PR24
Price control deliverables
Technical annex

V1.1

Anglian Water

October 2023

Change control

Version	Date submitted	Changes from previous version
1.0	02 Oct 2023	First issue
1.1	27 Oct 2023	**Resilience: Climate Vulnerable Mains** • Km of mains renewed corrected from 668km to 688km. Additional 20km of delivery flowed through to target and rates. **WINEP & Storm Overflows** • Correction of minor discrepancies to September WINEP and correction of allocation across a number of measures, totex, obligation numbers and subsequent rates. • New measure of Chemical interventions and investigations included to distinguish from major capital improvements. • Monitoring measure split out into three measures to reflect differences in unit costs.

Introduction

As part of the PR24 methodology, Ofwat has set an expectation for companies to propose Price Control Deliverables (PCDs) associated with material enhancement investments.

The purpose of this annex is to set out the detail of each of our proposed PCDs forming part of our PR24 business plan submission.

We highlight specifically how these align to Ofwat's stated PCD principles and the set out the underlying mechanics such as definitions, targets and associated assurance.

As set out in Chapter 8 – Our Commitment to Customers of our business plan, we propose three different types on PCD to enhancement investment to provide an additional level of customer protection:

1. Simple PCDs

These PCDs use controllable outcomes or high-level outputs as the measure. They operate mechanistically if the planned measure is not delivered by the planned date. They are associated with more discretionary areas of spend.

2. Gated PCDs

These PCDs are similar to simple PCDs but would only take effect subject to a condition or "gate".

These have been applied primarily where the measure associated with the PCD may not be met, but the company may still have undertaken some or all of the planned activities to deliver the PCD.

For these PCDs we are proposing that as part of the independent assurance we put in place for PCDs we are assessed against the following criteria where the planned PCD has not been delivered:

- If the company can evidence that they have reasonably incurred costs in order to deliver against a PCD up to the value of the allowed totex (in full or in part) but the PCD measure has still not been delivered, the PCD would not return that funding (in full or in part) to customers.

- Penalties for late delivery would still apply, except under circumstances outside of company control (i.e., macro-economic events which materially change our delivery risk such as a global chip shortage severely constrains the supply chain for smart meters).

The role of independent assurance is critical. This would form an independent assessment any non-delivery of PCDs of this type and report on whether the conditions justify return of funding to customers. They would also assess the percentage that should be returned if part of the expenditure could be justified as having been made in a reasonable manner.

3. Obligation backstops PCD

These PCDs are for investments relating to statutory obligations or undertakings.

In these cases, the PCD is linked directly to the delivery of the number of obligations, by the obligation dates as signed off by the responsible regulator (the EA or DWI). These obligations have been grouped into broad cost bandings and an average unit cost per obligation would apply if an obligation is not delivered either because of non-delivery or if the obligation is removed by the regulator.

These PCDs also allow for some substitution of obligations, within a given unit-cost banding. On the rare occasion that new obligations are sought to be imposed after FD allowances are set, this could also be accommodated through a positive increase based on the appropriate PCD rate.

PCDs in this instance in reality should rarely if ever be triggered where an obligation is not removed by the regulator. We have an outstanding track record of delivering our legal obligations on time and would face significant consequences were this to change in the future. In all but the most extreme cases, we would expect that the additional customer protection granted by a PCD for legal obligations to be redundant. A PCD does however allow us to more smoothly deal with changes in obligations post FD.

Resilience: Climate vulnerable mains

Enhancement area

This PCD relates to our proposed investment to renew 668km of climate vulnerable mains, detailed in the enhancement case for Resilience (water). The totex associated with climate vulnerable mains renewal is £182.3m in AMP8.

Context

This investment forms part of a multi-AMP strategy set out in the enhancement case and our LTDS to begin the renewal of our mains that are vulnerable to climate change. We have a clear and unambiguous definition of what constitutes a climate vulnerable main, which is a combination of main material, diameter and the soil type where it is located.

The consequences of non-delivery will be increasingly frequent and severe impacts of climate change events such as those experienced in the summer of 2022, which resulted in a sharp spike in mains bursts. This event is described in our enhancement strategy. The impact on key performance metrics, customer sentiment and company reputation would be severe if not mitigated before the predicted peak.

This is a multi-AMP strategy, so investment will be proposed over many further reviews.

How customers are already protected

Customers are protected firstly by our aligned interest to avoid the impacts of climate change events on the provision of our services.

Our Mains Repair performance commitment includes an assumed level of improvement attributed to this investment in AMP8. Leakage and Water Supply Interruptions ODIs would be negatively impacted as these events increase if not mitigated by this investment, but these impacts may not be felt in AMP8.

Protection provided by this PCD

We have chosen to propose additional protection for this investment through a simple PCD. As this investment does not relate to a statutory obligation and the link to ODI penalties for non-delivery may not occur until later AMPs we've applied a simple PCD that links delivery of a reduction in the percentage of climate vulnerable mains to an automatic return of funding to customers if not delivered.

If we fail to deliver the planned investment, customers will be compensated for the percentage that has not been delivered.

We have also included an over-delivery element to this PCD. Because this is a multi-AMP programme which requires a significant and challenging ramp-up to deliver the planned programme. In the event that we are able to deliver at a faster than expected rate in AMP8, there are efficiencies to continue to deliver rather than slowing down, only to need to ramp-up again in the next period. We would anticipate that any capacity to over-deliver would be limited and would discuss our plans with Ofwat prior to this over-delivery mechanism being utilised.

PCD definition

Price Control Deliverable: Percentage of our potable water supply network classified as climate vulnerable	
Ofwat Principle 1: Linkage to Performance Commitments	Our climate vulnerable mains programme delivers benefits through avoided supply interruptions and leakage increases that would otherwise occur as a result of climate change. As it will take multiple AMPs to replace the majority of the vulnerable mains, attempting to stay ahead of the impact that would otherwise be felt, there is no net performance improvement for supply interruptions and only a minor benefit to leakage in AMP8 as a result of AMP8 investment. We anticipate our climate vulnerable mains programme will deliver modest performance improvements in AMP8 against the Mains Repairs performance commitment. We quantify the benefits of this investment for PC performance in table CW15. The main benefit of this investment is to offset adverse impacts of climate change and prevent a performance deterioration. Our PCL has been calibrated to account for the benefits delivered from enhancement, therefore reaching this target is dependent on this investment being granted.
Ofwat Principle 2: Materiality	The value of this enhancement expenditure is £182.3m. The costs of the climate vulnerable mains programme exceeds the materiality threshold for water network+ of 1%. Materiality of totex (4.021bn) = 40.21m.
Ofwat Principle 3: Outcomes vs outputs/inputs	The purpose of this investment is to improve the long term resilience of the services we provide to our customers to the impact of climate change.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at the highest level possible to retain flexibility. We have therefore set the measure as percentage of our potable water supply network that is classified as climate vulnerable.
Output measurement and reporting	The measure reported is defined as a reduction of the percentage of the network deemed to be climate vulnerable. We express this as the length of mains meeting the definition below as a percentage of total length. Percentage is measured on a fixed baseline of the total length of the potable network reported in Annual Performance Report (APR) 2023 of 39,248.1km. Climate vulnerable mains are defined as those that meet 3 criteria based on physical characteristics:

Price Control Deliverable: Percentage of our potable water supply network classified as climate vulnerable	
	1. Material – Asbestos Cement, Cast Iron, PVC or uPVC 2. Diameter <320mm 3. Soil shrink swell class >4
Conditions on scheme	The understanding of the issue of climate vulnerability is emerging in the sector with new evidence becoming available over time. Should new information come to light regarding climate vulnerable mains, we will discuss with Ofwat to review the measure if doing so would benefit customers. This PCD has two payment rates defined, one for under or over delivery and one for late delivery: • The under or over delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed, or for over-delivery if the additional units have been delivered. The unit rate is calculated by dividing the total investment by the percentage improvement. • The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the annualised cost of the scheme).
Assurance	The outputs delivered by the climate vulnerable mains programme will be reported in the APR in pro forma 6C and therefore subject to our assurance framework for our annual reporting.
Target What is the expected outcome we want to achieve	We currently have 8,241km of climate vulnerable mains out of 39,248km total mains length reported in APR23 (20.997%). There are two other standalone schemes not included in this investment case that will renew 7.7km (Wicken Resilience and Stutney WR to Haddenham WT Resilience) in AMP8. Assuming these schemes deliver, there will be 8,233km of climate vulnerable mains (20.977%). These investments will deliver 688km of additional renewal, leaving 7,545km at the end of the AMP (19.224%). The reduction will therefore be 1.773% from a fixed baseline in APR23.
Additional comments	Consistent with the feedback received on our previous bespoke performance commitments we propose outperformance rates associated with outperformance of this PCD given the clear

Price Control Deliverable: Percentage of our potable water supply network classified as climate vulnerable	
	customer benefit associated with going beyond the level of replacement of climate vulnerable mains. This reflects expected benefits of increased resilience to AMP8 and future mains bursts by delivering this long multi-AMP programme. As part of this PCD, there are multiple investments which make up our total climate vulnerable main enhancement case which provide climate mitigation during AMP8. Our proposed PCD target assumes Ofwat are supportive of all our climate vulnerable main investments which are set out in our PR24 table commentary CW6. If any of our investments are not supported, we will readjust our target accordingly.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
Percentage of network defined as climate vulnerable	Percentage Reduction	-	-	-	-	-1.773%

Price control deliverable payments (gross of cost sharing)

Investment Area	Resilience: Climate vulnerable mains
Totex £m (A)	182.34
Units	%
Number of units (B)	1.773
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	102.8
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	3.6
Over delivery payment rate, £m	102.8

Net Zero

Enhancement area

The world faces a climate emergency resulting from the emission of greenhouse gases leading to a warming of the planet and changing climates across the world. The importance of tackling this challenge has been reflected at global and national levels, with the 2015 Paris Agreement setting the global ambition to limit global temperature increases to well below 2°C above pre-industrial temperatures, and in 2019, the UK government committed to reducing national greenhouse gas emissions to net zero by 2050 and in 2021 the UK enshrined a new target in law to reduce emissions by 78% by 2035. To achieve these aims it is vital that individuals, governments and businesses play their part; without action the climate emergency could evolve into a climate disaster.

