April 2023

# Accelerated infrastructure delivery project Appendix 2: draft price control deliverables



# About this document

This appendix sets out our proposed 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. In some areas we have asked companies to provide or confirm details of schemes in response to this consultation. We will update these price control deliverables in our draft and final 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.

# **Responding to this consultation**

We welcome any comments on this document. Please email them to ofwatdefraacceleratedprocess@ofwat.gov.uk. The closing date for this consultation is midday on Monday 24th April.

We will publish responses to this consultation on our website at www.ofwat.gov.uk, unless you indicate that you would like your response to remain unpublished. Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with access to information legislation – primarily the Freedom of Information Act 2000 (FoIA), the General Data Protection Regulation 2016, the Data Protection Act 2018, and the Environmental Information Regulations 2004. For further information on how we process personal data please see our privacy policy.

If you would like the information that you provide to be treated as confidential, please be aware that under the FoIA there is a statutory Code of practice which deals, among other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that we can maintain confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on Ofwat.

1.	Ang	lian Water	4
1.	.1	Scheme 3: Colchester Reuse	4
1.	.2	Scheme 4: Nutrient Neutrality	6
1.	.3	Scheme 5: Regional overflow reduction plan	7
1.	.4	Scheme 7: Smart metering1	0
2.	Nor	thumbrian Water (including Essex and Suffolk)1	.3
2.	.1	Scheme 1 New Linford WTWs and Borehole 1	.3
2.	.2	Scheme 2 Suffolk Strategic Network and Storage1	5
2.	.3	Scheme 7:Berwick Upon Tweed storm overflows1	6
3.	Sev	ern Trent Water1	8
3.	.1	Scheme 1: Smart metering 1	8
3.	.2	Scheme 2: Draycote Raise	21
3.	.3	Scheme 9: River water monitoring 2	!2
4.	Sol	thern Water 2	3
4.	.1	Scheme 4: Storm Overflows 2	3
5.	Sol	th West Water2	6
5.	.1	Scheme 1: Storm Overflows2	6
5.	.2	Scheme 3: Nutrient Neutrality2	9
5.	.3	Scheme 11: Colliford smart metering	0
5.	.4	Scheme 12: Supply pipe leakage	3
6.	Uni	ted Utilities Water	34

6	5.1	ENV2: Accelerating habitats improvement in the Eden catchment	4
6	5.2	ENV3: Delivering improvements to storm overflows	5
6	5.3 catch	ENV4: Reducing the frequency of storm overflow discharges in Windermere ment38	8
6	5.4	ENV10: Bathing Waters40	C
7.	Yorl	kshire Water	3
7	.1	Scheme 6: Inland bathing water improvement scheme - Wharfe Ilkley	3
7	.2	Scheme 9: Coastal bathing water improvement40	ó
8.	Affi	nity Water	3
٤	8.1	Scheme 7: Smart metering	3
8	8.2	Scheme 8: Broome (NO <sub>3</sub> )	1
٤	8.3	Scheme 9: Kingsdown (NO <sub>3</sub> )52	2
٤	3.4	Scheme 17:Holywell (PFOS)	3
8	8.5	Scheme 18: Stortford WQ (NO3)	4
9.	Bris	tol Water (now part of South West Water)5	5
ç	9.1	Scheme 13 and 15: Supply pipe replacements5	5
10.	Port	tsmouth Water	7
1	0.1	Scheme 1: Smart metering5	7
11.	Sou	th Staffs Water (including Cambridge Water)60	С
1	1.1	Scheme 1 and 2: Smart metering (household and non-household)60	С
A1	Ann 63	ex 1: ENV3: Delivering improvements to storm overflows – storm overflow scheme list	•

3

# 1. Anglian Water

### 1.1 Scheme 3: Colchester Reuse

Scheme delivery expectations: Colchester Reuse					
Description	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. 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 <u>'Our final methodology for PR24 Appendix 9 – Setting expenditure allowances</u> ' pages 112-113.				
Output measurement and	By 31 March 2025 the company will have completed the following activities:				
reporting	<ul> <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> By 31 March 2028 the company will have completed the following activities:				
	<ul> <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>				
	These activities are equivalent to 15.03% of the overall scheme delivery costs of the full Colchester reuse plant.				
	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.				
Conditions on scheme	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 funding by hosting an event. 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.				

Assurance	The company must commission an independent, third-party assurer, with a duty
	been met and the outputs of the scheme set out above have been delivered.

	Unit	Forecast deliverables	
Deliverable		2023-24	2024-25
Detailed design and planning of re-use scheme including pilot plant and transfer main construction.	% complete	2	12

## 1.2 Scheme 4: Nutrient Neutrality

Scheme delivery expec	ctations: Nutrient Neutrality
Description	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.
Output measurement and reporting	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. 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.
Conditions on scheme	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.
Assurance	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.

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

Scheme delivery expectations: Regional overflow reduction plan										
Description	Deliver 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 188 using digital solutions, with a total reduction of 459 spills across 21 storm overflows to be delivered as part of the accelerated programme. 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. The programme includes 21 storm overflows improvements and 148 storm overflow investigations. The WINEP drivers are specified below:									
	Driver	No. St Overfl	orm ow							
	IMP2		1							
	IMP3		3							
	IMP4		17							
	INV4		148							
Output measurement and reporting	overflows are hydraulic root cause prior to commencing implementation of the schemes. The scheme will deliver the outcomes set out above through the enhancement outputs at each site set out below:									
	Catchment/lo	cation	WINEP ID	Modelled Spill Frequency	Spill reduction assumed from Smart	WINEP Driver				
	Sandy STW		08AW100139	14	4	EnvAct_IMP4				
	Westbury STW		08AW100159	75	32	EnvAct_IMP4				
	March-Wisbech Rd/Norwood Rd OV		08AW100289	18	8	EnvAct_IMP4				
	Reepham STW (NORFOLK)	/	08AW100137	21	11	EnvAct_IMP4				
	Market Harbo STW	rough	08AW100116	11	1	EnvAct_IMP4				
	Ely Catchmen	t	08AW100035	16	6	EnvAct_IMP4				
	Ely Catchmen	t	08AW100036	23	6	EnvAct_IMP4				
	Ely Catchmen	t	08AW100150	63	26	EnvAct_IMP4				
	Louth Catchm	ent	08AW100111	12	2	EnvAct_IMP4				
	Louth Catchm	ent	08AW100110	26	8	EnvAct_IMP4				
	Louth Catchm	ent	08AW100145	40	15	EnvAct_IMP4				
	Louth Catchment		08AW100109	45	17	EnvAct_IMP4				

