Thames Water Reporting Criteria

Annual Performance Report 2020-21

31 March 2021

Version 1.0

Thames Water Reporting Criteria

The following Reporting Criteria are used for Selected Information within the Thames Water Annual Performance Report 2020-21. The Selected Information comprises the following:

- 3A: Water and Retail performance commitments – column '4: Performance level – actual current reporting year' and column '5: PCL met'
- 3B: Wastewater performance commitments – column '4: Performance level – actual current reporting year' and column '5 – PCL – met'
- 3C: Customer measure of experience (C-Mex) – Line: '3C.3: Annual C-Mex Score'
- 3D: Developer services measure of experience (D-Mex) – Line: '3D.3: D-Mex score'
- 3E: Non-financial performance commitments – column '4: Performance level – actual current reporting year' and column '5: PCL met'

The Reporting Criteria identifies notifications to Ofwat as a permitted way of disclosing Thames Water's interpretation of the PR19 Final Determination as well as any deviations from other regulatory guidance documents.

Contents

Section 3A: Water and Retail Performance Commitments

The following Reporting Criteria are used for water and retail performance commitments.

Performance commitment	BW06a: Water quality compliance
Unit of measure	Numerical CRI score, reported to two decimal places
Boundaries	There are no specific exclusions, however, there are some special rules on calculation of the impact score defined within the DWI procedure.

Reporting criteria

This measure is the water quality measure for water quality compliance. The measure is expressed as a numerical compliance risk index (CRI) score and is based on the calendar year (1 January 2020 - 31 December 2020).

The definition for this performance commitment is set by the Drinking Water Inspectorate (DWI) in collaboration with the industry as per the following guidance: https://www.ofwat.gov.uk/publication/dwi-compliance-risk-index-cri-definition/

A CRI score is calculated for every individual compliance failure within all water supply zones, authorised supply points, treatment works and service reservoirs. The annual CRI for the company, for the calendar year, is the sum of the individual CRI scores for every compliance failure reported during that year.

The calculation for each individual compliance failure is as follows:

i. Water supply zones: CRI = (Parameter Score * Assessment Score * Population affected) / Total company population served
ii. Supply Points and treatment works: CRI = (Parameter Score * Assessment Score * volume supplied (m3/day)) / Total daily volume supplied by the company (m3/day)
iii. Service reservoirs: CRI = (Parameter Score * Assessment Score * reservoir capacity (m3)) / Total service reservoir capacity of the company (m3)

- A water supply zone is defined as the defined as the largest area of a water company's supply system where all customers have the same supply risk.
  - A supply point is defined as an individual point of service on the customer premises (i.e. a customer tap).
- A treatment works is defined as a site or plant whereby processes and technologies used to remove contaminants from water are carried out.
- A service reservoir is defined as a place or structure where water from a water treatment works is stored for delivery to other service reservoirs for distribution to the consumers of a water supply district
- The parameter score is based on different criteria reflective of the nature of the parameter. This can include human health concerns, aesthetic concerns or regulatory impact concerns
- The assessment score is based on an assessment by the DWI of how well the wellbeing and interests of consumers were protected by best practice in management of compliance failures.

The list of scores associated with the parameters and assessment criteria are defined within the DWI guidance.

Performance commitment	BW03: Water supply interruptions
Unit of measure	Hours:minutes:seconds (HH:MM:SS) per property per year, reported to zero decimal places.
Boundaries	The performance measure only accounts for interruptions greater than or equal to 3 hours in duration. Any interruptions less than 3 hours are excluded from the measure. Interruptions as a result of planned (e.g. planned maintenance) and unplanned interruptions (e.g. an asset failure) are included in the performance results.

Reporting criteria

This measure relates to the average number of minutes lost per customer for the whole customer base for water supply interruptions that lasted three hours or more in the financial year (1 April 2020 - 31 March 2021). The metric is calculated as follows:

(Total number of properties with interrupted supply > or = to 3 hours x the full duration of the interruption in minutes) / Total number of properties supplied with water at 31 March 2021.

An interruption is defined as when a customer is without a continuous supply of water and the supply has been interrupted for greater than 3 hours.