In line with both the Water UK and the Anglian Water Net Zero Carbon Routemaps,[1] Net Zero enhancement funding is now required to take transformational steps on 'non electricity' emissions – elements of our carbon emissions where current approaches cannot deliver the required change and areas where Anglian Water, and most other water companies, have not previously concentrated. To deliver this, we are proposing:

- 19 nitrous oxide reduction enhancement investments, including real-time monitoring and control aeration changes (e.g., aeration systems), membrane aerated biofilm reactor and ammonia recovery,
- Three 'gas to grid' investments,
- Eight investments to capture methane post digestion at eight sites,
- For our heavy goods vehicle fleet, the replacement of 12 rigid bodied HGVs, 26 articulated tractor units, four hook-lifts and four tippers with electric equivalents.

More detail of this proposed investment area is available in ANH28 Our PR24 Enhancement Strategies, Part 3, A carbon neutral business.

Context

We have a strong track record of delivering emissions reductions.

We have been at the forefront of carbon reduction in the water industry. Our decarbonisation journey began in 2010, when we first set ambitious goals to reduce our operational and capital (embedded) carbon emissions, at a time when measuring and managing capital carbon – the carbon in our assets and what we build – was unheard of. With a committed leadership and a determined supply chain, by 2023 we reduced capital carbon by 63 per cent in our capital programmes from our original 2010 baseline. Through AMP6 we also reduced operational emissions by 34 per cent from a baseline set in 2014/2015. These whole life carbon reductions have already benefited our customers through driving additional capital expenditure (capex) and operational (opex) efficiencies.

Working with Government and leading businesses through our role in the Green Construction Board, we helped develop, and in March 2023, supported the revision to the world's first standard for managing carbon in infrastructure (PAS 2080), which is now being used nationally and internationally. We have also achieved platinum status on ISO 14064, the international standard for the quantification and reporting of greenhouse gases.

[1] anglianwater.co.uk/siteassets/household/environment/net-zero-2030-strategy-2021.pdf

How customers are already protected

Customers are protected by the common PC operational greenhouse gas emissions. Our PCL for that performance commitment has been set taking into account the benefits of this investment.

Protection provided by this PCD

We are proposing a simple outcome based PCD for this performance commitment. This is to reflect the expected delivery time of these investments and provide some flexibility in delivering the outcome. This means customers are protected if we do not deliver the emissions reductions.

PCD definition

Price Control Deliverable: ktCO2e of GHG reduced	
Ofwat Principle 1: Linkage to Performance Commitment	At PR24 there is a common performance commitment for Operational Greenhouse Gas Emissions (water recycling). However as the incentive rates are not currently set for this PC we are proposing this PCD. It may be that at Draft Determination when incentive rates are proposed for this PC the need for this PCD is removed.
Ofwat Principle 2: Materiality	The value of this programme is £152.859m. The costs of the Net Zero programme exceed the materiality threshold for water recycling of 1% Materiality of Totex (5.601bn) = 56.01m
Ofwat Principle 3: Outcomes vs outputs/inputs	The purpose of this investment is to reduce GHG and enable us to deliver our company purpose and Strategic Direction Statement Goal of a 'carbon neutral business'. Considering the size of the investment programme and the new investment requirements we have therefore proposed an outcomes-based measure.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as tonnes of CO2e of Greenhouse Gas Emissions reduced.
Output measurement and reporting	We are already measuring, tracking, and reporting on this metric and could easily reflect this PCD. Material changes in emission factors (exceeding 5%) can result in an update to the baseline.
Conditions on scheme	This PCD has two payment rates defined: - The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. - The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).

Price Control Deliverable: ktCO2e of GHG reduced	
Assurance	We will report and assure this investment under ISO-14064. We will also be reporting our emissions for the performance commitment as part of the APR, subject to our assurance framework.
Target What is the expected outcome we want to achieve	A model reduction in greenhouse gas emissions in comparison to peers and against our net zero pathway. We are aiming for a reduction of 29,900 t/CO2e . We will measure the target as kt/co2e.
Additional comments	Weather can impact year-to-year changes in emissions. The current granularity of the Carbon Accounting Workbook may not capture all emission reductions (methane and nitrous oxide). The simple methodology in comparing performance for carbon between companies may put us at a disadvantage. A PCD which measures tonnes of carbon saved verses the investment made in line with the submission may reduce overall risk verses a sector comparator ODI.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
kt/co2e	Number	-	-	-	-	29.900

Price control deliverable payments (gross of cost sharing)

Investment Area	1.2 Net Zero
Totex £m (A)	152.86
Units	ktCO2E
Number of units (B)	29.9
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	5.1
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.18
Over delivery payment rate, £m	N/A

Bioresources: Sludge capacity

Enhancement area

Investment is required to mitigate key risks in AMP8 including:

- Increasing capacity – by investing additional capacity to cater for new housing growth in our region as well as the additional sludge that is produced by enhanced WRC treatment techniques such as nutrient removal schemes.
- Surface water nutrient pollution – by providing enhanced sludge storage with Dutch barns to prevent re-wetting of treated sludge, enhanced dewatering at three Sludge Treatment Centre (STC) sites and purchase of more accurate sludge spreading equipment
- Increased resilience – by investing in additional sludge treatment capacity to avoid storing of backlogs of untreated sludge during seasonal production peaks in winter and spring. This will improve our end-to-end operational resilience across the bioresources price control.

These risks are driven by:

- population growth within the region, equating to an annual increase of 3.093 thousand tonnes of dry solids (TTDS) per annum by 2030 compared with 2024/25;
- the requirement for additional sludge production arising from the proposed WINEP programme; we forecast this to increase sludge production by 8.211 TTDS by 2030,
- tightening environmental regulations (such as potential revisions of Farming Rules for Water); and
- Operational resilience.

More detail of this proposed investment area is available in ANH28 Our PR24 Enhancement Strategies, Part 3, A carbon neutral business.

Context

We have made investments during each price review period to ensure that we maintain sufficient capacity to treat all raw sludge produced because of our water recycling operations, though such investment is distinct from the proposed expansion of capacity in this instance.

In AMP7, we invested to increase capacity at our Whitlingham STC by 6.4 TTDS to cater for growth and additional sludge due to tightening environmental standards. The delivery of this additional capacity at Whitlingham STC will be measured at the end of AMP7 through our end of period bespoke PC as a protection mechanism for customers.

How customers are already protected

This PCD is the main form of customer protection for non-delivery. However not investing to increase capacity and manage risk could cause non-compliance with environmental regulations.

Protection provided by this PCD

We are proposing a simple outcome based PCD for this performance commitment. This is to reflect the expected delivery time of these investments and provide some flexibility in delivering the outcome volume. This means customers are protected if we do not deliver the additional capacity.

PCD definition

Price Control Deliverable: Capacity created in thousand tonnes of dry solids per year	
Ofwat Principle 1: Linkage to Performance Commitments	There are no common performance commitments at PR24 relating to bioresources and therefore no overlap or linkage to this PCD.
Ofwat Principle 2: Materiality	The value of this enhancement expenditure is £75.904m. The costs of the bioresources capacity programme exceed the materiality threshold for water recycling of 1% Materiality of Totex (5.601bn) = 56.01m.
Ofwat Principle 3: Outcomes vs outputs/inputs	The intended benefit of this investment is to provide increased capacity to deal with additional sludge that will be produced by our Water Recycling Centres due to tightening performance required by Water Industry National Environment Programme, as well as to increase resilience of seasonal peak treatment capacity. We have therefore selected an output level metric relating directly to capacity installed.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as total capacity installed.
Output measurement and reporting	The output will be measured as the increase in thousand tonnes of dry solids per year (ttDS/yr) capacity.
Conditions on scheme	This PCD has two payment rates defined: - The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. - The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	Bioresources treatment metrics are already reported in pro forma 8A of the Annual Performance Report (APR), and available capacity is monitored by the company already to produce those statistics. APR reporting is subject to our assurance framework.
Target What is the expected outcome we want to achieve	The target is defined as 23 ttDS/yr additional capacity to be completed by the 31st March 2030.
Additional comments	The treatment capacity is to deliver a treated product that meets the definition of enhanced treated product under the Biosolids Assurance Scheme (BAS). If we can find a market solution, there is a possibility that we will choose to go down the market route. In that case we proposed

Price Control Deliverable: Capacity created in thousand tonnes of dry solids per year	
	that no penalty is levied. A market solution may also provide an alternative to our current sludge treatment technologies so may recycle products to different markets (e.g Advanced Thermal Conversion) and therefore BAS assurance standards in this case would not be applicable. Should a viable market solution be identified we are proposing to share the benefits with our customers as per our sharing rate.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
Additional treatment capacity	ttDS/yr	-	-	-	-	23

Price control deliverable payments (gross of cost sharing)

Investment Area	Capacity created in thousand tonnes of dry solids per year
Totex £m (A)	75.904
Units	ttDS/yr
Number of units (B)	23
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	3.3
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.12
Over delivery payment rate, £m	N/A

Metering: Meter boundary boxes

We are proposing this PCD as a link to our cost adjustment claim for boundary boxes. Our preferred solution is to remove the cost adjustment claim and move to an uncertainty mechanism which would make this PCD redundant.