	Framlingham upstream catchment	08AW100285	11	1	EnvAct_IMP4					
	Framlingham upstream catchment	08AW100164	52	9	EnvAct_IMP4					
	Brightlingsea catchment	08AW100295	4	2	EnvAct_IMP3					
	Brightlingsea catchment	08AW100282	UNK	1	EnvAct_IMP2					
	Earls Barton sub catchment	08AW100149	15	5	EnvAct_IMP4					
	Earls Barton sub catchment	08AW100031	51	20	EnvAct_IMP4					
	Great Billing WRC	08AW100044	125	11	EnvAct_IMP4					
	Southend Sub catchment	08AW100298	7	2	EnvAct_IMP3					
	Southend Sub catchment	08AW100180	5	1	EnvAct_IMP3					
Conditions on	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 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. 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 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.									
scheme	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).									
	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.
	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.
	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.
	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.
Assurance of outputs	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							
			<b>IP</b> 7	AMP8				
	Units	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Percentage Expenditure per year	%	20	40	60	80	100	100	100
Scheme outputs	Nr of modelled spills reduced through smart solutions	0	0	0	0	188	188	188
Total spill reduction	Nr	0	0	0	0	459	459	459

#### 1.4 Scheme 7: Smart metering

#### Scheme delivery expectations Description Bringing forward metering programme from AMP8 as part of the company's proposed best value strategy in its dWRMP24. 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. Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property. 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. 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: 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; Enable automated leak alarms to be communicated to the customer and company; and Communicate with the internet. 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. 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. At PR24 these smart meters will be funded at the efficient unit rate for this technology as determined during the PR24 process. Output Company must deliver the number and type of meters specified in the table below. measurement and reporting Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by: New AMI meter installations where no meter was previously installed AMI for AMR meter replacements • AMI for basic meter replacements Assurance 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. **Conditions on** Company must deliver meters funded at PR19 by 31 March 2025. Funding will be made available scheme for meters installed above baseline level.

Deliverable	Unit	Starting position	g Forecast deliverables				
		2019/20	2020-21	2021-22	2022-23	2023-24	2024-25
Baseline basic meters - cumulative	Number	1,694,091	1,576,989	1,477,377	1,275,627	1,072,787	869,118
Baseline AMR smart meters - cumulative	Number	210,040	206,238	202,285	184,885	167,635	150,535
Baseline AMI smart meters - cumulative	Number	19,364	183,764	329,685	591,711	853,736	1,115,761
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 AMR meter upgrades	Number		-	-	-	-	-
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

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.

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

п

Scheme delive	ry expectations: New Linford WTWs and Borehole
Description	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.
Output measurement and reporting	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.
	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.
	Delivery of the outputs will be reported and monitored through the existing APR process.
Conditions on scheme	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.
Assurance	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	Unit			For	ecast bene	efits		
measure		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
WAFU benefit to Essex WRZ supply-demand balance	Ml/d	0	0	0	0	6.75	6.75	6.75

### 2.2 Scheme 2 Suffolk Strategic Network and Storage

П

Scheme deliver	y expectations: Suffolk Strategic Network and Storage
Description	Detailed design and planning, ahead of construction of the Suffolk Strategic Network and Storage pipelines. Brings forward the delivery date of this dWRMP24 preferred programme option, which will increase water resilience in Suffolk. 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 ahead of new supply schemes being ready. 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 <u>'Our final methodology for PR24 Appendix 9 – Setting</u> <u>expenditure allowances</u> ' pages 112-113.
Output measurement and reporting	<ul> <li>By 31 March 2025 the company will have completed the following activities:</li> <li>detailed engineering design;</li> <li>updated Integrated Environmental Assessment. This will have included undertaking site ecological, archaeological and topographical surveys, undertaking formal Environmental Impact Assessment (EIA) and preparing environmental statements for planning approval;</li> <li>secured planning approval;</li> <li>and secured any required environmental permits for the strategic pipelines.</li> <li>The design capacity of the strategic pipelines will deliver 15Ml/d dry year water available for use (WAFU) gain, split between Hartismere WRZ (8.5Ml/d) and Blyth WRZ (6.5Ml/d)</li> <li>These activities are equivalent to 7.12% of the overall scheme delivery costs for the Suffolk Strategic Network and Storage scheme.</li> <li>Delivery of the outputs will be reported and monitored through the existing APR process.</li> </ul>
Conditions on scheme	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.
Assurance	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 and planning	% complete	50	100		

### 2.3 Scheme 7:Berwick Upon Tweed storm overflows

Scheme deliver	y expectations
Description	The proposal is to deliver an initial 'Concept and Definition' phase to identify how to reduce environmental impact by reducing spills across 42 storm overflows in the Berwick catchment. The scheme will involve model verification and feasibility work to identify proposed options and costs to determine how best to reduce overflow spills in the catchment.
Output measurement and reporting	This proposal is to identify the type of interventions that will ultimately be delivered at 42 storm overflows, and we expect the company to provide progress with delivery and completion of this output through the APR.
	The company should provide an interim report on outputs (including future investment requirements at the named overflows) by end-May 2024, and a final report concluding this concept and definition phase by end-March 2025.
	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.
Conditions on scheme	The allowance is conditional on the company demonstrating to Ofwat that all of the named storm overflows have undergone investigation or feasibility assessments to determine the root cause of spills and best value solutions to address them. This work must be undertaken within AMP7.
	The allowance is also 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 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 Environment Agency, 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).
	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.
	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.
	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.

Assurance	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 deliver	y expectations
Description	Bringing forward metering programme from AMP8 as part of the company's proposed best value strategy in its dWRMP24.
	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.
	Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property.
	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.
	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:
	<ul> <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> </ul>
	• Communicate with the internet. 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.
	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.
	At PR24 these smart meters will be funded at the efficient unit rate for this technology as determined during the PR24 process.
Output measurement and reporting	Company must deliver the number and type of meters in line with the profile specified in the table below.
	<ul> <li>Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:</li> <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>
Assurance	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.

Conditions on<br/>schemeCompany must deliver meters funded at PR19 and Green Recovery by 31 March 2025.Funding will be made available for meters installed above baseline level.

Deliverable	Unit	Starting position	Forecast deliverables				
		2019/20	2020-21	2021-22	2022-23	2023-24	2024-25
Baseline basic meters – cumulative	Number	796,615	797,305	794,463	769,542	759,107	756,913
Baseline AMR smart meters – cumulative	Number	920,705	1,003,363	1,111,244	1,148,853	1,203,887	1,290,118
Baseline AMI smart meters - cumulative	Number	-	-	5,359	86,969	145,099	157,319
PR19 delivery basic meters – unmeasured properties	Number		690	13	-	-	-
PR19 delivery AMR meters – unmeasured properties	Number		82,658	110,141	62,968	74,245	90,269
PR19 delivery AMI meters - unmeasured properties	Number		-	-	-	-	-
PR19 delivery basic to AMR meter upgrades	Number		-	-	-	-	-
PR19 delivery basic to AMI meter upgrades	Number		-	-	-	-	-
PR19 delivery AMR to AMI meter upgrades	Number		-	-	-	-	-
Green Recovery delivery AMI meters - unmeasured properties	Number		-	244	31,330	28,484	5,988
Green Recovery delivery basic to AMI meter upgrades	Number		-	2,855	24,921	10,435	2,194
Green Recovery delivery AMR to AMI meter upgrades	Number		-	2,260	25,359	19,211	4,038
Acceleration new AMI smart meters installed	Number		-	_	-	42,000	83,000
Acceleration AMI for AMR replacements	Number		-	_	-	16,800	33,200
Acceleration AMI for basic replacements	Number		-	_	_	25,200	49,800

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.

