of modelling. If there is currently no permit in place, then the company should evaluate the enhancement scheme on the basis of an assumed set of permit conditions that may typically be expected, e.g. the pass forward flow being set using formula A. It should provide the reasoning underpinning these assumptions.</p> <p>The company, through the process of progressing final scheme design, must continue to consider opportunities for inclusion of nature-based and surface water management at source type solutions. The company must deliver a best value solution to meet all investment drivers, and provide detailed evidence to show how the company has assured itself that the solution chosen is best value, including but not limited to evidence that the company assessed the compliance status of the asset in advance and evaluated options on the basis of that assessment. Insufficient evidence may be grounds for clawback. Where an element of the scheme is to address either maintenance or regain compliance then the company should proportionally allocate cost between base and enhancement and explain that apportionment as allowances will only be made for those elements considered enhancement expenditure, with any residual funds clawed back.</p>
<b>Assurance of outputs</b>	<p>The company must commission an independent, third party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the above conditions have been met.</p>

Deliverable	Unit	Forecast Deliverables						
		AMP7		AMP8				
		2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
<b>Total storm overflows improved</b>	Number	0	0	1	0	0	0	0
<b>Total spill reduction per annum</b>	Number	0	0	44	44	44	44	44

## 8. Affinity Water

### 8.1 Scheme 7: Smart metering

Scheme delivery expectations	
<b>Description</b>	<p>Bringing forward year 1 metering programme from AMP8 as part of the company's proposed best value strategy in its draft WRMP24.</p> <p>Installation of 20,000 advanced monitoring infrastructure (AMI) meters – capable of recording and transmitting data at least once every 24 hours to measure supplies of water to premises. This involves new AMI meter installations and replacement of existing meters with new AMI meters as specified below.</p> <p>Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property.</p> <p>AMR meters are meters using automated meter reading (AMR) technology. This enables consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. It does not however enable consumption data to be read by customers (directly or via contractors/agents) and the company at near real time.</p> <p>AMI meters enable consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. Consumption data is transferred to the company through an integrated system of smart meters, communications networks, and data management systems. Such systems have the capability to:</p> <ul style="list-style-type: none"> <li>Record consumption data and allow ready access to this data by customers (directly or via contractors/agents) and the company at near real time, with data updated daily at a minimum, and made available at a minimum granularity of 1 hour intervals, or such greater frequency and/or granularity as reasonably requested by the customer or the customer's contractors/agents;</li> <li>Enable automated leak alarms to be communicated to the customer and company; and</li> <li>Communicate with the internet.</li> </ul> <p>Company should engage and collaborate with other water companies, meter suppliers and other stakeholders across the sector to agree on common standards relating to the data collected from smart meters to ensure data interoperability across the sector.</p> <p>Company must ensure all meters comply with the appropriate regulations governing cold water meters, and that their metering systems comply with their obligations under competition law.</p> <p>At PR24 these smart meters will be funded at the efficient unit rate for this technology as determined during the PR24 process.</p>
<b>Output measurement and reporting</b>	<p>Company must deliver the number and type of meters in line with the profile specified in the table below.</p> <p>Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:</p> <ul style="list-style-type: none"> <li>New AMI meter installations where no meter was previously installed</li> <li>AMI for AMR meter replacements</li> <li>AMI for basic meter replacements</li> </ul>
<b>Assurance</b>	<p>The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the conditions below have been met and the outputs of the scheme set out below have been delivered.</p>

<b>Conditions on scheme</b>	<p>Company must deliver the meters funded at PR19 by 31 March 2025. Transition expenditure funding will be made available for meters installed over and above the PR19 meters set out in the table below.</p> <p>Company must provide sufficient and convincing evidence at our action plan review meeting in July 2023 that they are on track to deliver their PR19 enhancement programme.</p>
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Deliverable	Unit	Forecast deliverables				
		2020/21	2021/22	2022/23	2023/24	2024/25
<b>PR19 delivery AMR meters – unmeasured properties</b>	Number	28,013	54,928	28,916	42,049	42,000
<b>PR19 delivery basic to AMR meter upgrades</b>	Number	12,015	12,520	8,683	11,000	11,000
<b>Acceleration new AMI smart meters installed</b>	Number	-	-	-	-	4,000
<b>Acceleration AMI for basic replacements</b>	Number	-	-	-	-	16,000

We expect the PR19 forecast deliverables, together with the meters installed in previous control periods, to translate into the baseline trend shown in the table below. This table shows the cumulative number of meters by technology that we expect the company to achieve over the PR19 period excluding the acceleration programme.