Enhancement area

We have proposed an uncertainty mechanism to address the increased level of water meter boundary boxes replacements that will be required as they reach end of asset life. This is our preferred method for dealing with an uncertain level of expenditure in AMP8. Should this uncertainty mechanism be accepted, we would not require this PCD, since the uncertainty mechanism would allow for any variation in the level of delivery that may be required.

However, we also set out the case in the format of a cost adjustment claim (CAC) that could be used as an alternative to the preferred uncertainty mechanism. In this case, as the investment would be funded up-front to an assumed level, we've developed this candidate PCD to accompany the CAC to ensure customers are still protected if the actual rate of failure differs from our assumptions.

The totex associated with this investment (if allowed through a CAC) would be £148m to replace an estimated 239,331 meter boundary boxes.

Context

We are clear that the level of meter boundary box replacements that will actually be required in AMP8 is uncertain. We are one of the first companies to see these asset types reach end of life given the timing of our early meter roll-out programme. Asset failures can be visible to customers and often result in observable leakage.

We've already delivered significantly increased levels of meter boundary box replacements in AMP7 as we have seen a material increase in the failure rate of these assets.

How customers are already protected

The proposed uncertainty mechanism provides the best protection against non-delivery – operating as a payment on delivery rather than protection and recovery after the fact.

Protection provided by this PCD

Should a CAC be preferable, this PCD provides additional protection against non-delivery by returning funding to customer if not required. The mechanism is simple and directly related to the activity undertaken so delivery can easily be evidenced and assured.

In theory, an overperformance payment would be suitable for this simple PCD, but then it would operate in almost the same way as an uncertainty mechanism. Should this approach be preferred, we would therefore limit the risk to customers by effectively capping the total funded expenditure to that set out in the CAC and absorb this risk.

PCD definition

Price Control Deliverable: Number of Meter Chambers repaired / replaced	
Ofwat Principle 1: Linkage to Performance Commitments	There is no common performance commitment or outcome delivery incentive currently to reflect this investment. As such we are proposing a PCD to cover the cost adjustment claim for Boundary Boxes.
Ofwat Principle 2: Materiality	The value of the additional expenditure over implicit allowances from base is £138m. The costs of the meter chambers cost adjustment claim exceeds the materiality threshold for water network+ of 1% Materiality of totex (4.021bn) = 40.21m.
Ofwat Principle 3: Outcomes vs outputs/inputs	This PCD is closely associated with the outputs of meter boundary boxes renewed / repaired. Asset failures are visible to customers and often result in observable leakage.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as number of meter chambers repaired / replaced.
Output measurement and reporting	The output will be measured in number of meter chambers repaired or replaced.
Conditions on scheme	This PCD has two payment rates defined: • The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. • The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	As part of the cost adjustment claim we will regularly review, report and measure our progress against our set target as part of our annual reporting subject to our assurance framework.
Target What is the expected outcome we want to achieve	The target we have set is aligned to the Cost Adjustment Claim and reflects the number of meter chambers repaired or replaced at the end of AMP8. We are proposing a target of 239,331 in line with our cost adjustment claim.

Price Control Deliverable: Number of Meter Chambers repaired / replaced	
Additional comments	Ideally this PCD will not be needed as we are proposing to remove the corresponding cost adjustment claim and move to an uncertainty mechanism for this investment.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
Meter Chambers repaired / replaced	Number	-	-	-	-	239,331

The driver for replacement is reactive by nature, so interim targets are not appropriate. An end of period target returns funding to customers that was not required.

Price control deliverable payments (gross of cost sharing)

Investment Area	Number of Meter Chambers repaired / replaced
Totex £m (*A*)	138
Units	No. chambers repaired
Number of units (*B*)	239,331
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (*C*)	0.0006
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.00002

DWMP: Growth at Water Recycling Centres (WRCs)

Enhancement area

This PCD relates to our proposed investment to ensure sufficient capacity for additional properties to connect to our sewerage system, detailed in enhancement case for Growth at Water Recycling Centres. The totex associated with this PCD is £164.3m in AMP8.

Under Section 106 of the Water Industry Act 1991 customers are provided with a 'right to connect' foul and surface water into the sewerage system. Our DWMP assessed the risks to our WRCs due to growth across the period 2025-30, using a growth demand forecast model aligned to WRMP 2024 (Water Resources Management Plan) and WRE (Water Resources East) regional plan. These forecasts are both based upon a unified foundation of Local Authority Planning data (collated by the external consultant, Edge Analytics) and ONS data.

Context

All of our WRCs have been reviewed against the current view of growth to understand whether they will be able to manage with the additional demand within the next AMP period. Where a risk has been identified we have used a tiered approach to solutions, aiming to manage the risk through no or low-cost solutions where possible. Therefore a range of solutions have been identified and to meet the demands of growth in our region, the most common ones are:

- Managing the risk through optimisation of the site, such as adjusting how the site is run, or small scale upgrades.
- Investigating levels of unaccounted for flow and reducing where feasible through methods such as sewer relining.
- Upgrading the capacity of the WRC through additional processes like extra settlement tanks, aeration tanks or tertiary treatment.
- Applying for new environmental permits, with or without additional processes to meet the new permitted limits.
- Transferring sewage between catchments to utilise available capacity across our system.

Updating WRC risk from DWMP to PR24:

- Catchments reviewed with lower projection of growth.
- Catchments reviewed with the most up to date flow and population data.

How customers are already protected

In the event of our WRC growth enhancement investment being cancelled, delayed or reduced in scope, our customers will be protected through the Growth at Water Recycling Centres Price Control Deliverable that we have included within our PR24 business plan. They will also be protected by the Discharge Permit Compliance performance commitment which could be impacted if investment to meet growth is not made in a timely fashion.

Protection provided by this PCD

We are proposing a gated approach for this PCD. By linking the customer protection mechanism to the number of new connections, we ensure that the protection is focussed around making sure that our plan contains adequate investment to meet the growth needs of the region (i.e. should the number of new connections be lower than our expectation, funding will be returned to customers, reflecting the reduction in the need for the investment).

PCD definition

Price Control Deliverable: New connections made to Water Recycling Centres (WRCs)	
Ofwat Principle 1: Linkage to Performance Commitments	This measure is associated with the common performance commitment discharge permit compliance in the short term to 2030, as part of our duties to ensure that population growth is accounted for and that we continue to provide our services whilst meeting our purpose. However, the growth expenditure is intended to hold performance stable rather than deliver improvement, therefore there is no link to this PCD.
Ofwat Principle 2: Materiality	The value of this enhancement expenditure is £164.3m. The costs of the WRC growth programme exceed the materiality threshold for water recycling of 1% Materiality of Totex (5.601bn) = 56.01m
Ofwat Principle 3: Outcomes vs outputs/inputs	The purpose of this investment is to ensure that our WRCs have enough capacity to deal with population growth. We believe that this measure should focus on the outcome of the investment as there are different solutions to mitigate this issue. The CMA examined this issue in detail as part of their redetermination in 2021[2], and decided that using connections was a suitable metric for their expanded Developer Services Revenue Adjustment (DSRA) mechanism, given that connections positively correlate with growth costs. We propose to retain the CMA's precedent for this PCD.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as number of new connections to the water recycling network in line with the CMA's decision, rather than at individual sites.
Output measurement and reporting	The number of new connections is reported in line with the guidance published by Ofwat for table 4Q (see page 85 RAG-4.11-–-Guideline-for-the-table-definitions-in-the-annual-performance-report.pdf (ofwat.gov.uk))
Conditions on scheme	This PCD has two payment rates defined: - The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. - The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	We report the number of new connections to our water recycling networks annually via the Annual Performance Report (APR) pro

[2] See paragraph 4.856 onwards: Final report (publishing.service.gov.uk)

Price Control Deliverable: New connections made to Water Recycling Centres (WRCs)	
	forma 4Q and therefore are subject to the normal external audit carried out for APR reporting.
Target What is the expected outcome we want to achieve	We are proposing a target based on the load being received at the WRCs – date to date: 2025 – 2030 dates for UWWTD sites (over 2,000 population). As such we are proposing a metric to measure new connections to the water recycling network. By the end of 2030 we are expecting new connections based on growth to be 102,548 new properties. Due to the uncertainty surrounding the timing of housing growth, setting an end of period target will reduce unnecessary volatility in customer bills while receiving the same level of protection.
Additional comments	Given the regulatory precedent set by the CMA with the expanded DSRA mechanism, we propose both non-delivery and over-delivery payment rates to align to that approach. This would provide additional funding to the company in the event that growth is greater than forecast. Forecast deliverables based on PR24 figures which is higher than the expected Ofwat modelled output.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
Growth at WRCs: new connections to the water recycling network	Number of properties	-	-	-	-	102,548

Price control deliverable payments (gross of cost sharing)

Investment Area	New connections made to Water Recycling Centres (WRCs)
Totex £m (*A*)	164.3
Units	No. connections
Number of units (*B*)	102,548
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (*C*)	0.0016
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.00006
Over delivery payment rate, £m	0.0016

Metering: Smart Metering

Enhancement area

This PCD relates to the enhancement investment in smart metering which forms part of our long-term strategy that we have been carrying out for over thirty years. This started in the 1990s when we began the large-scale rollout of metering. In 2020, we began the large-scale rollout of smart meters (following earlier trials) with half of meters being replaced by smart meters in AMP7, plus an additional 60,000 smart meters being accelerated into AMP7 through the Accelerated Infrastructure Delivery (AID). Our AMP8 plan sees the completion of this long-term approach with investment to upgrade every meter in our region to a smart meter. This is detailed in enhancement case for Metering. The totex associated with this smart metering PCD is £137.4m in AMP8.