Performance	Unit	Forecast benefits						
commitment		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	Ml/d (cum.)	_	2.02	6.00	6.00	6.00	6.00	6.00

### 3.2 Scheme 2: Draycote Raise

Scheme deliver	y expectations: Draycote raise
Description	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.
Output measurement and reporting	By the end of 2024-25 the company will have completed 90% of the feasibility and detailed design work. This is to be equivalent to 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
Conditions on scheme	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.
Assurance	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	40	90	
Overall project earned value	%	10	50	

Benefit	Unit		Forecast benefits							
measure		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 deliver	y expectations
Description	Installation of Flow to Full treatment meters to specification required by WINEP U_MON4 driver.
Output measurement and reporting	Number of meters installed. Delivery of each meter is to be verified through the WINEP process.
Conditions on scheme	All meter installations to be included in WINEP for AMP7 through the alterations, or similar, process.
	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.
	The company is expected to deliver a minimum of 80 installations. The PCD unit cost is to be determined as a part of the PR24 process.

Deliverable	Unit	Forecast deliverables						
		2020-21	2021-22	2022-23	2023-24	2024-25		
U_MON4 meter installation	Number	-	-	-	-	80		

# 4. Southern Water

#### 4.1 Scheme 4: Storm Overflows

Scheme delivery expectations											
Description	Scheme to deliver a reduction in storm overflow spills that impact bathing waters and inlands waters, with a strong focus on innovation and maximising learning ahead of AMP8. The programme will accelerate AMP8 WINEP storm overflows in 3 areas - the Solent, the North Kent Coast, and Chichester and Langstone Harbours. Up to 36 named overflows will be targeted to reduce spills by up to 600 per annum compared with the 2020-21 average. Outcomes and outputs are detailed in the table below. The Company has committed to delivering the first option (300 spill reductions across 30 overflows), but with the possibility of extending the scope to the third option (600 spills across 36 overflows). This PCD is based on delivery of the third and largest option.										
		Ordian	Number of	Outcome Annual spills		Output					
		Option (CapEx - £m)	overflows in scope	reduction (base year average of 2020 & 2021)	Non- permeable Area Managed (hectares)	Number of wetlands (#)	Sewer sealing (km)				
		£25	30	300	40-70	4	5 - 7				
		£40	34	475	60-80	6	12 - 20				
		£50	36	600	70-90	8	14 - 26				
Output measurement and reporting	The programme will deliver schemes to progress the reduction in spills as set out above. We are allowing the acceleration of the £50 million option. 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 600 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. We will require updates in the annual performance report from Southern Water to confirm what interventions have been commenced or completed at each of the listed storm overflows, a description of those interventions and the forecast and actual spill reductions. The company should also provide interim updates to Ofwat (quarterly, starting October 2023 - format to be agreed) on progress being made with the schemes.										
Conditions on scheme	The allowa interventi This can r up to 600 The allowa funding is environme	ance is cond ons at all of nean investi, spill reducti ance is also o for enhanci ental permit	itional on the the storm ove gations, feas ons within Al conditional o ng the functi or beyond th	e company de erflows targe ibility assess MP7. In the compa foning of the at which cou	emonstratin; ted under th ments or ful ny evidencir asset beyon uld be achiev	g to Ofwat than ne preferred i I scheme del ng to our satis nd the level se ved through r	at it has prog nvestment of ivery, but mu sfaction that et out in its maintenance	ressed otion 3. Ist deliver all . This test			

	for "compliance" is for the purposes of the Southern 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 Environment Agency, 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).
	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.
	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.
Assurance	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.

Deliverables (for option 3)	Unit	Forecas	Forecast deliverables									
		2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	2027- 28	2028- 29	2029- 30	
Storm	%	-	-	-	-	100%	-	-	-	-	-	
overflows improved (investigated or schemes delivered)	Number	-	-	-	-	36	-	-	-	-	-	
Spills reduced per year across 36 storm overflows	Number	-	-	-	-	-	600	600	600	600	600	

### 5. South West Water

#### 5.1 Scheme 1: Storm Overflows

Scheme delive	ery expectations: Storm Overflo	WS										
Description	Deliver enhancements to 14 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, six 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.).											
Output measurement and reporting	The scheme should deliver the outcomes set out above through the enhancement outputs at each site set out below, rting											
	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								
	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								
	FORTESCUE_CSO_SIDMOUTH	No	No	EnvAct_IMP4								
	MANSTONE LN_CSO_SIDMOUTH	No	No	EnvAct_IMP4								

	TIPTON ST JOHN SPS_CSOEO_SIDMOUTH	No	No	EnvAct_IMP4						
	Delivery of the outputs will be mon the relevant output information for provided, area of surface water sep benchmarking. We have estimated company should provide a commit consultation. The reduction in spill frequency for into account when setting the perf performance commitment. The ap overflow PC is set out in the PR24 fi outputs that have been delivered, w has been shared across the indust	itored through the exis the completed storm of paration and spill freque a delivery profile and s ted delivery and spill re overflows included in formance commitment proach to setting the p inal methodology. We w what innovative solutio ry.	ting APR process and the overflow schemes; includ ency reduction achieved spill reduction profile for t duction profile in respon- the acceleration program level for the PR24 storm of erformance commitment vill require a final report s ns have been implement	APR must provide ing storage for the purpose of the scheme. The se to this me will be taken overflow spill level for the storm summarising the ed, and how this						
Conditions on scheme	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 Southern 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 Environment Agency, 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 Socretary of State enforce)									
	The company must set out its method of providing this evidence for our approval either before 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 ar 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 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 should provide the reasoning underpinning these assumptions									
	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.									
Assurance of outputs	The company must commission an assure, to our satisfaction, that the	independent, third-pa above conditions have	rty assurer, with a duty o e been met.	f care to Ofwat, to						

Deliverable		Forecast Deliverables										
	Unit	AM	<b>1</b> P7		AMP8							
		2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030				
Total storm overflows improved	Nr	0	0	4	9	14	14	14				
Total spill reduction per annum	Nr	0	0	110	220	330	330	330				

### 5.2 Scheme 3: Nutrient Neutrality

Scheme delivery expectations: Nutrient Neutrality								
Description	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.							
Output measurement and reporting	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. 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.							
Conditions on scheme	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.							
Assurance	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.							