Meter type	Unit	Starting position	Cumulative meters by technology, excluding acceleration				
		2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
<b>Baseline basic meters</b>	Number	640,504	628,489	615,969	607,286	596,286	585,286
<b>Baseline AMR meters</b>	Number	302,539	342,567	410,015	447,614	500,663	553,663

There is an expected improvement in performance in AMP7 and into AMP8 delivered through this proposed accelerated activity. The impact on PCC and leakage performance commitments are detailed below. These savings must be excluded from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025 so that the company does not earn outperformance (or avoid underperformance) from this additional investment. Company should report these savings

separately in its 2025 Annual Performance Reports and reflect them in its PR24 performance commitment levels. These savings should be converted to three-year averages when compared against reporting performance levels in relation to performance commitments.

Performance commitment	Unit	Forecast benefits						
		2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Per capita consumption	l/h/d (cum.)	-	0.21	0.85	0.85	0.85	0.85	0.85
Leakage	MI/d (cum.)	-	0.07	0.07	0.07	0.07	0.07	0.07

## 8.2 Scheme 8: Broome (NO<sub>3</sub>)

Scheme delivery expectations	
<b>Description</b>	Scheme brings forward the accelerated detailed design and activity to secure planning permissions 63% complete by 31 March 2024 and 100% complete by the 31 March 2025, enabling the accelerated construction of a nitrate (NO <sub>3</sub> ) treatment plant which will deliver benefits in 2027-28. The new treatment process will secure a reliable 2.5 MI/d annual average deployable output and 4.5 MI/d peak week output from the Broome site to the WRZ7 Dour water resource zone.
<b>Output measurement and reporting</b>	Each deliverable under this scheme to be reported annually parallel with the APR.
<b>Conditions on scheme</b>	Compliance with associated DWI legal instrument requirements and deadlines by 31 March 2025 and those agreed with the DWI for the delivery of the treatment solution for the 2025-30 period.
<b>Assurance</b>	Independent assessment and assurance of completed deliverables in this period must be provided to Ofwat as set out below.

Deliverable	Unit	Forecast deliverables	
		2023/24	2024/25
Completion of planning permission, detailed design and delivery contracts	%	63	100

## 8.3 Scheme 9: Kingsdown (NO<sub>3</sub>)

Scheme delivery expectations	
<b>Description</b>	Scheme brings forward the accelerated detailed design and activity to secure planning permissions 63% complete by 31 March 2024 and 100% complete by the 31 March 2025, enabling the accelerated construction of a nitrate (NO <sub>3</sub> ) treatment plant delivering benefits in 2026-27. The new treatment process will secure a reliable 3.17 Ml/d annual average deployable output and 3.7 Ml/d peak week output from the Kingsdown site to the WRZ7 Dour water resource zone.
<b>Output measurement and reporting</b>	Each deliverable under this scheme to be reported annually parallel with the APR.
<b>Conditions on scheme</b>	Compliance with associated DWI legal instrument requirements and deadlines by 31 March 2025 and those agreed with the DWI for the delivery of the treatment solution for the 2025-30 period.
<b>Assurance</b>	Independent assessment and assurance of completed deliverables in this period must be provided to Ofwat as set out below.

Deliverable	Unit	Forecast deliverables	
		2023-24	2024-25
Completion of planning permission, detailed design and delivery contracts	%	63	100

## 8.4 Scheme 17: Holywell (PFOS)

Scheme delivery expectations	
<b>Description</b>	Bringing forward the replacement and reinstatement of 6 number (18m <sup>3</sup> per adsorbers) granular activated carbon, GAC adsorber media treatment process to meet rising PFOS challenge in AMP7. Accelerated to enable earlier delivery in 2025-30 to secure 20.46 Ml/d peak week (with up to 12 number adsorbers media replacements and reinstatements) output by 31 March 2026 to the WRZ 2 Colne water resource zone.
<b>Output measurement and reporting</b>	Number of adsorbers receiving regenerated or virgin GAC media and Ml/d of each deliverable under this scheme to be reported annually parallel with the APR.
<b>Conditions on scheme</b>	Compliance with associated DWI legal instrument demonstrating increasing PFOS removal output capabilities: 5.12 Ml/d by 31 March 2024; 10.23 Ml/d by 31 March 2025 and 20.46 Ml/d by 31 March 2026.
<b>Assurance</b>	Independent assessment and assurance of completed deliverables in this period must be provided to Ofwat as set out below.