Context

Our PR24 metering investment is informed by, and aligns with, our Water Resources Management Plan (WRMP). Without any intervention the Anglian region will be in a water balance deficit during the next 25 years. Our demand management options include reductions in usage due to metering, reducing leakage and other water efficiency measures. All three play an important role in delivering the demand reduction required for our WRMP. Our smart metering strategy for AMP8, consequently is fundamental in underpinning a significant amount of the benefit delivered through our three demand management approaches. We have started the journey of rolling out smart meters to our customers in AMP7 and it is vital that we continue to carry this rollout into AMP8. The benefits that smart metering can bring at scale is reflected in our transition programme with 60,000 smart meters to be funded through PR24 being delivered in AMP7 as part of the Accelerated Infrastructure Delivery programme.

How customers are already protected

Customers are protected firstly by our need to meet the targets set out in our WRMP as these are aligned to mitigating the water resource deficit forecast for our region. The WRMP chooses the most cost effective options first, therefore not completing this smart metering investment would mean a less cost beneficial solution would be required to achieve the demand reduction.

Our Per Capita Consumption performance commitment includes an assumed level of improvement attributed to this investment in AMP8.

Protection provided by this PCD

We have chosen to propose additional protection for this investment through a gated PCD. The stated benefit of smart meter installation is to assist customers in managing their consumption, and so this programme of work is directly linked to the common performance commitment for Per Capita Consumption (PCC). However, the penalty rate for that performance commitment is insufficient to cover the cost of smart meter installation in the event of non-delivery, therefore this PCD is required.

If we fail to deliver the planned investment, customers will be compensated for the percentage that has not been delivered.

PCD definition

Price Control Deliverable: Total number of smart meters installed	
Ofwat Principle 1: Linkage to Performance Commitments	The stated benefit of smart meter installation is to assist customers in managing their consumption, and so this programme of work is directly linked to the common performance commitment for Per Capita Consumption (PCC), leakage and Business Demand. However, the penalty rate for the performance commitments is insufficient to cover the cost of smart meter installation in the event of non-delivery, therefore this PCD is required.
Ofwat Principle 2: Materiality	The value of this enhancement investment is £137.4m. The costs of the smart meter programme exceed the materiality threshold for water network+ of 1% Materiality of Totex (4.021bn) = 40.21m
Ofwat Principle 3: Outcomes vs outputs/inputs	PCC is inherently not fully within company control and history shows that changes occur rapidly, therefore a PCD based on outputs is more suitable.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as total number of smart meters installed.
Output measurement and reporting	We measure and report the number of smart meters fitted on an annual basis for the Annual Performance Report (APR). For the purposes of this measure a smart meter is defined as Advanced Meter Infrastructure (AMI) able to be read via a fixed data network.
Conditions on scheme	This PCD has two payment rates defined: - The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. - The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	This will be reported and assured in our APR submission pro forma 6D. Our APR is externally assured by third party auditors.
Target What is the expected outcome we want to achieve	This PCD aligns to smart metering investment target of 1,121,511 meters installed by 31st March 2030. We are proposing to consolidate the early Accelerated Infrastructure

Price Control Deliverable: Total number of smart meters installed	
	Delivery (AID) of 60,000 meters within this PCD, removing the regulatory burden of having two similar PCDs.
Additional comments Please note any risks	In light of the sector's wider demands for smart meters in AMP8, we have not prescribed an annual profile of installation, rather an end of AMP total to account for in-year fluctuations. Additionally, we are incentivised by our WRMP24 demand side challenge to install smart meters as soon as possible which argues against having a yearly profile. We are proposing to include the early delivery of the metering schemes in this PCD and not to have a separate AID PCD. This PCD covers the delivery of all schemes, early delivery as well as in AMP period.

Deliverables

Deliverable	Unit	Forecast deliverables					
		2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Smart meters installed	Number of meters	60,000	-	-	-	-	1,061,511

Price control deliverable payments (gross of cost sharing)

Investment Area	Metering: Smart metering
Totex £m (A)	137.41
Units	No. smart meters installed
Number of units (B)	1,121,511
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	0.000123
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.000004
Over delivery payment rate, £m	N/A

WRMP: Water Available for use (WAFU) in Water Resource Zones (WRZs)

Enhancement area

This PCD relates to our proposed investments aligned to our Water Resource Management Plan 24 (WRMP24) to ensure water in Water Resource Zones that may otherwise be in deficit. This PCD combines the investments from our Interconnectors (£534m), Supply-side improvements (£248m) and Demand-side improvements (£22m), further detail can be found in those enhancement cases and in our published WRMP24. The totex associated with these investments is £803m in AMP8.

Context

Our revised draft WRMP24 sets out how we will maintain a sustainable and secure supply of drinking water for our customers over the period of 2025 to 2050. This long-term view allows us to plan an affordable, sustainable pathway that provides benefit to our customers, society and the environment.

We face significant challenges in balancing supply and demand. In particular driven by licence caps and to support the environmental ambition to further reduce unsustainable abstraction from watercourses. Growth in our region also drives the need but is offset by our demand management programme. This long-term strategy to secure resilient water supplies for the region is adaptive, allowing us to respond to changing needs and pressures.

As part of this long term strategy we have looked to consider as wide a range of solutions as feasibly possible, before developing a plan which meets the needs of the supply demand balance, whilst providing best value for our customers, stakeholders and the environment.

Interconnectors

Drawing on our industry leading experience and vision in AMP7, we will continue our interconnector strategy by installing pipelines. Our AMP7 experience has also led to us phasing some of the interconnectors into AMP9, a seven year delivery programme to reflect the complexities associated with these investments.

These interconnectors will move water from areas in surplus to those in deficit, helping to secure a reliable supply of water across all areas of our region whilst limiting the need to take more water from the environment.

Supply-side improvements

A key component of our strategy is to utilise our existing resource, this will see us invest in supply-side enhancements. These supply-side improvements include the relocation of abstractions that are due to cease, enhancements to treatment works to allow them to operate at lower abstraction licence rates, backwash recovery schemes and the additions of new processes to allow variable water quality to be treated.

All of these enhancements will increase our water available for use (WAFU), allowing us time to develop our strategic resource options (detailed separately in Section 4 'Strategic Resource Solutions').

Demand-side improvements

We are keen to build on our current momentum and the rapid deployment of smart meters across our region, while expanding our digital offerings to take full advantage of our smart future (see our Smart Metering enhancement case and PCD).

Our proposed portfolio represents our most extensive programme of water efficiency and behaviour change activity to date. Our ability to change customer behaviour and drive efficiency will be noticeably enhanced, as it is supported by our smart meter 10-year installation programme. Smart meters are now facilitating innovative water efficiency interventions and allowing us to provide a platform for tailored customer engagement. Some of the options that are enabled by smart metering include customer campaigns and reward schemes through the smart meter usage portal (MyApp Account) and smart home device retro-fitting. These options are included in our preferred portfolio.

How customers are already protected

We report Supply Demand Balance Index (SDBI) annually for the Environment Agency's Environmental Performance Assessment. This is calculated using Available Headroom, which is itself a function of WAFU. We report on the supply side capacity delivered each year (in APR) and adjust the WAFU used in SDBI and included in the WRMP Annual Review data return.

Additional water resources are needed in the short, medium and long-term in the east of our region, as outlined in our Water Resources Management Plan (WRMP). If these resources are not provided, we may not be able to balance supply and demand, which would impact performance for the Supply Demand Balance Index which could lead to enforcement action by the EA.

Protection provided by this PCD

We are proposing a gated approach for this PCD. By linking the customer protection mechanism to the Ml/d for WAFU in WRZs, we ensure that the protection is focussed around making sure that our plan contains adequate investment to the WRMP requirements of the region (i.e., should the WAFU not be required, funding will be returned to customers, reflecting the reduction in the need for the investment).

PCD definition

Price Control Deliverable: Water Available for Use (WAFU) in Water Resource Zones (WRZs)	
Ofwat Principle 1: Linkage to Performance Commitments	At PR24 there are no common performance commitments relating to WAFU, therefore no linkage to performance commitments.
Ofwat Principle 2: Materiality	The value of these enhancement investments is £803.480m. The costs of the combined interconnectors, supply-side and demand-side programmes exceed the materiality threshold for water network+ of 1% Materiality of Totex (4.021bn) = 40.21m
Ofwat Principle 3: Outcomes vs outputs/inputs	In AMP7 our determination included a performance commitment for the interconnector programme that was output based (megalitres per day (Ml/d) of capacity delivered by each interconnector). This has caused issues in the deliverability of that programme and so we welcome Ofwat's move to WAFU in

Price Control Deliverable: Water Available for Use (WAFU) in Water Resource Zones (WRZs)	
	the Accelerated Infrastructure Delivery PCDs as more outcomes focused and providing more flexibility to select best value options in delivery to achieve that outcome.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as the total amount of WAFU improvement delivered by the interconnector programme. We do not specify the WRZs affected due to our experience of AMP7 and previous periods where the Environment Agency have changed the abstraction caps mid-period affecting the exact location of the deficit.
Output measurement and reporting	We measure the additional WAFU in Ml/d added in the receiving WRZ and take this into the calculation of available headroom. Our Enhancement strategy-Resilience to drought and flood (ANH26) (for interconnectors and supply-side) in our plan contains details of WAFU at a scheme level. Additionally our enhancement strategy enabling sustainable economic and housing growth (for demand-side) contains details of the Ml/d per area.
Conditions on scheme	This PCD has two payment rates defined: • The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. • The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	We report Supply Demand Balance Index (SDBI) annually for the Environment Agency's Environmental Performance Assessment. This is calculated using Available Headroom, which is itself a function of WAFU. We report on the supply side capacity delivered each year (in APR) and adjust the WAFU used in SDBI and included in the WRMP Annual Review data return. The supply-side capacity delivered in-year is subject to external assurance as part of the APR.
Target	The target is defined in line with the three elements of WRMP and in total generates 238.26 Ml/d additional water for WRZs.