Deliverable	Total P- permit	Date of delivery	Feasibility	Detailed design	Level of performance (compliance)	WINEP driver
Axminster Kilmington WwTW	0.25mg/L	31st March 2025	30th September 2023	31st March 2024	31st March 2025	HD_IMP_NN
Tatworth WwTW	0.25mg/L	31st March 2025	30th September 2023	31st March 2024	31st March 2025	HD_IMP_NN
Bodmin Nanstallon WwTW	0.25mg/L	31st March 2025	31st December 2024	30th June 2024	31st March 2025	HD_IMP_NN
Camelford WwTW	0.25mg/L	31st March 2025	31st December 2024	30th June 2024	31st March 2025	HD_IMP_NN
Scarlett's Well WwTW	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
Description	Bringing forward metering programme from AMP8 as part of the company's proposed best value strategy in its draft WRMP24.
	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.
	Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property.
	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.
	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:
	<ul> <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;</li> </ul>
	<ul> <li>Communicate with the internet.</li> </ul>
	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.
	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.
	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.
	At PR24 these smart meters will be funded at the efficient unit rate for this technology as determined during the PR24 process.
Output measurement and reporting	Company must deliver the number and type of meters in line with the profile specified in the table below.
	Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:
	<ul> <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>
Assurance	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.

Conditions on scheme	Company must deliver meters funded at PR19 and Green Recovery by 31 March 2025. Funding will be made available for meters installed above baseline level.
	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.

Deliverable	Unit	Starting position	Forecast deliverables				
		2019/20	2020-21	2021-22	2022-23	2023-24	2024-25
Baseline basic meters - cumulative	Number	711,439	701,867	693,846	678,146	636,330	604,307
Baseline AMR smart meters - cumulative	Number	146,520	167,988	188,416	210,760	212,376	214,599
Baseline AMI smart meters - cumulative	Number	-	-	200	5,500	57,234	96,970
PR19 delivery basic meters – unmeasured properties	Number		-	-	-	-	-
PR19 delivery AMR meters – unmeasured properties	Number		11,896	12,607	11,944	-	-
PR19 delivery AMI meters - unmeasured properties	Number		-	-	-	-	-
PR19 delivery basic to AMR meter upgrades	Number		9,572	7,821	10,400	10,616	11,223
PR19 delivery basic to AMI meter upgrades	Number		-	-	-	-	-
PR19 delivery AMR to AMI meter upgrades	Number		-	-	-	-	-
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 new AMI smart meters installed	Number		-	-	-	-	-
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

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.

Performance	Unit	Forecast benefits						
commitment		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	Ml/d (cum.)	0.125	0.250	0.250	0.250	0.250	0.250	0.250

#### 5.4 Scheme 12: Supply pipe leakage

Scheme delivery expectations						
Description	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.					
Output measurement and reporting	Number of leaking supply pipes replaced to be reported annually parallel with the APR.					
Conditions on scheme	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.					
Assurance	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						
Description	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.					
Output measurement and reporting	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.					
	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					
	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					
	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.					
	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.					
Conditions on scheme	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.					
Assurance	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.					

Deliverable	Total P- permit	Date of delivery	Tender and procurement process (x)	Detailed design, environmental impact assessment screening and planning permission	Level of performance (compliance)	WINEP driver
Appleby WwTW	0.25mg/L	31st March 2026	31st March 2024	31st March 2025	31st March 2026	HD_IMP_NN

Brampton WwTW (Carlisle)	0.25mg/L	31st March 2026	31st March 2024	31st March 2025	31st March 2026	HD_IMP_NN
Kirkby Stephen WwTW	0.25mg/L	31st March 2026	31st March 2024	31st March 2025	31st March 2026	HD_IMP_NN
Warwick Bridge WwTW	0.25mg/L	31st March 2026	31st March 2024	31st March 2025	31st March 2026	HD_IMP_NN
Carlisle WwTW	0.25mg/L	31st March 2028	31st March 2025	31st March 2026	31st March 2028	HD_IMP_NN
Penrith WwTW	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 delive	ry expectations: Delivering improvements to storm overflows					
Description	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 approximately 7,800 spill reduction per annum when compared to 2021 spill frequency. The schemes will utilise over 275,000m <sup>3</sup> of traditional grey storage and approximately 55ha separation.					
	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.					
Output measurement	The scheme should deliver the outcomes set out above through the enhancement outputs of each site set out in annex 1 of appendix 2.					
and reporting	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.					
	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.					
	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.					
	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.					
Conditions on scheme	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 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).					
	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. 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. Assurance of 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. outputs

	Forecast Deliverables								
	AMP7		AMP8	AMP8					
Deliverable	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030		
Scheme Percentage Delivered	10	20	30	45	60	85	100		
Total Storm Overflows Improved	0	0	27	54	81	108	135		
Reduction in Storm Overflow Spills	0	0	1450	2900	4350	5800	7308		

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

Scheme deliv Windermere	very expectat catchment.	ions – Reduc	ing the frequ	iency of stor	m overflow di	ischarges in			
Description	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 over 99 per annum compared to 2021 spill frequency. The schemes will utilise over 8,700m <sup>3</sup> of traditional grey storage and approximately 0.7ha of surface water separation. 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 2026.								
Output measuremen	The scheme sho each site set ou	ould deliver the o t below:	outcomes set ou	it above through	n the enhancem	ent outputs of			
t and reporting	Overflow Name or Location	Environment Act High Priority	Primary Driver	Secondary Driver	Tertiary Driver	Solution Deliverable			
	AMBLESIDE WwTW		EnvAct_IMP3	EnvAct_IMP4		3 Spills per Bathing Season 10 Spills per annum			
	Near Sawrey WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4	10 Spills per annum			
	Elterwater pumping station (ELTER) (LAK0025)	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP4		10 Spills per annum			
	Hawkshead Pumping Station (Site ID HWKSH) (LAK0107)	EnvAct_IMP2	EnvAct_IMP2			WFD			
	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.								
	The reduction ir taken into acco spill performand the storm overfl	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.							
	We will require solutions have b	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.							
Conditions on scheme	The allowance is enhancing the f beyond that wh	s conditional on functioning of th ich could be ach	the company ev le asset beyond hieved through r	videncing to our the level set out maintenance. Th	satisfaction tha in its environm nis test for "com	t all funding is for ental permit or pliance" is for the			

	purposes of the Reducing the frequency of storm overflow discharges in 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 the Urban Waste Water Treatment (England and Wales) Regulations 1994 (which Ofwat and the Secretary of State enforce).
	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.
	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.
Assurance of outputs	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	25	50	100	100	100	100	100	
Total Storm Overflows Improved	0	0	4	4	4	4	4	
Reduction in Storm Overflow Spills	0	0	150	150	150	150	150	