- A property is defined as one which is connected to the company's water distribution system.
- The duration of an interruption is defined as the amount of time which passes between the start time and stop time of an event.
- The start time is defined as when water is lost from the first cold water tap at a property.
- The stop time is defined as when the company is satisfied that water has been fully restored to an acceptable pressure to the affected property(ies) and water is restored to the first cold water tap at a property.

Performance commitment	BW04: Leakage
Unit of measure	Percentage reduction from 2019-20 baseline, reported to one decimal place. The volumetric levels resulting from the application of the percentage reduction in megalitres per day (Ml/d) reported to one decimal place.
Boundaries	Leakage includes any uncontrolled losses between Thames Water's treatment works and the customer's stop tap. This includes trunk mains, service reservoirs, flow monitoring zones and customer supply pipes. It does not include internal plumbing losses. The annual average leakage level is calculated by Thames Water in line with the final reporting guidance for PR19 – Leakage, published on 27 March 2018, with exception of the following aspects of the guidance: 1. Household night use:

	5d – Evidence that survey is representative (based on demography, property type or other factors) of the company as a whole. 5e – Sample size is sufficient to capture continuous and intermittent night use with reasonable confidence 5f – Continual monitoring and maintenance of individual household monitors (IHM) and small area monitors (SAMs) For the reporting year 2020/21, Thames Water used the historic night use allowances calculated from the Domestic Water Use Study (DWUS) and TestDWUS which do not satisfy the above requirement.

Reporting criteria

This measure is the percentage reduction of three-year average leakage in megalitres per day (Ml/d) from the 2019/20 baseline. It is reported to one decimal place.

Percentage reduction (for the report year) = ((2019/20 baseline – Three-year average Leakage (for the report year)/ 2019/20 baseline)) * 100

Three-year average Leakage (for the report year) is calculated from annual average values for the reporting year and two preceding years and expressed in Ml/d.
2019/20 baseline is calculated as the mean of the annual average leakage for 2019/20, 2018/19 and 2017/18 and expressed in Ml/d.

Where this calculation results in a positive value, it corresponds to the outperformance of leakage in Ml/d. Where this calculation results in a negative value it corresponds to the underperformance of leakage in Ml/d.

Annual average leakage is defined as the sum of distribution system leakage, including customer supply pipe leakage, plus service reservoir losses and trunk mains leakage.

Distribution system leakage is calculated by establishing the baseline leakage through minimum nightlines. Minimum nightlines are measured at the flow monitoring zone level as a minimum flow during the fixed hour period (3am to 4am). Any residual flow after legitimate night use is assumed to be leakage.

Legitimate night use is an estimate of genuine use of water during the night-time. Components of night use include the night use of measured and unmeasured households, commercial measured, unmeasured and assessed non-household night use and operational night use such as that of sewage treatment works. It also includes allowances for wastage occurring at void properties and night use of occupied void properties.

Due to pressure variations during the day and the sensitivity of leakage to pressure, night-time leakage (nightlines - legitimate night use) needs adjustment to arrive at a daily average leakage flow. This adjustment deals with the effect of pressure variations and is known as the T-Factor. The T-Factor is calculated as average daily pressure divided by night pressure and multiplied by 24 hours. The T-factor is calculated on flow monitoring zone levels using the average pressure from all pressure loggers located within the zone. Night pressure is calculated as average for the period of 3am to 4am; day pressure - average for the whole 24-hour period.

A water resources zone is defined as the largest area of a water company's supply system where all customers have the same supply risk. Trunk mains are defined as the length of mains between from the start of the distribution system and the flow monitoring zones. Transfer mains leakage is estimated based on the length of main, multiplied by the assessed leakage rate per kilometre of main. Reservoir leakage is calculated based on reservoir drop tests. For reservoirs where drop tests are not available the capacity and reservoir type are used to estimate leakage. Reservoir type is made up of three categories, brick, concrete and other. Leakage for each reservoir is calculated by the capacity-leakage relationship for each reservoir type and then summed to give total reservoir leakage. Leakage is reported as a post-Maximum Likelihood Estimation (MLE) weighted average Ml/day over the year. The MLE technique is used to distribute the volume of any unaccounted-for water in the water balance calculation. Unaccounted for water occurs when the distribution input and the sum of the components of the water balance do not reconcile. To reconcile the water balance, the MLE method is used to distribute the unaccounted-for water according to the uncertainty in the components of the water balance. The total level of leakage is defined in the final reporting guidance for PR19 – Leakage, published on 27 March 2018: https://www.ofwat.gov.uk/publication/reportingguidance-leakage/