Price Control Deliverable: Water Available for Use (WAFU) in Water Resource Zones (WRZs)	
What is the expected outcome we want to achieve	Note: For the interconnectors, for the purposes of this PCD we have used the WAFU added to the receiving WRZ. All figures have been aligned to the revised draft WRMP24 and use a 1:200 year scenario. We have also included the additional Ml/d benefit that will be generated across all WRZs from the demand-side programme.
Additional comments	This aligns with Ofwat's PCD in the AID programme for Northumbrian (Essex & Suffolk) Schemes 1 and 2, and the guidance provided in IN-2305 Further guidance on price control deliverables for PR24. We have shown a profile of benefit below aligning to the year of delivery of the schemes in our plan, with three schemes completing in 2032 (CAM4/SWC8/EXS19).

Deliverables

Deliverable	Unit	Forecast deliverables							
		2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33
Water Available for use (WAFU) in Water Resource Zones (WRZ)	Ml/d	-	-	-	-	-	176.86	-	61.4

Price control deliverable payments (gross of cost sharing)

Investment Area	WRMP: WAFU in WRZs
Totex £m (A)	803.480
Units	Ml/d
Number of units (B)	238.26
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	3.4
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.12
Over delivery payment rate, £m	N/A

Direct Procurement for Customers (DPC)

Enhancement area

Final treated water effluent from Colchester currently discharges into the river Colne. This option would intercept the effluent before discharge and divert it to an advanced treatment process. From here the water could be transferred to Ardleigh Reservoir for abstraction and treatment at the existing Ardleigh WTW. This will provide additional water available for use in our Essex South Water Resource Zone.

This project passed our DPC eligibility assessment on the basis of the size threshold and there is no significant reason why most construction, operation and maintenance risks cannot be transferred to a Competitively Appointed Provider (CAP). However, it should be noted that the project must be delivered within tight timescales, and development activities may need to begin in the final years of AMP7.

Context

We have had a bid for Advanced Infrastructure Delivery funding for two key elements of the Colchester reuse scheme approved. This will enable earlier delivery of the overall project and provide greater drought resilience. The two elements that are to be progressed though this mechanism are a Demonstration Centre, and the transfer pipeline to take water from the Water Recycling Centre (WRC) to Ardleigh Reservoir. We have started work on the development of what we would like to call a Demonstration Centre (previously referred to as 'pilot'). We feel that Demonstration Centre better reflects what we hope to achieve.

How customers are already protected

Additional water resources are needed in the short, medium and long-term in the east of our region, as outlined in our Water Resources Management Plan (WRMP). If these resources are not provided, we may not be able to balance supply and demand, which would impact performance for the Supply Demand Balance Index which could lead to enforcement action by the EA.

Protection provided by this PCD

We have opted for a gated approach for this PCD. This is on the basis that the funding provided is on the basis of procuring the CAP.

PCD definition

Price Control Deliverable: Successful Direct Procurement of the scheme	
Ofwat Principle 1: Linkage to Performance Commitments	The purpose of this investment is to create an asset that enables the re-use of treated effluent from Colchester WRC to be transferred to Ardleigh Reservoir to support available water resources in the areas supplied by the reservoir. There are no connections to common performance commitments for this PCD. We proposed a bespoke performance commitment, but it was not deemed appropriate by Ofwat.
Ofwat Principle 2: Materiality	The value of the funding requested is £8.727m. Although the cost of running the DPC process to appoint the CAP is not material, the value of the scheme being procured is material and

Price Control Deliverable: Successful Direct Procurement of the scheme	
	we propose to include a PCD to incentivise the running of a process that provides value to customers.
Ofwat Principle 3: Outcomes vs outputs/inputs	This metric incentivises us to procure the scheme under DPC, which is expected to bring financial savings and promote innovation. However, setting a metric aligned to that outcome is not accurately measurable, therefore we propose an output measure aligned to the precedent of the AMP7 bespoke performance commitment.
Ofwat Principle 4: Level of aggregation	We will make use of markets through a DPC process to maximise the value to customers of this scheme. This means that a CAP will finance and manage the scheme, owning the assets for the duration of a contract. By doing this there is more opportunity for market forces to deliver the scheme efficiently. Since there is only one scheme assessed as suitable for DPC in our PR24 plan there is no opportunity for further aggregation.
Output measurement and reporting	This PCD incentivises us to procure Colchester Effluent Re-use plant under DPC in a way which demonstrates value for money to customers through delivery by a CAP. Where we successfully complete an agreed procurement process and, following approval by Ofwat, award the scheme to a CAP such that the contract is signed and fully effective in accordance with its terms, we would be entitled to receive an incentive payment which would reflect the size and complexity of the scheme and the procurement undertaken. We will develop and carry out a procurement process as agreed with Ofwat and award a contract to a CAP to deliver the scheme. In general, the process comprises us competitively tendering for a third-party to design, construct, finance, maintain and operate the scheme. Customers benefit where the scheme is procured at a lower whole life cost and if it is carried out efficiently. We expect to procure the CAP prior to 31/3/2028. The full value of the outperformance payment will be payable if the contract award of the scheme to the CAP, occurs prior to the date as specified.
Conditions on scheme	This PCD has two payment rates defined: • The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement.

Price Control Deliverable: Successful Direct Procurement of the scheme	
	• The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	As the appointment of the CAP is completed jointly with Ofwat no separate assurance is required to that process.
Target What is the expected outcome we want to achieve	In response to our proposed bespoke PC for DPC, Ofwat commented: "*We welcome companies proposing direct procurement for customers (DPC)PCDs in their PR24 business plans. Through the Allowed Revenue Direction, we plan to implement a focused package of DPC incentives for Appointees. The appropriate incentive package will be decided on a project-by-project basis recognising the risks inherent in the project and the potential value obtainable from the procurement process. Where companies propose DPC Price Control Deliverables, we expect them to justify the proposed commitments, how incentives are sized, as well as justification for any outperformance payments and how they link to benefits for customers where, for example, we do not expect outperformance payments for delivering every stage in the DPC process.*" Our target is therefore specified as the award of the CAP, prior to 31/3/2028.
Additional comments	Ofwat included a bespoke performance commitment at PR19 for Direct Procurement of the Elsham scheme[3]. We have followed the principles of that measure here, as well as subsequent guidance in the Final Methodology.[4] We propose a two-sided adjustment, with an over-delivery payment made if the CAP is appointed on time or early. This is on the basis of delivering early customer and environmental benefits of additional water resources. We proposed the incentive payment to be the same as the late delivery under performance unit rate. Separately the Demonstration Centre for the re-use scheme and the transfer pipeline from the re-use scheme to Ardleigh Reservoir are being accelerated under the Accelerated

[3] See section 1.2.28 PR19-final-determinations-Anglian-Water-–-Outcomes-performance-commitment-appendix.pdf (ofwat.gov.uk)

[4] See section 3.4.3 PR24_final_methodology_Appendix_5_DPC.pdf (ofwat.gov.uk)

Price Control Deliverable: Successful Direct Procurement of the scheme	
	Infrastructure Delivery programme and are therefore excluded from this PCD.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
Successful appointment of the CAP	Number	-	-	1	-	-

Price control deliverable payments (gross of cost sharing)

Investment Area	2.5 PCD for DPC
Totex £m (A)	8.7
Units	CAP procured
Number of units (B)	1
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	8.7
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.31
Over delivery payment rate, £m	0.31

A-WINEP

Enhancement area

Advanced WINEP is our opportunity to deliver long-term environmental and social benefits above and beyond a traditional WINEP approach. We plan to do this by demonstrating an approach that maximises value by going even further for the environment through partnership working, a focus on the use of nature-based solutions, improved multi-stakeholder governance and innovative funding models.

We will invest £26.2m to unlock wider environmental and social outcomes through two workstreams:

- The creation of a Partnership Centre of Excellence that brings together stakeholders to deliver improvements in river and coastal waters through nature first solutions
- A Partnership Grant Fund, supporting emerging partnership opportunities within target catchments.

Context

We are passionate about this opportunity to provide consistency to collaborative environmental delivery. We expect this approach to provide the template for a different way of working for the sector, becoming the standard approach to WINEP investment planning from PR29 and beyond.

We've worked collaboratively and extensively with Ofwat and the EA to develop our A-WINEP proposals and they form a cornerstone of our long-term strategy. We've already shared early ideas concerning customer protection with Ofwat in this area as we developed our plans. These proposals are consistent with those ideas.

How customers are already protected

The actual schemes that are progressed under A-WINEP will already be covered by obligation back-stop PCDs for WINEP.