### 6.4 ENV10: Bathing Waters

Scheme deliv	very expectations:	Bathing Water	S								
Description	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.										
	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 1000 per annum based on 2021 spill frequencies utilising over 45,000m <sup>3</sup> of traditional grev storage and approximately 6ha separation										
	It is expected that the improvements at the 15 storm overflows to achieve the Storm Overflow Discharge Reduction Plan targets will be delivered to later than 31 March 2027										
Output measuremer and	The scheme should ntout below:	deliver the outc	omes set ou	it above throug	gh the enhanc	cement output	s of each site set				
reporting	Overflow Name or Location	Environment Act High Priority	Primary Driver	Secondary Driver	Tertiary Driver	Quaternary Driver	Solution Deliverable				
	BOTHEL		BW_IMP2	EnvAct_IMP4			3 Spills per Bathing Season, 10 Spills per Annum				
	Dearham WwTW	EnvAct_IMP2	BW_IMP2	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4	3 Spills per Bathing Season, 10 Spills per Annum				
	GILCRUX WwTW	EnvAct_IMP2	BW_IMP2	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP5	3 Spills per Bathing Season, 10 Spills per Annum				
	Plumbland		BW_IMP2	EnvAct_IMP4	EnvAct_IMP5		3 Spills per Bathing Season, 10 Spills per Annum				
	Prospect Oughterside		BW_IMP2	EnvAct_IMP4			3 Spills per Bathing Season, 10 Spills per Annum				
	ALLERBY		BW_IMP2	EnvAct_IMP4			3 Spills per Bathing Season, 10 Spills per Annum				
	CROSSCANONBY WwTW	EnvAct_IMP2	BW_IMP2	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4	3 Spills per Bathing Season, 10 Spills per Annum				
	Maryport Sewage PS		BW_IMP2	EnvAct_IMP4	EnvAct_IMP5		3 Spills per Bathing Season, 10 Spills per Annum				
	Haverigg PS	EnvAct_IMP2	BW_IMP1	EnvAct_IMP2	EnvAct_IMP3	EnvAct_IMP4	3 Spills per Bathing Season, 10 Spills per Annum				
	31 Abbotsmead Approach CSO		BW_IMP1	EnvAct_IMP4			3 Spills per Bathing Season, 10 Spills per Annum				

Ferry PS	EnvAct_IMP2	SW_IMP	BW_IMP1	EnvAct_IMP2	EnvAct_IMP3	3 Spills per Bathing Season, 10 Spills per Annum
Graving Dock Pumping Station (Site ID 04525) (BRW0100)	EnvAct_IMP2	BW_IMP1	SW_IMP	EnvAct_IMP2	EnvAct_IMP3	3 Spills per Bathing Season, 10 Spills per Annum
Harbour Yard Pumping Station (Site ID 04524) (BRW0101)	EnvAct_IMP2	SW_IMP	BW_IMP2	EnvAct_IMP2	EnvAct_IMP3	3 Spills per Bathing Season, 10 Spills per Annum
St Bees PS		BW_IMP2	EnvAct_IMP3	EnvAct_IMP4		3 Spills per Bathing Season, 10 Spills per Annum
Skippool PS (Poulton PS)		BW_IMP2	EnvAct_IMP3	EnvAct_IMP4		3 Spills per Bathing Season, 10 Spills per Annum

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.

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.

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.

Conditions on scheme	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 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).
	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.
	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.
Assurance of outputs	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	25	50	75	100	100	100	100	
Total Storm Overflows Improved	0	0	7	15	15	15	15	
Reduction in Storm Overflow Spills	0	0	600	1028	1028	1028	1028	

## 7. Yorkshire Water

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

Scheme deliver	y expectations			
Description	Deliver enhancements to combined sewer overflows and wastewater treatment works to ensure compliance with bathing water quality standards at the inland site of Ilkley Wharfe on or before 31 March 2026. It is expected that the inland bathing water site will achieve a minimum statutory standard of 'sufficient' as set out in the Bathing Water Directive. All CSOs within 5km of the bathing sites are expected to discharge only one time per bathing water season. Additional investments will be delivered to discharges downstream of the statutory sampling point to safeguard public health.			
Output	The scheme should deliver the outcomes set out above through the enhancement outputs			
measurement	at each site set out below,			
and reporting	<ul> <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>			
	The tertiary treatment at Draughton, Grassington and Beamsley are works in addition to the UV irradiation commissioned June 2022.			
	<ul> <li>The additional investments necessary to secure public health downstream of the sample point are,</li> <li>Ilkley STW - tertiary treatment &amp; increased storage for the '6*DWF' storm overflow line.</li> </ul>			
	Delivery of the output will be monitored through the existing APR process.			
	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. The company should provide a committed delivery and spill reduction profile in response to this consultation.			

			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		
	An en no Th co co so Th Th of de tre	e retu ny per viror n-co e out mpai nside urce e sch is wi all w term	returned to customers. y penalty for late delivery of the defined output will be administered through vironmental legislation enforced by the Environment Agency in the form of fines for n-compliance. e outputs can be replaced with alternative options on agreement with Ofwat and EA. T mpany, through the process of progressing final scheme design, should continue to nsider opportunities for inclusion of nature-based and surface water management at urce type solutions. e scheme costs allowance will be determined as a part of the PR24 final determination is will be the efficient cost for the scheme and will take into consideration the delivery all works to deliver the outcome. It is expected that the efficient cost benchmark will I termined using relevant cost drivers, e.g. volume of storage, capacity of tertiary eatment process as set out in the company's PR24 business plan.				
	s	cher	ne output	Completion date	% of Cost allowance		
	В	ridg	e Lane CSO – screen	March 2026	1%		
	A a	ddin nd so	gham SPS overflow – storage creen	March 2026	10%		
	L( S(	ow M cree	1ill Lane CSO – storage and n	March 2026	1%		
	Middleton CSO – storage and screen		eton CSO – storage and screen	March 2026	4%		
	R	ivad	ale CSO – storage	March 2026	21%		
	11	kley	STW – increased FFT	March 2026	28%		
	11	kley	STW – tertiary treatment	March 2026	8%		
	11	kley	STW - storage	March 2026	10%		