Performance commitment	BW05: Per capita consumption
Unit of measure	Percentage reduction from 2019-20 baseline, reported to one decimal place. The volumetric levels resulting from the application of the percentage reduction in litres/person/day (l/p/d) reported to one decimal place.
Boundaries	The PCC level is calculated in line with the Final reporting guidance for PR19 – Per Capita Consumption, published on 27 March 2018, with exception of the following aspects of the guidance: 1. Unmeasured household consumption 4a – Monitors follow principles set out in the UKWIR Report 'Best Practice for unmeasured per- capita consumption monitors 1999' and the more recent report 'Future Estimation of Unmeasured Household Consumption', UKWIR 2017 4c – Evidence that survey is representative (based on demography, property type or other factors) of the company as a whole; valid data available from at least 80% of monitors as an annual average For the reporting year 2020-21, Thames Water used the 2019/20 baseline level of unmeasured consumption in London obtained from the Domestic Water Use Study (DWUS) and used data from smart metered properties to estimate the change in consumption between 2019/20 and 2020/21 for all property types other than flats in large blocks.

	This approach does not comply with the above requirements of the reporting guidance.

Reporting criteria

This measure is a performance movement (PM) of the three-year average per capita consumption (PCC) values against the baseline.

PM (for the report year) = ((PCC baseline – Three year average PCC (for the report year)/ PCC baseline)) * 100

Three-year average PCC (for the report year) is calculated from annual average values for the reporting year and two preceding years and expressed in litres/person/day (l/p/d).

PCC baseline is calculated as the mean of the annual average PCC for 2019/20, 2018/19 and 2017/18 and expressed in litres/person/day (l/p/d).

Where this calculation results in a positive value, it corresponds to an outperformance of PCC in l/p/d. Where this calculation results in a negative value it corresponds to an underperformance of PCC in l/p/d.

PCC is calculated using the following formula:
PCC = (Measured Household consumption + Unmeasured Household Consumption) / Total household population

It is reported as the annual arithmetic mean per capita consumption expressed in litres per person per day (l/p/d). The measure uses post MLE (maximum likelihood estimation) data for measured household consumption and unmeasured household consumption.

Measured Household consumption is the volume of water used by each measured household within Thames Water's area, including meter under-registration but excluding supply pipe leakage. It is calculated from Thames Water's billing system, including actual reads and estimated reads.
Unmeasured Household consumption is the volume of water used by each unmeasured household excluding supply pipe leakage. It is calculated from average unmeasured per household consumption (PHC expressed in l/household/day) multiplied by the number of unmeasured households.

Per capita consumption (PCC) is defined in the Final reporting guidance for PR19 – Per Capita Consumption, published on 27 March 2018:
https://www.ofwat.gov.uk/publication/reporting-guidance-per-capita-consumption/

Performance commitment	BW01: Mains repairs
Unit of measure	Number of repairs per 1,000km of mains, reported to one decimal place.
Boundaries	The performance commitment excludes communication and supply pipes.

Reporting criteria

Mains repairs is defined in the reporting guidance for PR19 – Mains Repairs per 1,000km, published on 27 March 2018.

https://www.ofwat.gov.uk/publication/reporting-guidance-mains-repairs-per-1,000km/

The measure is reported as the number of mains repairs per thousand kilometres of the entire water main network.

Mains repairs – This includes all physical repair work to mains from which water is lost.
Mains length – This is the length of all pipes conveying treated water around the distribution point but not including communication pipes or supply pipes

Mains repairs are reported separately for pro-active and reactive repairs. Pro-active repairs are those completed by the company as a result of the company's active leakage control (ALC) or its own leak detection activity. Reactive repairs are those that are completed as a result of a customer contact (made using any communication channel) informing the company of a leak.