We have a strong commitment to a successful A-WINEP and will be vocal and transparent about our approach. There will therefore exist strong reputational incentives, linked to our purpose, to deliver successfully and in full on our plans.

Protection provided by this PCD

Nevertheless, we recognise that we are breaking new ground with this approach, and so some additional customer protection is appropriate through a specific PCD relating to the additional funding under A-WINEP. We have designed the obligation back stop PCD to operate in two ways.

Firstly, we will have set up a centre of excellence to support partnership working by the end of the AMP. If we are not successful, we will return the funding for this element to customers.

Secondly, we have an aspirational target to achieve 70% partnership funding but will commit to ensuring that each individual funding decision includes at least a 50% partnership contribution. Any funding not granted under these conditions by the end of the AMP would be returned to customers.

PCD definition

Price Control Deliverable: A-WINEP grants; A-WINEP centre of excellence	
Ofwat Principle 1: Linkage to Performance Commitments	The expenditure covered by this PCD is not directly linked to performance commitments.
Ofwat Principle 2: Materiality	The investment covered in this PCD is not material, but a PCD has been developed to provide additional protection due to the novel nature of the investment.
Ofwat Principle 3: Outcomes vs outputs/inputs	The purpose of this investment is to explore, at scale, a different way of delivering WINEP obligations that delivers greater environmental value per pound of water company investment, in line with the WINEP Roadmap.[5]. It aims to develop a more outcome focused approach to WINEP by building partnerships and setting up a centre of excellence.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have aggregated investment to the highest level reasonable for this PCD.
Output measurement and reporting	There are two measures within this PCD: • Grants - value of grants made which attracted at least a 50% partnership contribution (£m). • Centre of Excellence – establishment of the planned centre of excellence.
Conditions on scheme	This PCD has two payment rates defined: • The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. • The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme). Grants will be made in-line with the principles set out in our enhancement strategy.
Assurance	We proposed annual assurance in line with our annual reporting to ensure we are on track for delivery of all obligations. Due to the nature of partnership working in this area, these will be assessed and monitored through a transparent governance and reporting framework that includes external experts and auditors.

[5] https://www.gov.uk/government/publications/water-industry-national-environment-programme-winep-roadmap/water-industry-national-environment-programme-winep-roadmap

Price Control Deliverable: A-WINEP grants; A-WINEP centre of excellence	
Target What is the expected outcome we want to achieve	We propose two targets for this PCD: Grant funding: We have proposed that the grant delivery is assessed by percentage partnership contribution and that we would only approve grants that had achieved a 50% partnership contribution. Overall, we aim to generate 70% from the total grant. Centre of excellence: We visualise the Centre of Excellence as a virtual Centre, with costs spent on project development and design, staff, who may be employed by Anglian Water or partners, training and capacity building, engagement e.g., public engagement and consultation where new SuDS are proposed and developing a benefit tracking tool. We are committed to exploring the best way to deliver this approach, for example whether a hosted programme or through a dedicated vehicle with its own legal entity, such as a company limited by guarantee comprised of partners alongside Anglian Water. A successful Centre will have: • Formal structure — demonstrating engaged, informed, and committed partners, with control of investment shared with partners • Detailed project development and financing strategies • Market assessment and confidence in funding contributions • Exploration of innovative delivery frameworks. These will be assessed and monitored through a transparent governance and reporting framework that includes external experts and auditors.
Additional comments Please note any risks	This investment is related to our innovative approach to partnership working under A-WINEP, and so is dependent on engagement and activity with a wide group of stakeholders. If for any reason we are unable to deliver the planned centre of excellence or unable to find sufficient opportunities for partnership funding, this PCD provides the mechanism for funding to be returned to customers.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
Value of grants made which attracted at least a 50% partnership contribution (£m)	£	-	-	-	-	11.4
Centre of excellence established	Number	-	-	-	-	1

We anticipate much earlier delivery for most of these measures than the end of the AMP, but we are in the early stages of developing the centre of excellence, which will in turn facilitate the allocation of the grants.

Price control deliverable payments (gross of cost sharing)

Investment Area	Grants	Centre of excellence
Totex £m (*A*)	11.400	14.877
Units	Value of grants made which attracted at least a 50% partnership contribution (£m)	Centre of excellence established
Number of units (*B*)	11.400	1
Non-delivery or over delivery unit rate formula	A / B = C	A / B = C
Non-delivery unit rate, £m (*C*)	1	14.877
Late delivery payment rate formula	C * 0.035	C * 0.035
Late delivery payment rate, £m	0.035	0.521

Water Quality: poly-fluorinated alkyl substances (PFAS)

Enhancement area

The scale and pace of investment in this area is driven by a requirement to meet regulatory standards in the Water Supply (Water Quality) Regulations 2016 (as amended), and the Drinking Water Inspectorate (DWI) poly-fluorinated alkyl substances (PFAS) guidance and Information Letters (IL). We are committed to mitigating risks to delivering safe, clean drinking water from source to tap by addressing emerging challenges through our long-term planning approach.

Context

We are working to better understand the potential impact of PFAS compounds on the environment and health. As agreed with the DWI, we will invest to upgrade water treatment works (WTW) to protect customers from the risk of 'forever chemicals' known as PFAS in water and investigate how we can help tackle the issue in the long term.

After considering a range of options, we select replacement of granular activated carbon (GAC) with virgin carbon as our preferred solution as this offers the most robust reduction in risk from PFAS, as found by Cranfield University. We have received DWI Letters of Support (LOS) for all the capital PFAS investments. These can be reviewed in our document ANH48 Long Term Planning for the quality of drinking water supplies.

How customers are already protected

As these schemes have received a DWI LOS, we would be at risk of regulatory enforcement action if we do not deliver them.

Protection provided by this PCD

We are proposing an obligation back-stop PCD for this investment. We have opted for this type of PCD as these investments are aligned to specific LOS for specific sites agreed with the DWI. This means that if we do not deliver, or are late in delivering, these specific obligations, customers will be compensated.

PCD definition

Price Control Deliverable: No. of solutions implemented as part of the DWI Undertakings relating to Per- and polyfluoroalkyl substances (PFAS).	
Ofwat Principle 1: Linkage to Performance Commitments	This measure is not linked to common performance commitments in the short term to 2030. It relates to an obligation from the Drinking Water Inspectorate (DWI).
Ofwat Principle 2: Materiality	The value of this enhancement expenditure is £76.960m. The costs of the PFAS programme exceed the materiality threshold for water network+ of 1% Materiality of Totex (4.021bn) = 40.21m.
Ofwat Principle 3: Outcomes vs outputs/inputs	The objective of this investment is to reduce the level of PFAS in drinking water. The science of PFAS treatment is still being understood and therefore this metric is selected to ensure that our obligations to manage risk under the DWI undertakings relating to PFAS are completed on time, rather than based on measurements of PFAS in drinking water.

Price Control Deliverable: No. of solutions implemented as part of the DWI Undertakings relating to Per- and polyfluoroalkyl substances (PFAS).	
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as the number of DWI Undertakings relating to PFAS.
Output measurement and reporting	Total number of legal instruments complied with.
Conditions on scheme	This PCD has two payment rates defined: • The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. • The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	As these schemes are defined by DWI undertakings, they are subject to reporting and assurance requirements specified by DWI. We propose to utilise these metrics for our reporting with Ofwat as well.
Target What is the expected outcome we want to achieve	The target is to deliver/implement/install the solutions defined in the Undertakings at 23 sites (24 schemes) across the PFAS portfolio. The list of sites is confirmed in the DWI's LOS for these investments. We will use the completion of the scheme as the obligation for our legal instruments.
Additional comments	If DWI exchanges the obligation with a new one, we propose to use the funding to cover the unfunded obligation and no payment will be due as the number of undertakings remains unchanged. Due to the reporting requirements 12 months post-delivery we are proposing to count the scheme as completed and having achieved its purpose when we have implemented the required solution as set out in the DWI undertaking.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
Number of solutions implemented as part of the DWI Undertakings	Number of sites where solution has been implemented	-	-	-	-	23

Price control deliverable payments (gross of cost sharing)

Investment Area	3.1 Water Quality PFAS
Totex £m (A)	76.96
Units	No. of solutions delivered as per PFAS undertakings
Number of units (B)	23
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	3.3
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.12
Over delivery payment rate, £m	N/A

WINEP

Enhancement area

The water industry national environment programme (WINEP) is the programme of work we undertake to meet our obligations from environmental legislation and UK government policy.

The WINEP is the most important and substantial programme of environmental investment in England. For 2020 to 2025 across the industry it consists of £5.2 billion of asset improvements, investigations, monitoring and catchment interventions.

This PCD covers the following areas of our proposed WINEP for AMP8:

- Nutrient removal and sanitary parameter,
- Chemicals removal and investigations,
- Clean water obligations including river restoration, invasive species and drinking water protected areas
- Four monitoring programmes for continuous river water quality monitoring, event duration monitors and flow monitors at Water Recycling Centres and Emergency Overflow Monitors,

Context

We have a strong track record of delivering our regulatory obligations under the WINEP and our AMP7 programme was one of the biggest in the industry. We also have a small number of Accelerated Infrastructure Delivery schemes in AMP7. Our AMP8 WINEP is even larger, but we are confident that our proven approaches and work on deliverability and supply chain in developing this business plan means we can deliver these obligations.

How customers are already protected

There are numerous protection mechanisms in place for this enhancement area. First and foremost, failure to deliver WINEP obligations can result in enforcement action. There are also interactions with several common performance commitments, including the river water quality and bathing water quality PCs.