	Draughton STW – tertiary treatment	March 2026	6%			
	Grassington STW – tertiary treatment	March 2026	6%			
	Beamsley STW – tertiary treatment		6%			
	The allowance is conditional on the company of is for enhancing the functioning of the asset be permit or beyond that which could be achieve "compliance" is for the purposes of the Wharfe actually compliant or not with the conditions is matter for the EA, not Ofwat. Similarly this tes Ofwat's views on the compliance standards re Act 1991 as supplemented by the provisions of Treatment (England and Wales) Regulations 19 enforce).	evidencing to our sat beyond the level set of d through maintena e Ilkely scheme only. in its environmental it should not be read quired by section 94 f Regulation 4 of the 994 (which Ofwat an	isfaction that all funding but in its environmental nce. This test for Whether a company is discharge permits is a as in any way indicating of the Water Industry Urban Waste Water d the Secretary of State			
	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.					
	The company, through the process of progress consider opportunities for inclusion of nature- source type solutions. The company must del investment drivers, and provide detailed evide itself that the solution chosen is best value, in company assessed the compliance status of th the basis of that assessment. Insufficient evid an element of the scheme is to address either company should proportionally allocate cost b that apportionment as allowances will only be enhancement expenditure, with any residual t	rough the process of progressing final scheme design, must continue to nities for inclusion of nature-based and surface water management at ions. The company must deliver a best value solution to meet all rs, and provide detailed evidence to show how the company has assured ution chosen is best value, including but not limited to evidence that the ed the compliance status of the asset in advance and evaluated options on assessment. Insufficient evidence may be grounds for clawback. Where e scheme is to address either maintenance or regain compliance then the proportionally allocate cost between base and enhancement and explain ent as allowances will only be made for those elements considered penditure, with any residual funds clawed back.				
Assurance of outputs	The company must commission an independe Ofwat, to assure, to our satisfaction, that the a	ent, third party assur- above conditions hav	er, with a duty of care to ve been met.			

Deliverable		Forecast Deliverables								
	Unit	AMP7		AMP8						
		2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030		
Total storm overflows improved	Nr	0	0	0	8	0	0	0		
Total spill reduction per annum	Nr	0	0	0	279	279	279	279		

### 7.2 Scheme 9: Coastal bathing water improvement

#### Scheme delivery expectations

	,							
Description	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.							
Output measurement	The scheme should deliver the outcomes as set out above through the enhancement outputs of a storage solution and screen at Wheatcroft CSO.							
	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 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. The company should provide a committed delivery and spill reduction profile in response to this consultation.							
	Delivery of the output will be monitored through the existing APR process.							
Conditions on scheme	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.							
	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.							
	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.							
	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 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 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).							
	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. 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.
Assurance of	The company must commission an independent, third party assurer, with a duty of care to
outputs	Ofwat, to assure, to our satisfaction, that the above conditions have been met.

Deliverable			Forecast Deliverables									
	Unit	AM	1P7		AMP8							
		2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030				
Total storm overflows improved	Nr	0	0	1	0	0	0	0				
Total spill reduction per annum	Nr	0	0	44	44	44	44	44				

# 8. Affinity Water

## 8.1 Scheme 7: Smart metering

Scheme delivery expectations						
Description	Bringing forward year 1 metering programme from AMP8 as part of the company's proposed best value strategy in its draft WRMP24.					
	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.					
	Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property.					
	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.					
	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:					
	<ul> <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>					
	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.					
	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.					
	At PR24 these smart meters will be funded at the efficient unit rate for this technology as determined during the PR24 process.					
Output measurement and reporting	Company must deliver the number and type of meters in line with the profile specified in the table below.					
	Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:					
	<ul> <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>					
Assurance	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.					
Conditions on scheme	Company must deliver meters funded at PR19 by 31 March 2025. Funding will be made available for meters installed above baseline level.					

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.

Deliverable	Unit	Starting position	g Forecast deliverables				
		2019/20	2020-21	2021-22	2022-23	2023-24	2024-25
Baseline basic meters - cumulative	Number	640,504	628,489	615,969	607,286	596,286	585,286
Baseline AMR meters - cumulative	Number	302,539	342,567	410,015	447,614	500,663	553,663
Baseline AMI meters - cumulative	Number	-	-	-	-	-	-
PR19 delivery basic meters – unmeasured properties	Number		-	-	-	-	-
PR19 delivery AMR meters – unmeasured properties	Number		28,013	54,928	28,916	42,049	42,000
PR19 delivery AMI meters - unmeasured properties	Number		-	-	-	_	_
PR19 delivery basic to AMR meter upgrades	Number		12,015	12,520	8,683	11,000	11,000
PR19 delivery basic to AMI meter upgrades	Number		-	-	-	-	-
PR19 delivery AMR to AMI meter upgrades	Number		-	-	-	-	-
Acceleration new AMI smart meters installed	Number		-	-	-	-	4,000
Acceleration AMI for AMR replacements	Number		-	-	_	_	_
Acceleration AMI for basic replacements	Number		-	-	_	_	16,000

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.

Performance	Unit	Forecast benefits							
commitment		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	Ml/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					
Description	Scheme brings forward the accelerated detailed design and activity to secure planning permissions by the 31 March 2025, enabling the accelerated construction of a nitrate $(NO_3)$ treatment plant which will deliver in 2027-28. The new treatment process will secure a reliable 2.5 Ml/d annual average deployable output and 4.5 Ml/d peak week output from the Broome site to the WRZ7 Dour water resource zone.				
Output measurement and reporting	Each deliverable under this scheme to be reported annually parallel with the APR.				
Conditions on scheme	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.				
Assurance	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	2025-26	2026-27	2027-28	2028-29	2029-30
Completion of planning permission, detailed design and delivery contracts	%	63	100	100	100	100	100	100
Annual average deployable output with nitrate treatment	Ml/d	0	0	0	0	2.5	2.5	2.5
Peak week output with nitrate treatment	Ml/d	0	0	0	0	4.5	4.5	4.5

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

Scheme delivery expectations					
Description	Scheme brings forward the accelerated detailed design and activity to secure planning permissions by the 31 March 2025, enabling the accelerated construction of a nitrate $(NO_3)$ treatment plant delivering 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.				
Output measurement and reporting	Each deliverable under this scheme to be reported annually parallel with the APR.				
Conditions on scheme	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.				
Assurance	Independent assessment and assurance of completed deliverables in this period must be provided to Ofwat as set out below.				

Deliverable	Unit	Forecast o	Forecast deliverables								
		2023-24	2024-25	2025-26	2026- 27	2027-28	2028-29	2029-30			
Completion of planning permission, detailed design and delivery contracts	%	63	100	100	100	100	100	100			
Annual average deployable output with nitrate treatment	Ml/d	0	0	0	3.17	3.17	3.17	3.17			
Peak week output with nitrate treatment	Ml/d	0	0	0	3.7	3.7	3.7	3.7			

### 8.4 Scheme 17:Holywell (PFOS)

Scheme delivery expectations				
Description	Bringing forward the replacement and reinstatement of 12 number (18m <sup>3</sup> per filter) granular activated carbon filter media treatment process to meet rising PFOS challenge. Accelerated to enable earlier delivery in 2025-30 to secure 20.46 Ml/d peak week output by 31 March 2026 to the WRZ 2 Colne water resource zone.			
Output measurement and reporting	Number of filters receiving enhanced media and Ml/d of each deliverable under this scheme to be reported annually parallel with the APR.			
Conditions on scheme	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.			
Assurance	Independent assessment and assurance of completed deliverables in this period must be provided to Ofwat as set out below.			