Performance commitment	BW02: Unplanned outage
Unit of measure	Percentage of peak week production capacity, reported to two decimal places
Boundaries	The performance measure only accounts for outages relating to unplanned causes such as asset failure. Outages relating to planned causes such as when assets are taken out of supply or made unavailable for supply to enable planned maintenance or capital works to be completed are excluded from the measure. Additional exclusions from the measure are: - Excluded sites: Sites not in service as per the annual production plan, sites used only in the case of an emergency or sites only required to be in service during a dry year. - Outages of 24 hours or less in duration. - Outages where we have proactively restricted abstraction or production from a given WTW because of variable raw water quality. - Outages caused by raw water quality outside of the normal operating band for a given works. - Outages caused or prolonged by extreme weather events.

Reporting criteria

This measure is defined as the annualised unavailable flow, based on the peak week production capacity (or PWPC), for each company. This measure is proportionate to both the frequency of asset failure as well as the criticality and scale of the assets that are causing an outage.

PWPC and Outages (planned and unplanned) are defined as per the following guidance:

https://www.ofwat.gov.uk/wp-content/uploads/2018/03/20190327-6.-Unplanned-outage-final-reporting-guidance.pdf

This measure is reported as the temporary loss of peak week production capacity (PWPC) in the reporting year weighted by the duration of the loss (in days). Outages arising from planned works are recorded separately to outages arising from unplanned causes, such as asset failure. Unplanned outage for each water production site is calculated separately and then summed over the reporting year to give a total actual unplanned outage for the water resource zone. The company water resource zone weighted outage is summed (Ml/d) and normalised based on overall company peak week production capacity to be reported as a percentage.

The company reports its current company level peak week production capacity (PWPC) (Ml/d), the unplanned outage (Ml/d) and planned outage (Ml/d) in its commentary. The company provides a summary of data quality and compliance in accordance with the reporting requirements.

Performance commitment	BW07: Properties at risk of receiving low pressure
Unit of measure	Number of properties to zero decimal places
Boundaries	A weather 'event' may be exceptional in its intensity or in its duration or a combination of both. However long the event, the effects on our Performance Commitments can last for much longer. A weather event can include drought, heavy rainfall, freezing conditions, heatwaves and strong winds. In reporting Thames Water considers a weather event deemed to have a return period greater than 1 in 10 years to be a mitigating factor, provided that it is beyond the normal design standards. Additional boundaries are set out in Ofwat's guidance in the following link: https://www.ofwat.gov.uk/publication/properties-at-risk-of-receiving-low-pressure/

Reporting criteria

his measure is the number of properties receiving, or at risk of receiving, pressure below the low pressure reference level, at the end of the reporting year (31 March 2021).

This measure is calculated as the total number of properties receiving pressure below standard, minus the number of those properties that are covered by the predetermined allowable exclusion categories as detailed in the reporting guidance. Before a property is removed from the Low Pressure register there is a verification period which varies depending on method of addition to the register. At the end of the verification period, and assuming that the solution has proven to be sustainable, the property is removed from the register with the date of removal logged as being the date that the solution was implemented. This aligns the register time with the low pressure being experienced by the customers.

Low pressure reference level is defined in the reporting guidance published 11 December, 2017 'Properties at risk of receiving low pressure': https://www.ofwat.gov.uk/publication/properties-at-risk-ofreceiving-low-pressure

Performance commitment	BW08: Acceptability of water to consumers
Unit of measure	Number of consumer contacts per 1,000 population, reported to two decimal places.
Boundaries	The following list of water quality customer contacts are excluded from this measure: • Consumer contacts related to water supplied by another water company. • Contacts from school children and college students seeking information to help them with an educational assignment. • Contacts from representatives of consumers such as a local councillor or an MP usually relate to a water quality incident or to a consumer's complaint and inclusion of these would duplicate information already recorded. • Contacts found to relate to a private supply of water and not the company's public water supply. • Consumer contacts received in the course of managing a notified water quality event. A further list of excluded contact types is defined within the DWI guidance

Reporting criteria

This measure relates to the number of times the company is contacted by consumers due to the taste and odour of drinking water, or due to drinking water not being clear, or consumer reporting illness due to drinking water, reported per 1,000 population.