Deliverable	Unit	Forecast Benefits		
		2023/24	2024/25	2025/26
Adsorbers (each of 18m <sup>3</sup> minimum volume) receiving regenerated or virgin GAC media	Number (cum.)	3	6	up to 12
PFOS removal maximum output capability	Ml/d	5.12	10.23	20.46

## 8.5 Scheme 18: Stortford WQ (NO<sub>3</sub>)

Scheme delivery expectations	
<b>Description</b>	Accelerating the delivery of a blending solution to mitigate breaching nitrate standards from Stansted WTW in order to secure 2.69 Ml/d annual average deployable output and reduce resilience issues in the WRZ05 Stort water resource zone. DWI to support with new legal instrument.  The scheme includes blending controls at three pumping stations to facilitate blending for Stansted WTW nitrates. The laying of approximately 2km of 250mm HPPE pipeline from Forest Hall Booster into the Stortford WQZ and emergency booster operation to provide resilience in the event of >12 hrs failure at Stansted WTW.
<b>Output measurement and reporting</b>	Ml/d, Number and km of each deliverable under this scheme to be reported annually parallel with the APR.
<b>Conditions on scheme</b>	Compliance with associated DWI legal instrument demonstrating full operational availability of all the scheme elements by 31 March 2025.
<b>Assurance</b>	Independent assessment and assurance of completed deliverables in this period must be provided to Ofwat as set out below.

Deliverable	Unit	Forecast deliverables	
		2023/24	2024/25
Annual average deployable output with nitrate and resilience solutions	Ml/d	0	2.69
Operational availability of blending controls at 3 pumping stations	Number	0	3
Operational availability of 250mm HPPE main	km	0	2
Operational availability of emergency booster operation from Forest Hall Booster	Number	0	1
Domestic properties receiving an improved security of supply	Number	0	4,846

## 9. Bristol Water (now part of South West Water)

### 9.1 Scheme 13: Supply pipe leakage and Scheme 15: Lead supply pipes

**Bristol** Ωατερ □ συμπληρ πιπε ρεπλαχεμεντο (λεακαγε ανδ λεαδ)

Scheme delivery expectations	
<b>Description</b>	Replacing up to 1,500 customer supply pipes (1,000 non-lead for leakage and 500 external lead supply pipes of which 250 will also include the internal supply pipes) in the Bristol Water supply area. This will reduce customer side leakage by 0.25MI/d by 2024-25 enabling earlier delivery of the company's proposed strategy in its draft WRMP24. The proposal also reflects South West Water green economic recovery 'Smarter, healthier homes' project water quality benefits associated with lead supply pipe replacements.
<b>Output measurement and reporting</b>	Number of leaking supply pipes (non-lead) replaced to be reported annually parallel with the APR. Number of external lead supply pipes replaced to be reported annually parallel with the APR. Number of internal lead supply pipes replaced to be reported annually parallel with the APR.
<b>Conditions on scheme</b>	To ensure that the scheme does not impact on existing performance commitments, the company must exclude the impact of the scheme on leakage and per capita consumption from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025. Company must replace the lead pipes funded at PR19 by March 2025. Funding will be made available for pipes installed above the baseline level. Compliance with associated DWI legal instrument demonstrating external and internal lead supply scheme elements by 31 March 2025.
<b>Assurance</b>	Independent assessment and assurance of completed deliverables in this period must be provided to Ofwat as set out below.

Deliverable	Unit	Forecast deliverables				
		2020/21	2021/22	2022/23	2023/24	2024/25
Leaking supply pipes replaced (non-lead)	Number	0	0	0	500	500
Customer external lead supply pipes replaced	Number	0	0	0	250	250
Customer internal lead supply pipes replaced	Number	0	0	0	125	125

There is an expected improvement in performance in 2020-25 and into 2025-30 delivered through this proposed accelerated activity. The impact on leakage performance commitments are detailed below. These savings must be excluded from PR19 performance reporting so that the company does not earn outperformance (or avoid underperformance) from this additional investment.