Deliverable	Unit	Forecast	orecast benefits							
		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30		
Filters (each of 18m3 minimum volume) receiving enhanced media	Number	3	6	12	12	12	12	12		
PFOS removal maximum output capability	Ml/d	5.12	10.23	20.46	20.46	20.46	20.46	20.46		

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

Scheme deliver	y expectations
Description	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 concerns 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.
Output measurement and reporting	Ml/d, Number and km of each deliverable under this scheme to be reported annually parallel with the APR.
Conditions on scheme	Compliance with associated DWI legal instrument demonstrating full operational availability of all the scheme elements by 31 March 2025.
Assurance	Independent assessment and assurance of completed deliverables in this period must be provided to Ofwat as set out below.

Deliverable	Unit	Forecast de	eliverable	s				
		2023-24	2024- 25	2025- 26	2026- 27	2027-28	2028- 29	2029- 30
Annual average deployable output with nitrate and resilience solutions	Ml/d	0	2.69	2.69	2.69	2.69	2.69	2.69
Operational availability of blending controls at 3 pumping stations	Number	0	3	3	3	3	3	3
Operational availability of 250mm HPPE main	km	0	2	2	2	2	2	2
Operational availability of emergency booster operation from Forest Hall Booster	Number	0	1	1	1	1	1	1
Domestic properties receiving an improved security of supply	Number	0	4,846	4,846	4,846	4,846	4,846	4,846

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

#### 9.1 Scheme 13 and 15: Supply pipe replacements

#### Bristol Water - supply pipe replacements (leakage and lead)

Scheme deliver	y expectations
Description	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 0.25Ml/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.
Output measurement	Number of leaking supply pipes (non-lead) replaced to be reported annually parallel with the APR.
and reporting	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.
Conditions on scheme	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.
	Compliance with associated DWI legal instrument demonstrating external and internal lead supply scheme elements by 31 March 2025.
Assurance	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 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	Forecast benefits					
		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Leakage reduction	Ml/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 deliver	y expectations
Description	Bringing forward metering programme from AMP8 as part of the company's proposed best value strategy in its draft WRMP24.
	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. Basic meters are meters that require manual reads of consumption data through direct
	physical access to the meter installation or property.
	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.
	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:
	<ul> <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> </ul>
	Communicate with the internet.
	Installation of the following supporting AMI infrastructure:
	<ul> <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> </ul>
	• 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.
	<ul> <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 writems to integrate accenters.</li> </ul>
	<ul> <li>System implementation and integrate seamessly.</li> <li>System implementation and integration – These costs account for the tooling, licenses, testing, and development required to deliver the CRM system with smart capability with data visualisation for customers (i.e., customer</li> </ul>

	portal/app). This will support the integration of smart data as the smart network comes online.
	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. 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. 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.
Output measurement and reporting	<ul> <li>Company must acquire the following supporting AMI infrastructure by 31 March 2025:</li> <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>
	<ul> <li>Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:</li> <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>
Assurance	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.
Conditions on scheme	Company must deliver meters funded at PR19 by March 2025. Funding will be made available for meters installed above baseline level.

Deliverable	Unit	Starting position	Forecast d	eliverables			
		2019/20	2020-21	2021-22	2022-23	2023-24	2024-25
Baseline basic meters - cumulative	Number	112,491	113,760	116,015	126,054	140,354	141,848
Baseline AMR smart meters - cumulative	Number	_	-	-	-	-	-
Baseline AMI smart meters - cumulative	Number	-	-	-	-	-	-
PR19 delivery basic meters – unmeasured properties	Number		1,269	2,255	10,039	14,300	1,494

PR19 delivery AMR meters – unmeasured properties	Number	-	-	_	_	_
PR19 delivery AMI meters - unmeasured properties	Number	-	-	-	-	-
PR19 delivery basic to AMR meter upgrades	Number	-	-	-	-	-
PR19 delivery basic to AMI meter upgrades	Number	-	-	-	-	-
PR19 delivery AMR to AMI meter upgrades	Number	-	-	-	-	-
Acceleration new AMI smart meters installed	Number	-	_	-	_	470
Acceleration AMI for AMR replacements	Number	_	_	_	_	_
Acceleration AMI for basic replacements	Number	-	-	_	_	30

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 nonhousehold)

Scheme deliver	y expectations
Description	Bringing forward metering programme from AMP8 as part of the company's proposed best value strategy in its draft WRMP24.
	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.
	Basic meters are meters that require manual reads of consumption data through direct physical access to the meter installation or property.
	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.
	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:
	<ul> <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>
	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. 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.
	At PR24 these smart meters will be funded at the efficient unit rate for this technology as determined during the PR24 process.
Output measurement and reporting	Company must deliver the number and type of meters in line with the profile specified in the table below.
	<ul> <li>Company should report spend and number of meters installed under this scheme annually in parallel with the APR. This information should be split by:</li> <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>
Assurance	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.

Conditions on	Company must deliver meters funded at PR19 by March 2025. Funding will be made
scheme	available for meters installed above baseline level.

Deliverable	Unit	Starting position	Forecast deliverables				
		2019/20	2020-21	2021-22	2022-23	2023-24	2024-25
Baseline basic meters - cumulative	Number	249,237	247,889	246,173	243,473	240,773	238,073
Baseline AMR smart meters - cumulative	Number	143,957	149,400	156,777	166,477	176,177	185,877
Baseline AMI smart meters - cumulative	Number	-	-	-	-	-	-
PR19 delivery basic meters – unmeasured properties	Number		-	-	-	-	-
PR19 delivery AMR meters – unmeasured properties	Number		4,095	5,661	7,000	7,000	7,000
PR19 delivery AMI meters - unmeasured properties	Number		-	-	-	-	_
PR19 delivery basic to AMR meter upgrades	Number		1,348	1,716	2,700	2,700	2,700
PR19 delivery basic to AMI meter upgrades	Number		-	-	-	-	-
PR19 delivery AMR to AMI meter upgrades	Number		-	-	-	-	-
Acceleration new AMI smart meters installed	Number		-	-	-	44,980	41,000
Acceleration AMI for AMR replacements	Number		-	-	-	-	-
Acceleration AMI for basic replacements	Number		-	_	_	_	5,420

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.