The calculation of the measure is as follows:

((the number of contacts for appearance, taste/odour and illness) * 1,000) / the resident population as supplied to the Drinking Water Inspectorate (DWI).

The consumer contact classification guidance is defined by the DWI in the following:

https://www.ofwat.gov.uk/publication/dwi-letter-customer-contacts-about-water-quality-appearance/

Appearance consists of the following categories:
Discoloured water – brown/black/orange, discoloured water – blue/green, particles, white-air, white-chalk and animalcules.

Taste/Odour consists of the following categories:
Chlorine, earthy/musty, petrol/diesel and other taste/odour.

Illness consists of the following categories:
Gastroenteritis, oral, skin and medical opinion

The company reports consumer contacts separately for appearance, and taste and odour for the Discover Water website.

Performance commitment	BW09: Water quality events
Unit of measure	Number of events (category 3, 4 and 5) to zero decimal places
Boundaries	The measure excludes: • Category 3, 4 and 5 events that do not require the company to issue "restriction of use" advice, and those that do not prompt customers to directly contact the company by telephone, letter, email or website in response to a problem. • Category 1 and 2 events

Reporting criteria

This performance commitment is a measure of the number of category 3, 4 and 5 water quality events that have impacted customers. The DWI set out event notification criteria in their document "Guidance on the notification of events, August 2009". The company's internal triggers apply this guidance to enable it to be consistent in its event notifications.

Impacted customers are defined by events where:

- the company issues restriction of use advice (or the DWI considers the company should have taken such action); or
- where one or more customers directly contacts the company by telephone, letter, email or website in response to a problem.

Each event is independently assessed by the DWI which assigns it a category score. The following category definitions are as follows:

- 'Category 1. Not significant' – least potential negative impact on public confidence in the water supply.
- 'Category 2. Minor' – some potential for negative impact on public confidence in the water supply, but not requiring significant level of investigation.
- 'Category 3. Significant' – potential for negative impact on public confidence in the water supply requiring a detailed investigation and assessment of the event by a warranted inspector.
- 'Category 4. Serious' – significant potential for negative impact on public confidence in the water supply requiring a detailed investigation and assessment of the event by a warranted Inspector, possibly with additional internal and external support (to be determined on initial assessment of the circumstances of the event).
- 'Category 5. Major' - significant potential for negative impact on public confidence in the water supply requiring a detailed investigation and assessment of the event by a warranted Inspector with additional internal and external support at all seniority levels (to be determined on initial assessment of the circumstances of the event).

Performance commitment	BW10: Reducing risk of lead
Unit of measure	The cumulative number of lead communication pipes replaced annually, reported to zero decimal places.
Boundaries	Only lead pipes replaced within the four mentioned categories are counted within the target. Lead pipes replaced by other synergistic work such as leakage are not counted under this programme. The performance commitment also excludes lead communication pipes replaced as part of other rehabilitation programmes that are not in the 'hotspot' areas.

Reporting criteria

This performance commitment is defined as the cumulative number of lead communication pipes replaced in the 2020-25 period.

This performance commitment includes replacements that will result from:
1. Customer requests for communication pipe replacements (reactive activities);
2. Failed samples (reactive activities);
3. Targeted replacements in 'hot-spots' (proactive activities); and
4. Social homes and establishments with vulnerable customers including those at primary schools, nurseries and similar establishments (proactive activities)

Replacements at customers' request are defined as all lead communication pipes replacements where the customer has requested replacement under Regulation 30(4)(b) of the Water Supply (Water Quality) Regulations and where the customer intends to replace or has replaced their supply pipe.

Replacements on failed samples are defined as all lead communication pipes replacements where water quality sampling test results have shown the lead content to be higher than the acceptable threshold (10µg).