Deliverable	Unit	Forecast benefits						
		2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Leakage reduction	MI/d (annual)	0.13	0.25	0.25	0.25	0.25	0.25	0.25

## 10. Portsmouth Water

### 10.1 Scheme 1: Smart metering

Scheme delivery expectations	
<b>Description</b>	<p>Bringing forward metering programme from AMP8 as part of the company's proposed best value strategy in its draft WRMP24.</p> <p>Smart meter trial involving the installation of 500 advanced monitoring infrastructure (AMI) meters – capable of recording and transmitting data at least once every 24 hours to measure supplies of water to premises. This involves new AMI meter installations and replacement of existing meters with new AMI meters as specified below.</p> <p>Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property.</p> <p>AMR meters are meters using automated meter reading (AMR) technology. This enables consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. It does not however enable consumption data to be read by customers (directly or via contractors/agents) and the company at near real time.</p> <p>AMI meters enable consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. Consumption data is transferred to the company through an integrated system of smart meters, communications networks, and data management systems. Such systems have the capability to:</p> <ul style="list-style-type: none"> <li>• Record consumption data and allow ready access to this data by customers (directly or via contractors/agents) and the company at near real time, with data updated daily at a minimum, and made available at a minimum granularity of 1 hour intervals, or such greater frequency and/or granularity as reasonably requested by the customer or the customer's contractors/agents;</li> <li>• Enable automated leak alarms to be communicated to the customer and company; and</li> <li>• Communicate with the internet.</li> </ul> <p>Installation of the following supporting AMI infrastructure:</p> <ul style="list-style-type: none"> <li>• Programme Delivery Teams - Delivery capability to deliver a functioning smart network, including all internal systems and customer communication activities. This includes both technical and business change capabilities to deliver successfully and engage in comprehensive communications with customers.</li> <li>• Meter Data Management (MDM) System - This system/software will perform long-term meter and meter readings data storage and management for the vast quantities of data delivered by smart metering systems and will enable data to be processed from the smart estate.</li> <li>• Cloud Hosting/storage and infrastructure - Implementing a cloud infrastructure will enable the smart meter data to be stored remotely and readily accessible, enhancing the security of data and providing stable, scalable infrastructure for future customer benefit.</li> <li>• Software purchasing - All software licensing and purchases required to provide a data analytics and process mapping capability to deliver the systems and infrastructure required. This will enable the company to present data to customers and seamlessly adopt future iterations of software to align to the company's processes. Middleware licensing required to enable data from multiple systems to integrate seamlessly.</li> <li>• System implementation and integration - These costs account for the tooling, licenses, testing, and development required to deliver the CRM system with smart</li> </ul>

	<p>capability with data visualisation for customers (i.e., customer portal/app). This will support the integration of smart data as the smart network comes online.</p> <p>Company should engage and collaborate with other water companies, meter suppliers and other stakeholders across the sector to agree on common standards relating to the data collected from smart meters to ensure data interoperability across the sector.</p> <p>Company must ensure all meters comply with the appropriate regulations governing cold water meters, and that their metering systems comply with their obligations under competition law.</p> <p>At PR24 these smart meters and supporting infrastructure will be funded at the efficient unit rate for this technology as determined during the PR24 process. The cost efficiency of the supporting infrastructure will be assessed in the context of Portsmouth Water's full PR24 metering programme and against the costs proposed by other companies for similar activities.</p>
<b>Output measurement and reporting</b>	<p>Company must acquire the following supporting AMI infrastructure by 31 March 2025:</p> <ul style="list-style-type: none"> <li>• Programme Delivery Teams</li> <li>• Meter Data Management System</li> <li>• Cloud Hosting/storage and infrastructure</li> <li>• Software purchasing</li> <li>• System implementation and integration</li> </ul> <p>Company must deliver the number and type of meters in line with the profile specified in the table below.</p> <p>Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:</p> <ul style="list-style-type: none"> <li>• New AMI meter installations where no meter was previously installed</li> <li>• AMI for AMR meter replacements</li> <li>• AMI for basic meter replacements</li> </ul>
<b>Assurance</b>	<p>The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the conditions below have been met and the outputs of the scheme set out below have been delivered.</p>
<b>Conditions on scheme</b>	<p>Company must deliver the meters funded at PR19 by March 2025. Transition expenditure funding will be made available for meters installed over and above the PR19 meters set out in the table below.</p>