Protection provided by this PCD

We have opted for an obligation back-stop focused PCD for this enhancement area. This is on the basis that the WINEP is largely focused on prescriptive delivery of outputs. This means that if we do not deliver the prescribed obligation, customers are protected. This is reasonable on the basis that customers are receiving protection for the delivery of outcomes through the river water quality and bathing water quality PCs.

PCD definition

Price Control Deliverable: Number of Water Industry National Environment Programme obligations completed	
Ofwat Principle 1: Linkage to Performance Commitments	This measure links to the bathing water quality and river water quality performance commitments.
Ofwat Principle 2: Materiality	The value of this enhancement expenditure is £1,200.088m. The costs of the WINEP programmes exceed the materiality threshold for water recycling of 1% Materiality of Totex (5.601bn) = 56.01m.

Price Control Deliverable: Number of Water Industry National Environment Programme obligations completed	
Ofwat Principle 3: Outcomes vs outputs/inputs	The purpose of this investment is to comply with the legal obligations of the WINEP as set out by the EA and DEFRA. By their nature the obligations and the investments are prescriptive which is why we believe that an outputs-based measure is sufficient to ensure customers are adequately protected.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as the number of obligations completed under WINEP. As defined in the 'Target' section of this document below we are able to aggregate and disaggregate the measure further to enable targeted review and protection for customers.
Output measurement and reporting	The WINEP programme already outlines the measurement and reporting of the output obligation. We propose to follow that reporting. Additionally, there are some investments which will be reported in the Annual Performance Report (APR) in table 7F.
Conditions on scheme	This PCD has two payment rates defined: • The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. • The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	P-removal which is the single largest investment contributor to this PCD will be reported in the Annual Performance Report (APR) in table 7F. The remaining obligations will be measured against the statutory completion dates as agreed with the EA. We propose annual assurance as part of our annual reporting to ensure we are on track for delivery of all obligations.
Target What is the expected outcome we want to achieve	We are proposing multiple targets for this measure as we have grouped investment together by obligation driver type. We are proposing to include the early delivery of three Nutrient Removal schemes currently within the Accelerated Infrastructure Delivery programme in this PCD and not have a separate AID PCD. This PCD covers the delivery of all schemes, early delivery as well as in AMP.
Additional comments	If the EA propose to exchange an obligation with a new one we propose to use the below table outlining the costs of obligations.

Price Control Deliverable: Number of Water Industry National Environment Programme obligations completed	
	The table below sets out for each target area the delivery year for each of the obligation's statutory deadline.

Deliverables

Deliverables are defined according to the relevant obligations dates.

Price control deliverable payments (gross of cost sharing)

Nutrient removal

We have specified individual rates for six schemes to reach P < 0.5 mg/l due to variation in unit costs.

Investment Area	Cotton Valley WRC	Great Billing WRC	Whitling-ham WRC	Bedford WRC	Cambridge WRC	Fornham WRC
Totex £m (A)	29.18	20.71	18.45	14.53	13.01	12.08
Units	No of obligations	No of obligations	No of obligations	No of obligations	No of obligations	No of obligations
Number of units (B)	1	1	1	1	1	1
Non-delivery or over delivery unit rate formula	A / B = C	A / B = C	A / B = C	A / B = C	A / B = C	A / B = C
Non-delivery unit rate, £m (C)	29.183	20.709	18.446	14.526	13.007	12.079
Late delivery payment rate formula	C * 0.035	C * 0.035	C * 0.035	C * 0.035	C * 0.035	C * 0.035
Late delivery payment rate, £m	1.021	0.725	0.646	0.508	0.455	0.423

Other areas of nutrient removal are grouped so that similar schemes and unit costs are together.

Investment Area	P Removal < 1mg/l	P Removal > 1mg/l	Other Nutrient Removal
Totex £m (A)	471.02	85.38	84.69
Units	No of obligations	No of obligations	No of obligations
Number of units (B)	164	48	46
Non-delivery or over delivery unit rate formula	A / B = C	A / B = C	A / B = C
Non-delivery unit rate, £m (C)	2.872	1.779	1.841
Late delivery payment rate formula	C * 0.035	C * 0.035	C * 0.035
Late delivery payment rate, £m	0.101	0.062	0.064
Over delivery payment rate, £m	2.872	1.779	1.841

Bathing water

Investment Area	Bathing Water
Totex £m (A)	37.66
Units	No of obligations
Number of units (B)	24
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	1.569
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.055
Over delivery payment rate, £m	N/A

Chemicals

Investment Area	Chemical improvements	Chemical interventions & investigations
Totex £m (A)	44.07	31.20
Units	No of obligations	No of obligations
Number of units (B)	11	112
Non-delivery or over delivery unit rate formula	A / B = C	A / B = C
Non-delivery unit rate, £m (C)	4.006	0.279
Late delivery payment rate formula	C * 0.035	C * 0.035
Late delivery payment rate, £m	0.140	0.010
Over delivery payment rate, £m	4.006	0.279

Monitoring

Investment Area	CRWQM	EDM & flow monitoring	Emergency overflow
Totex £m (A)	166.46	52.82	44.16
Units	No of monitors installed	No of obligations	No of monitors installed
Number of units (B)	484	938	1,421
Non-delivery or over delivery unit rate formula	A / B = C	A / B = C	A / B = C
Non-delivery unit rate, £m (C)	0.344	0.056	0.031
Late delivery payment rate formula	C * 0.035	C * 0.035	C * 0.035
Late delivery payment rate, £m	0.012	0.002	0.001
Over delivery payment rate, £m	0.344	0.056	0.031

Investigations

Investment Area	**Investigations**
Totex £m (A)	23.69
Units	No of obligations
Number of units (B)	1,541
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	0.015
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.001
Over delivery payment rate, £m	0.015

Water WINEP

Investment Area	**Water WINEP**
Totex £m (A)	51.08
Units	No of obligations
Number of units (B)	74
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	0.690
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.024
Over delivery payment rate, £m	0.690

Storm Overflows

Enhancement area

This PCD relates to our proposed investment to address the potential for environmental harm which can result from storm overflow and emergency overflow discharges. The totex associated with these schemes is £516.444m in AMP8.

This PCD covers the following areas:

- Overflow sites improved
- Deferred AMP7 Obligations
- Screens installed.

Context

Our AMP8 investment builds upon our efforts to reduce spills from storm overflows throughout AMP7. In the period 2020-25, we committed to reducing spills from storm overflows to an average of 20 per year by the end of the AMP, with our 2022 Event Duration Monitor (EDM) data showing that we are making good progress against this target. Our extensive EDM rollout during AMP7 has given us greater visibility of the frequency and duration of our spills, informing our overall strategy of reducing the impact of storm overflows in AMP8 and beyond.

Our PR24 enhancement strategy and LTDS set out our multi-AMP strategy for reducing storm overflows. We will prioritise addressing high priority storm overflows in the short- to medium-term, placing us on the pathway to eliminating all harm from overflows by 2050 to meet targets specified under the Storm Overflows Discharge Reduction Plan and the Environment Act.

As this is a multi-AMP strategy, further investment will be proposed in subsequent price reviews.

How customers are already protected

There are numerous protection mechanisms in place for this enhancement area. First and foremost, failure to deliver WINEP obligations can result in enforcement action. In addition, customers are also protected through the Storm Overflows common performance commitment, which measures the average number of spills per storm overflows.

Protection provided by this PCD

We are proposing an obligation back-stop PCD for this investment. We have opted for this type of PCD as these investments are aligned to specific schemes specified within our WINEP, as agreed with the EA. This means that if we do not deliver, or are late in delivering, these specific statutory obligations, customers will be compensated.

PCD definition

Price Control Deliverable: Number of sites improved	
Ofwat Principle 1: Linkage to Performance Commitments	This measure links to the storm overflow performance commitment.
Ofwat Principle 2: Materiality	The value of this enhancement expenditure is £516.444m. The costs of the investment programmes exceed the materiality

Price Control Deliverable: Number of sites improved	
	threshold for water recycling of 1% Materiality of Totex (5.601bn) = 56.01m
Ofwat Principle 3: Outcomes vs outputs/inputs	The purpose of this investment is to comply with the Overflow Programme as set in the WINEP by the EA and DEFRA. These are legal obligations which we must deliver or face prosecution. By their nature the investment is quite prescriptive which is why we believe that an outcomes-based measure is sufficient to ensure customers are adequately protected.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as the Number of EA sites improved
Output measurement and reporting	The WINEP programme already outlines the measurement and reporting of the output obligation. We propose to follow that reporting.
Conditions on scheme	This PCD has two payment rates defined: • The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. • The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	Delivery of the obligations will be measured against the completing dates as agreed by the EA. We proposed annual assurance as part of our annual reporting to ensure we are on track for delivery of all obligations.
Target What is the expected outcome we want to achieve	The obligations included in this PCD are: • 288 sites improved • 40 deferred flow obligations completed • 115 screens installed
Additional comments	If the EA exchanges the obligation with a new one, we propose to use the funding to cover the unfunded obligation and no payment will be due as the number of undertakings remains unchanged.