Performance commitment	Unit	Forecast benefits							
		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
Per capita consumption - CAM	l/h/d (cum.)	0.852	1.704	1.704	1.704	1.704	1.704	1.704	
Per capita consumption - SST	l/h/d (cum.)	0.940	1.880	1.880	1.880	1.880	1.880	1.880	
Leakage	Ml/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	Quaternar y Driver	Solution Deliverable
BETLEY WwTW		EnvAct_IMP4	EnvAct_IMP 5			10 Spills per annum
Biddulph WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
CONGLETON	EnvAct_IMP2	EnvAct_IMP2				WFD
WwTW Storm Tank Spill	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 5			WFD
Glazebury WwTW ST	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP 2	EnvAct_IMP 4		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_IMP 4			10 Spills per annum
STOCKPORT WwTW	EnvAct_IMP2	EnvAct_IMP2				WFD
CASTLETON	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
MERE BROW WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum
Longton WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 3			WFD
WEETON WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
CATON	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP 5			10 Spills per annum
Casterton WwTW Storm Tanks		EnvAct_IMP4	EnvAct_IMP 5			10 Spills per annum
Gosforth WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 3	EnvAct_IMP 4		10 Spills per annum
DUBWATH WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
GREAT BROUGHTON WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
GREAT BROUGHTON WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum

KESWICK WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
BULLGILL	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
THREAPLAND WwTW		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
TORPENHOW WwTW		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
KIRKBY STEPHEN WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
KIRKBY STEPHEN WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
MORLAND WwTW		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
SHAP WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
ARMATHWAITE WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
GREAT SALKELD	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
HEADS NOOK WwTW		EnvAct_IMP4			10 Spills per annum
SOCKBRIDGE & TIRRIL		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
CASTLE CARROCK		EnvAct_IMP4			10 Spills per annum
Rockcliffe WwTW	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
CARGO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
GREAT ASBY WwTW		EnvAct_IMP4			10 Spills per annum
GLENRIDDING WwTW		EnvAct_IMP4			10 Spills per annum
GREY HOUND INN CSO		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
Eastland Farm	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
The Burroughs CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Deanscales PS		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
Cumberland Street CSO	EnvAct_IMP2	EnvAct_IMP2			WFD

Preston New Road/Yew Tree Drive CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Addison Close CSO	EnvAct_IMP2	EnvAct_IMP2			WFD
Appleby Street CSO	EnvAct_IMP2	EnvAct_IMP2			WFD
Accrington Road CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Philips Road CSO	EnvAct_IMP2	EnvAct_IMP2			WFD
Weston Street/Viking Street CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
WHITE LION BROW CSO		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
The Sunnybank Road CSO	EnvAct_IMP2	EnvAct_IMP2			WFD
Maple Avenue CSO		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
PARR BROOK CSO	EnvAct_IMP2	EnvAct_IMP2			WFD
Honey Holme Lane CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
In Front of 19 Bear Street CSO		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
ETTERBY TERRACE	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
CROWN ST,TOWN DYKE ORCHARD	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
Longburgh PS		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
BOUSTEADS GRASSING CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Dalston Sewage PS, CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Little Corby PS	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
Trinity School / Strand Road Combined Sewer Overflow (Site	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum

ID 10015) xxxx ) (CAR0093)					
Adjacent Duxbury Mill Pumping Station Combined Sewer Overflow (CHR0024)	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
Coppull New, Butterworth Brow	EnvAct_IMP2	EnvAct_IMP2			WFD
Eccleston Bridge D/S CSO	EnvAct_IMP2	EnvAct_IMP2			WFD
Withnell Fold PS	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Moor Road/Eaves Green Road CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
29 Cresswellshaw e Road CSO (Overflow A)	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Keekle PS	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
Moresby Park PS	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
Moor Row CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
Brookside CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 3	EnvAct_IMP 4	10 spills per annum
Rear of Hayes Castle Farm CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Church Lane CSO	EnvAct_IMP2	EnvAct_IMP2			WFD
SKIRWITH BECK CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
Holme Street/Chapel Street	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
Winton PS	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	 10 Spills per annum
Clifton PS		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum

Carleton Hall Templebank CSO	EnvAct_IMP2	EnvAct_IMP4	BW_IMP1			10 Spills per annum
Rivacre Valley Park CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
Hooton Road CSO	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP 2	EnvAct_IMP 4		10 Spills per annum
Near the Ship Inn CSO	EnvAct_IMP2	EnvAct_IMP4	EnvAct_IMP 5			10 Spills per annum
Warton PS (19010)	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
Halton Brow CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum
Halton East sewage pumping station (Site ID HALTN) (LAN0060	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
Cockerham Adjacent to Manor Inn Car Park CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum
Thurtle Cottages CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
Hest Bank PS	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum
Bexton Road	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum
Poynton Tanks CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
Westminster Road CSO	EnvAct_IMP2	EnvAct_IMP2				WFD
ASPIN LANE CSO		EnvAct_IMP4	EnvAct_IMP 5			10 Spills per annum
Newcastle Road CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum
Rookery CSO (29010) (NEW0038)	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4			10 Spills per annum
BOUNDARY PARK ROAD CSO		EnvAct_IMP4	EnvAct_IMP 5			10 Spills per annum
Percy Street CSO		EnvAct_IMP2	EnvAct_IMP 3	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
Whittams Farm CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5		10 Spills per annum

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

Broomstair Road CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		WFD
Denton Transfer PS	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Denton Transfer PS		EnvAct_IMP4			10 Spills per annum
School Lane/Lodge Lane CSO		EnvAct_IMP4	EnvAct_IMP 5		10 Spills per annum
Hey Shoot Lane CSO	EnvAct_IMP2	EnvAct_IMP2			WFD
Templeton Road PS	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP 2	EnvAct_IMP 4	WFD
Strangeways PS No2	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP 2		10 Spills per annum
Orrell House Farm CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
East Lancs Road Pumping Station	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP 2	EnvAct_IMP 4	10 Spills per annum
Manchester Road/Park Lane CSO		EnvAct_IMP4			10 Spills per annum
Hindley PS	EnvAct_IMP2	WFD_IMP_MO D			WFD
Sandy Lane CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Leasowe Road CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Bidston Bypass CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
Upton Storm Tanks	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Noctorum Avenue CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4	EnvAct_IMP 5	10 Spills per annum
Long Hey Road CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Eastham Rake CSO	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP 2	EnvAct_IMP 4	10 Spills per annum
The rear of 25 Wheatfield Close CSO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Thornton Hough PS SO	EnvAct_IMP2	EnvAct_IMP2	EnvAct_IMP 4		10 Spills per annum
Dean Wood CSO(49202) (WLN0020)	EnvAct_IMP2	WFD_IMP_MO D	EnvAct_IMP 2		10 Spills per annum

#### Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales.

Ofwat Centre City Tower 7 Hill Street Birmingham B5 4UA Phone: 0121 644 7500

© Crown copyright 2023

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/ open-government-licence/version/3.

Where we have identified any third party copyright information, you will need to obtain permission from the copyright holders concerned.

This document is also available from our website at www.ofwat.gov.uk.

Any enquiries regarding this publication should be sent to mailbox@ofwat.gov.uk.