Deliverable	Unit	Forecast deliverables				
		2020/21	2021/22	2022/23	2023/24	2024/25
<b>PR19 delivery basic meters – unmeasured properties</b>	Number	1,269	2,255	10,039	14,300	1,494
<b>Acceleration new AMI smart meters installed</b>	Number	-	-	-	-	470
<b>Acceleration AMI for basic replacements</b>	Number	-	-	-	-	30

We expect the PR19 forecast deliverables, together with the meters installed in previous control periods, to translate into the baseline trend shown in the table below. This table shows the cumulative number of meters by technology that we expect the company to achieve over the PR19 period excluding the acceleration programme.

Meter type	Unit	Starting position	Cumulative meters by technology, excluding acceleration				
		2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
<b>Baseline basic meters</b>	Number	112,491	113,760	116,015	126,054	140,354	141,848

Given that most of the accelerated investment will be in supporting smart infrastructure we do not expect material impact on the company's PR19 performance commitments in relation to per capita consumption (PPC) and leakage.

## 11. South Staffs Water (including Cambridge Water)

### 11.1 Scheme 1 and 2: Smart metering (household and non-household)

Scheme delivery expectations	
<b>Description</b>	<p>Bringing forward metering programme from AMP8 as part of the company's proposed best value strategy in its draft WRMP24.</p> <p>Installation of 91,400 advanced monitoring infrastructure (AMI) meters – capable of recording and transmitting data at least once every 24 hours to measure supplies of water to premises. This involves new AMI meter installations and replacement of existing meters with new AMI meters as specified below.</p> <p>Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property.</p> <p>AMR meters are meters using automated meter reading (AMR) technology. This enables consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. It does not however enable consumption data to be read by customers (directly or via contractors/agents) and the company at near real time.</p> <p>AMI meters enable consumption data to be read remotely without having to physically access the meter or property to obtain a manual reading. Consumption data is transferred to the company through an integrated system of smart meters, communications networks, and data management systems. Such systems have the capability to:</p> <ul style="list-style-type: none"> <li>Record consumption data and allow ready access to this data by customers (directly or via contractors/agents) and the company at near real time, with data updated daily at a minimum, and made available at a minimum granularity of 1 hour intervals, or such greater frequency and/or granularity as reasonably requested by the customer or the customer's contractors/agents;</li> <li>Enable automated leak alarms to be communicated to the customer and company; and</li> <li>Communicate with the internet.</li> </ul> <p>Company should engage and collaborate with other water companies, meter suppliers and other stakeholders across the sector to agree on common standards relating to the data collected from smart meters to ensure data interoperability across the sector.</p> <p>Company must ensure all meters comply with the appropriate regulations governing cold water meters, and that their metering systems comply with their obligations under competition law.</p> <p>At PR24 these smart meters will be funded at the efficient unit rate for this technology as determined during the PR24 process.</p>
<b>Output measurement and reporting</b>	<p>Company must deliver the number and type of meters in line with the profile specified in the table below.</p> <p>Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:</p> <ul style="list-style-type: none"> <li>New AMI meter installations where no meter was previously installed</li> <li>AMI for AMR meter replacements</li> <li>AMI for basic meter replacements</li> </ul>
<b>Assurance</b>	<p>The company must commission an independent, third-party assurer, with a duty of care to Ofwat, to assure, to our satisfaction, that the conditions below have been met and the outputs of the scheme set out below have been delivered.</p>

<b>Conditions on scheme</b>	Company must deliver the meters funded at PR19 by March 2025. Transition expenditure funding will be made available for meters installed over and above the PR19 meters set out below.
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Deliverable	Unit	Forecast deliverables				
		2020/21	2021/22	2022/23	2023/24	2024/25
<b>PR19 delivery AMR meters – unmeasured properties</b>	Number	4,095	5,661	6,650	15,178	15,179
<b>Acceleration new AMI smart meters installed</b>	Number	-	-	-	44,980	41,000
<b>Acceleration AMI for basic replacements</b>	Number	-	-	-	-	5,420

As set out in Appendix 1 of this final decision, the company can deliver the PR19 meters set out in the above table through a combination of optant and selective meters, rather than by optant meters alone.