Price Control Deliverable: Number of sites improved	
	We are proposing to include the early delivery of the Overflow schemes under AID into this PCD and to not have a separate AID PCD. This PCD covers the delivery of all schemes, early delivery as well as in AMP period.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
Number of sites improved	Number	-	-	-	-	288
Number of Deferred Flow Obligations completed	Number	-	40	-	-	-
Number of screens installed	Number	-	-	-	-	115

Price control deliverable payments (gross of cost sharing)

Investment Area	Overflow sites improved	Deferred AMP7 Schemes	Screens Installed
Totex £m (A)	417.59	59.39	39.46
Units	No of obligations	No of Deferred Schemes delivered	No of Screens Installed
Number of units (B)	288	40	115
Non-delivery or over delivery unit rate formula	A / B = C	A / B = C	A / B = C
Non-delivery unit rate, £m (C)	1.450	1.485	0.343
Late delivery payment rate formula	C * 0.035	C * 0.035	C * 0.035
Late delivery payment rate, £m	0.051	0.052	0.012
Over delivery payment rate, £m	N/A	N/A	N/A

First time sewerage schemes (Section 101a)

Enhancement area

This PCD relates to our proposed investment to provide first time sewerage schemes to 17 communities, detailed in the enhancement case for First Time Sewerage. The totex associated with these schemes is £59.212m in AMP8.

Context

Private sewerage systems such as septic tanks in rural communities can cause environmental harm. Section 101A of the Water Industry Act places a statutory obligation on Anglian Water to provide a public sewer if evidence shows that the private systems are causing harm and a cost benefit analysis shows that a new public sewer is viable.

We will invest £59m to deliver 17 schemes for communities who are not currently connected with access to the sewerage system through the installation of new sewage treatment and sewerage assets. Where duty to serve has been confirmed, the Environment Agency requires schemes to begin within five years, which means all 17 schemes must be completed within the period 2025-2030.

How customers are already protected

Section 101A of the Water Industry Act places a statutory obligation on us to provide a public sewer if evidence shows that the private systems are causing harm and a cost benefit analysis shows that a new public sewer is viable. If a duty to serve is confirmed, the EA can take enforcement action against companies who do not complete the required schemes within five years.

Protection provided by this PCD

We are proposing an obligation back-stop PCD for this investment. We have opted for this type of PCD as these investments are aligned to specific schemes specified within our WINEP, as agreed with the EA. This means that if we do not deliver, or are late in delivering, these specific obligations, customers will be compensated.

PCD definition

Price Control Deliverable: Number of villages served with new sewerage systems	
Ofwat Principle 1: Linkage to Performance Commitments	There are no links from this programme to common performance commitments, other than C-MeX which can be affected by the significant disruption caused to communities while the new systems are in construction.
Ofwat Principle 2: Materiality	The value of this enhancement expenditure is £59.212m. The costs of the Section 101a programme exceed the materiality threshold for water recycling of 1% Materiality of Totex (5.601bn) = 56.01m.
Ofwat Principle 3: Outcomes vs outputs/inputs	The intended outcome of this investment is reduced pollution of watercourses from untreated sewage by moving properties onto new sewerage systems. The pollutions mitigated by the investment are caused by private systems, rather than company assets and therefore wouldn't be included in our historic

Price Control Deliverable: Number of villages served with new sewerage systems	
	pollution figures. The measure proposed is output based as it is aligned to the schemes required under S101a.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as the number of villages served as required by the EA.
Output measurement and reporting	The output will be measured as the number of villages that have received new mains sewerage systems and subsequently the schemes confirmed as complete by the EA. The number of villages reported is expected to be in line with the listed villages below, however on occasion there are appeals on timing heard by the EA which can change the specific villages served.
Conditions on scheme	Schemes are only reported as complete when completion sign off documentation is received from the EA. This PCD has two payment rates defined: • The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. • The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	The number of S101A schemes delivered in the report year is reported in pro forma 7C in the Annual Performance Report, and therefore is subject to the normal external audit processes carried out.
Target What is the expected outcome we want to achieve	The number of duty villages requiring S101a schemes in our PR24 plan has been confirmed as 17.
Additional comments	We are proposing to be able to switch out any duty village for a new one should the they be required in a different geographical area.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
Number of villages served with new mains sewerage	Number	-	-	-	-	17

Price control deliverable payments (gross of cost sharing)

Investment Area	S101a First time sewerage
Totex £m (A)	59.21
Units	No. villages served
Number of units (B)	17
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	3.5
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.12
Over delivery payment rate, £m	N/A

Water Quality: Nitrate

Enhancement area

Our raw water deterioration enhancement programme focusses on managing the level of nitrates and PFAS in drinking water. The scale and pace of investment is driven by a requirement to meet regulatory standards in the Water Supply (Water Quality) Regulations 2016 (as amended). We are committed to mitigating risks to delivering safe, clean drinking water from source to tap by addressing emerging challenges through our long-term planning approach.

To make sure we continue to comply with the regulatory standard, we will invest in 12 new and upgraded nitrate reduction schemes at water treatment works to protect 730,016 customers from changes in water quality due to rising nitrate levels in raw water. We considered a broad range of options to address nitrates. We select the installation or uprating of ion exchange plants for all sites as this a proven technology for nitrate removal and this is supported by the Drinking Water Inspectorate (DWI). Further detail about our proposed investments is available in the document 'Our PR24 Enhancement Strategies, Part 1: Resilience to the risk of drought and flood, Addressing raw water deterioration'.

Context

Delivering safe, clean water is the most vital service we provide; therefore, we need to protect our customers from increasing nitrate levels in our raw water sources. Our nitrate concentration prediction models indicate that nitrate concentration in some raw water sources will soon reach a point beyond which current treatment solutions at each site will be unable to ensure compliance with the regulatory standard for nitrate of 50 mg/l.

We have received DWI Letters of Support (LOS) for 12 nitrate schemes. These can be reviewed in our annex 48 Long Term Planning for the quality of drinking water supplies. Additionally, we have also received a letter of support from the Environment Agency that investment in nitrate treatment is required.

We have a strong track record of delivering regulatory obligations.

How customers are already protected

There are a number of regulatory protections for customers. As these schemes have received a DWI LOS, we would be at risk of regulatory enforcement action if we do not deliver them.

Nitrate can impact performance against the Compliance Risk Index (CRI) performance commitment once it exceeds the regulatory standard. Therefore, if we do not take action to address nitrates we could be penalised under CRI and through enforcement action.

Protection provided by this PCD

We are proposing an obligation back-stop PCD for this investment. We have opted for this type of PCD as these investments are aligned to specific levels of service for specific sites agreed with the DWI. This means that if we do not deliver, or are late in delivering, these specific obligations, customers will be compensated.

PCD definition

Price Control Deliverable: No. of solutions implemented as part of the DWI Undertakings relating to nitrate	
Ofwat Principle 1: Linkage to Performance Commitments	This measure links to the CRI common performance commitment.
Ofwat Principle 2: Materiality	The value of this programme is £110.329m. The costs of the nitrate reduction programme exceed the materiality threshold for water network+ of 1% Materiality of Totex (4.021bn) = 40.21m
Ofwat Principle 3: Outcomes vs outputs/inputs	The purpose of this investment is to ensure that we mitigate the risk from rising raw water nitrate levels and ensure compliance with regulatory standards. As these investments are aligned to specific letters of support from the Drinking Water Inspectorate, we are proposing an output measure.
Ofwat Principle 4: Level of aggregation	The Final Methodology states that companies should set PCDs at this highest level possible to retain flexibility. We have therefore set the measure as the number of DWI Undertakings relating to nitrate.
Output measurement and reporting	Total number of legal instruments complied with.
Conditions on scheme	This PCD has two payment rates defined: - The non-delivery payment rate applies if the company has not started the investment and has no plan to deliver it at the date agreed. The unit rate is calculated by dividing the total investment by the unit of improvement. - The late delivery payment applies if the company has substantially made progress on the delivery of the investment but has not completed it by the date agreed. This has been calculated in line with Ofwat's guidance (3.5% of the average cost of the scheme).
Assurance	As these schemes are defined by DWI undertakings, they are subject to reporting and assurance requirements to satisfy the DWI. We propose to utilise these metrics for our reporting with Ofwat as well.
Target What is the expected outcome we want to achieve	Delivery of the required solution as set out in the undertaking. We propose this is set on an end of period basis to enable some flexibility in the timing of delivery, given it is possible the undertakings from the DWI change in period and the requirements from reporting 12 months post-delivery.

Price Control Deliverable: No. of solutions implemented as part of the DWI Undertakings relating to nitrate	
Additional comments Please note any risks	If the DWI exchanges the obligation with a new one, we propose to use the funding to cover the unfunded obligation and no payment will be due as the number of undertakings remains unchanged. Due to the reporting requirements 12 months post-delivery we are proposing to count the scheme as completed and having achieved its purpose when we have implemented the required solution as set out in the undertaking. In the enhancement narrative and in the CW3 table we have costed 13 nitrate schemes. However recent communication from the DWI means that we will remove one nitrate scheme which is no longer required if there is an opportunity to resubmit the business plan alongside the Draft Determination. The penalty rates are calculated based on 13 schemes costed for the CW3 table.

Deliverables

Deliverable	Unit	Forecast deliverables				
		2025/26	2026/27	2027/28	2028/29	2029/30
Number of solutions implemented as part of the DWI Undertakings relating to nitrate	Number	-	-	-	-	13

Price control deliverable payments (gross of cost sharing)

Investment Area	3.5 Raw Water Deterioration Nitrate
Totex £m (A)	110.33
Units	No. of solutions delivered as per Nitrate undertakings
Number of units (B)	13
Non-delivery or over delivery unit rate formula	A / B = C
Non-delivery unit rate, £m (C)	8.5
Late delivery payment rate formula	C * 0.035
Late delivery payment rate, £m	0.30
Over delivery payment rate, £m	8.5