Replacements in targeted areas or 'hotspots' are defined as replacements of communication pipes to properties falling within water supply zones which Thames Water has identified (in accordance with methodology confirmed by DWI), as high risk of having lead pipework, and which have been listed and issued to the Lead Pipe Replacement (LPR) Team. This includes communication pipes, replaced as part of water mains rehabilitation programmes, which serve properties within hotspot areas.

Replacements at social homes and establishments with vulnerable customers are defined as replacements of lead communication pipes to primary schools and nurseries or other similar establishments across the supply area. As of the 31 March 2021 only replacements undertaken at schools and nurseries were reported under this category, as no work has been done work at any "similar establishments".

Performance commitment	DW02: Security of supply index SoSI
Unit of measure	SOSI score to zero decimal places
Boundaries	None

Reporting criteria

The Security of Supply index (SoSI) is a score reflecting a company's ability to meet its planned levels of service for average demand in a dry year at the end of the financial year (31 March 2021). The SoSI score can range from negative scores to 100. A score of less than 100 demonstrates that Thames Water would have to impose demand restrictions on its customers more frequently than set out in its levels of service.

The level of service is set with the following frequencies of occurrence and types of water use restrictions:

- Level 1 (1 year in 5 on average) – Intensive media campaign;
- Level 2 (1 year in 10 on average) – Sprinkle / unattended hosepipe ban, enhanced media campaign;
- Level 3 (1 year in 20 on average) – Temporary Use Ban (formerly hosepipe ban), Drought Direction 2011 (formerly non-essential use bans) requiring granting of an Ordinary Drought Order; and
- Level 4 (Never) – If extreme measures (such as standpipes and rota cuts) were necessary their implementation would require the granting of an Emergency Drought Order.

SoSI is scored for the whole company based on a weighted sum of the six individual Water Resource Zones (WRZs). A water resources zone is defined as the largest area of a water company's supply system where all customers have the same supply risk.

The methodology to derive the index score is set out below:

Calculate the Water available for use (WAFU).
WAFU is defined as WRZ deployable output less reductions including climate change, sustainability reductions, network constraints and reductions made for outage allowance. Deployable output is defined as a measure of Thames Water's capability to put water into the supply network in drought conditions. This capability is limited by a number of factors such as abstraction licences, treatment network constraints and water resource shortages. Estimation of deployable input is performed through Water Resources Management models used to understand how the current water supply system would work effectively in past droughts. Sustainability reductions are reductions in abstraction licence volume agreed with the Environment Agency (EA) for environmentally sustainable purposes.
Outage is defined as a temporary loss of Deployable Output that is retrievable. The outage allowance number for a given sub-zone is the worst of the monthly '95th percentile' actual outages numbers for that sub-zone.

Calculate the Dry Year Available Headroom per WRZ
Dry Year Available Headroom is defined as WAFU adjusted for Bulk Imports/Exports to and from other companies less adjusted dry year Distribution Input.
Bulk water exports and imports include treated and untreated exports and imports but excludes non-potable supplies.

Dry Year Distribution input (DI) is defined as the average DI recorded during the year adjusted by a dry year uplift. Weather dependent models of usage and leakage are used to

generate a range of demand scenarios at the WRZ level, using a number of years of weather and demand data.
The dry-year demand is defined as the demand observed under the joint conditions of a 1 in 5 summer and a 1 in 5 winter.

Calculate the Target Headroom
Target headroom is defined as 'the minimum buffer that water companies are required to maintain between supply and demand in order to account for current and future uncertainties in supply and demand'.
The target headroom model is used to calculate the threshold minimum acceptable headroom, catering for uncertainties in the overall supply demand balance and agreed levels of service, which would trigger the need for water management options to increase water available for use or decrease demand. Thames Water uses a statistical technique called Monte Carlo analysis to examine uncertainties used in the Target Headroom calculation and the possible range of values that specific elements of supply and demand forecast could take.

Calculate the surplus / deficit expressed as a percentage per WRZ
Surplus / deficit is defined as a difference between the Dry Year Available Headroom and Target Available Headroom.
The surplus or deficit expressed as a percentage per WRZ is calculated by dividing the surplus or deficit value in megalitres per day (Ml/d) by the sum of Adjusted Dry Year Distribution Input and Target Headroom.