We expect the PR19 forecast deliverables, together with the meters installed in previous control periods, to translate into the baseline trend shown in the table below. As we set out in Appendix 1 of this final decision, we have set out this baseline trend in a separate table for greater clarity. This table shows the cumulative number of meters by technology that we expect the company to achieve over the PR19 period excluding the acceleration programme.

Meter type	Unit	Starting position	Cumulative meters by technology, excluding acceleration				
		2019/20	2020/21	2021/22	2022/23	2023/24	2024/24
<b>Baseline basic meters</b>	Number	249,237	247,889	246,173	243,473	240,773	238,073
<b>Baseline AMR smart meters</b>	Number	143,957	149,400	156,777	166,127	184,005	201,884

There is an expected improvement in performance in AMP7 and into AMP8 delivered through this proposed accelerated activity. The impact on PCC and leakage performance commitments are detailed below. These savings must be excluded from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025 so that the company does not earn outperformance (or avoid underperformance) from this additional investment. Company should report these savings

separately in its 2024 and 2025 Annual Performance Reports and reflect them in its PR24 performance commitment levels. These savings should be converted to three-year averages when compared against reporting performance levels in relation to performance commitments.

Performance commitment	Unit	Forecast benefits						
		2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
<b>Per capita consumption - CAM</b>	l/h/d (cum.)	0.852	1.704	1.704	1.704	1.704	1.704	1.704
<b>Per capita consumption - SST</b>	l/h/d (cum.)	0.940	1.880	1.880	1.880	1.880	1.880	1.880
<b>Leakage</b>	MI/d (cum.)	0.36	0.74	0.74	0.74	0.74	0.74	0.74

## A1 Annex 1: ENV3: Delivering improvements to storm overflows – storm overflow scheme list.

Overflow Name or Location	Environment Act High Priority	Primary Driver	Secondary Driver	Tertiary Driver	Quaternary Driver	Solution Deliverable
BETLEY WwTW		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
Biddulph WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
CONGLETON	EnvAct_IMP2	EnvAct_IMP2				WFD
WwTW Storm Tank Spill	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP5			WFD
Glazebury WwTW ST	EnvAct_IMP2	WFD_IMP_MOD	EnvAct_IMP2	EnvAct_IMP4		10 Spills per annum
Dukinfield WwTW	EnvAct_IMP2	EnvAct_IMP2				WFD
SALE	EnvAct_IMP2	EnvAct_IMP2				WFD
SALE	EnvAct_IMP2	EnvAct_IMP2				WFD
STOCKPORT WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
STOCKPORT WwTW	EnvAct_IMP2	EnvAct_IMP2				WFD
CASTLETON	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
MERE BROW WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
Longton WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP3			WFD
WEETON WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
CATON	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
Casterton WwTW Storm Tanks		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
Gosforth WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4		10 Spills per annum
DUBWATH WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
GREAT BROUGHTON WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
GREAT BROUGHTON WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum

<b>KESWICK WwTW</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>BULLGILL</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>THREAPLAND WwTW</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>TORPENHOW WwTW</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>KIRKBY STEPHEN WwTW</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>KIRKBY STEPHEN WwTW</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>MORLAND WwTW</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>SHAP WwTW</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>ARMATHWAITE WwTW</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>GREAT SALKELD</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>HEADS NOOK WwTW</b>		EnvAct_IMP4				10 Spills per annum
<b>SOCKBRIDGE &amp; TIRRIL</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>CASTLE CARROCK</b>		EnvAct_IMP4				10 Spills per annum
<b>Rockcliffe WwTW</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>CARGO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>GREAT ASBY WwTW</b>		EnvAct_IMP4				10 Spills per annum
<b>GLENRIDDING WwTW</b>		EnvAct_IMP4				10 Spills per annum
<b>GREY HOUND INN CSO</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>Eastland Farm</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>The Burroughs CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Deanscales PS</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>Cumberland Street CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD

<b>Preston New Road/Yew Tree Drive CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Addison Close CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>Appleby Street CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>Accrington Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Philips Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>Weston Street/Viking Street CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>WHITE LION BROW CSO</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>The Sunnybank Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>Maple Avenue CSO</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>PARR BROOK CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>Honey Holme Lane CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>In Front of 19 Bear Street CSO</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>ETTERBY TERRACE</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>CROWN ST, TOWN DYKE ORCHARD</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Longburgh PS</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>BOUSTEADS GRASSING CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Dalston Sewage PS, CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Little Corby PS</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Trinity School / Strand Road Combined Sewer Overflow (Site</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum

<b>ID 10015) xxxx ) (CAR0093)</b>						
<b>Adjacent Duxbury Mill Pumping Station Combined Sewer Overflow (CHR0024)</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Coppull New, Butterworth Brow</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>Eccleston Bridge D/S CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>Withnell Fold PS</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Moor Road/Eaves Green Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>29 Cresswellshawe Road CSO (Overflow A)</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Keekle PS</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Moresby Park PS</b>	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>Moor Row CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Brookside CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4		10 spills per annum
<b>Rear of Hayes Castle Farm CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Church Lane CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>SKIRWITH BECK CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Holme Street/Chapel Street</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Winton PS</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Clifton PS</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum

<b>Carleton Hall Templebank CSO</b>	EnvAct_IMP2	EnvAct_IMP4	BW_IMP1			10 Spills per annum
<b>Rivacre Valley Park CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Hooton Road CSO</b>	EnvAct_IMP2	WFD_IMP_MOD	EnvAct_IMP2	EnvAct_IMP4		10 Spills per annum
<b>Near the Ship Inn CSO</b>	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>Warton PS (19010)</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Halton Brow CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Halton East sewage pumping station (Site ID HALTN) (LAN0060)</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Cockerham Adjacent to Manor Inn Car Park CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Thurtle Cottages CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Hest Bank PS</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Bexton Road</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Poynton Tanks CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Westminster Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>ASPIN LANE CSO</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>Newcastle Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Rookery CSO (29010) (NEW0038)</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>BOUNDARY PARK ROAD CSO</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>Percy Street CSO</b>		EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4	EnvAct_IMP5	10 Spills per annum
<b>Whittams Farm CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum

<b>Longworth Road/R'way Viaduct</b>		EnvAct_IMP4	EnvAct_IMP 5			10 Spills per annum
<b>Sabden SSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum
<b>Boothroyden Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			WFD
<b>A CSO downstream of Kirkway</b>	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP 2	EnvAct_IMP 4		10 Spills per annum
<b>Heywood (Botany) STW CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>Bank Street CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			WFD
<b>Gregson Lane Area CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum
<b>Daub Hall Lane, Walton-le-Dale CSO (403CW) (SRI0015)</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum
<b>Gaskell Street Bridge CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
<b>Carr Mill Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
<b>Lumb Lane (o/s No. 53) CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
<b>Cheadle Golf Course CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		WFD
<b>Briarlands Close CSO (formerly known as Rear of 40 Ack Lane CSO)</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			WFD
<b>Wharf Street CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			WFD
<b>Turner Lane/Alexandra Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>LOWER WHARF STREET CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum
<b>Pottinger Street/Oxford Street CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>DARK LANE CSO</b>		EnvAct_IMP4	EnvAct_IMP 5			10 Spills per annum

<b>Broomstair Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			WFD
<b>Denton Transfer PS</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Denton Transfer PS</b>		EnvAct_IMP4				10 Spills per annum
<b>School Lane/Lodge Lane CSO</b>		EnvAct_IMP4	EnvAct_IMP5			10 Spills per annum
<b>Hey Shoot Lane CSO</b>	EnvAct_IMP2	EnvAct_IMP2				WFD
<b>Templeton Road PS</b>	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP2	EnvAct_IMP4		WFD
<b>Strangeways PS No2</b>	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP2			10 Spills per annum
<b>Orrell House Farm CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>East Lancs Road Pumping Station</b>	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP2	EnvAct_IMP4		10 Spills per annum
<b>Manchester Road/Park Lane CSO</b>		EnvAct_IMP4				10 Spills per annum
<b>Hindley PS</b>	EnvAct_IMP2	WFD_IMP_MO D				WFD
<b>Sandy Lane CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Leasowe Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Bidston Bypass CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Upton Storm Tanks</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Noctorum Avenue CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5		10 Spills per annum
<b>Long Hey Road CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Eastham Rake CSO</b>	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP2	EnvAct_IMP4		10 Spills per annum
<b>The rear of 25 Wheatfield Close CSO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Thornton Hough PS SO</b>	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4			10 Spills per annum
<b>Dean Wood CSO(49202) (WLN0020)</b>	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP2			10 Spills per annum

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