Calculate the percentage of population with headroom deficit by dividing the population per zone with the deficit by the total company population. Where the zone is not in deficit, zero should be entered in 'percentage of total population with headroom deficit'.

Zonal population is the total average resident population in a water resource zone.

Calculate the zonal index per WRZ
Zonal index is defined as a percentage deficit (step 4) squared multiplied by the percentage of population affected (step 5) and multiplied by 100.

Calculate the final companywide SoSI as 1 minus the sum of zonal scores and then multiplied by 100.

The components of the Security of Supply Index calculation are annual averages and peak week values in Ml/d. As SoSI is a measure of the company's ability to supply water in a dry year, the Ml/d volumes are then adjusted for any weather effect to give the right return periods (the dry year Ml/d volume of water available). The score reported is the lower of the two scores produced by annual averages and peak week values in Ml/d.

Performance commitment	DWS01: Power resilience
Unit of measure	Number of sites to zero decimal places
Boundaries	None

Reporting criteria

The cumulative number of key power dependent sites that are made resilient to power disturbances or interruptions over three hours from the distribution network operators from 1 April 2020 to 31 March 2025. 47 power dependent sites were identified during PR19 and this measure reports progress against these 47 sites. These are listed in our PR19 Final Determination.

The key power dependent sites in this performance commitment only include:

- water and sewage treatment works;
- water booster stations and sewerage pumping stations with greater than 500kW installed power; and
- water booster stations without standby generation and with greater than 200 directly fed properties.

Performance commitment	DWS02: SEMD - Securing our sites (2020-25 projects)
Unit of measure	Percentage to one decimal place
Boundaries	Legacy projects that are outstanding from the 2020-25 period, which are covered by PR19TMS_DWS03 ('SEMD - Securing our sites (legacy projects)') are excluded.

Reporting criteria

This measure relates to the percentage of an agreed number of specified sites brought into compliance with Security and Emergency Measures Direction (SEMD) requirements and assessed against a set of criteria agreed with Defra from 1 April 2020.

This performance commitment only applies to a list of 28 borehole sites agreed between the company and Defra. This is the same measure that Defra request the water industry use when reporting to them. Full compliance is assessed against criteria established by Defra.

Percentage compliance of specified sites with SEMD requirements assessed against a set of criteria, as agreed with Defra. These sites will be assessed as compliant or not compliant. The schemes are considered complete and compliant when all project milestones have been completed, exit criteria has been met and the benefits have been realised, as set out in the defined project scope at initiation.

Performance commitment	DWS03: SEMD - Securing our sites (legacy projects)
Unit of measure	Percentage to one decimal place
Boundaries	New projects which were not due in the 2015-20 period are excluded.

Reporting criteria

The percentage of an agreed number of specified projects brought into compliance with Security and Emergency Measures Direction (SEMD) requirements and assessed against a set of criteria agreed with Defra.

The performance commitment only includes the 264 legacy projects, from the 591 agreed at PR14, which remain outstanding in the 2020-25 period. Full compliance is assessed against criteria established by Defra.

The schemes are considered complete when all project milestones have been completed, exit criteria has been met and the benefits have been realised, as set out in the defined project scope at initiation. Percentage compliance of specified projects with SEMD requirements assessed against a set of criteria, as agreed with Defra. These sites will be assessed as compliant or not compliant.

Performance commitment	ER01: Unregistered household properties
Unit of measure	Process completed' or 'Process not completed'
Boundaries	This measure excludes any Boundary Properties/Water only Companies (WOC's) where TW are responsible for Waste Only. This measure also excludes any charge points that do not relate to a physical property e.g. Kiosks and Hereditaments and Troughs.

Reporting criteria

This performance commitment assesses if the company has completed all processes to find unregistered household properties.

Unregistered household properties (also known as 'gap sites') are properties where water and/or wastewater services are being consumed, but the property is not in the company's system and is therefore not billed. This performance commitment is to ensure that the company has robust and consistent processes in place in order to minimise the number of unregistered properties within its region. The company will use third party datasets to cross reference with its billing system on a quarterly basis in order to identify mismatches in the properties registered.

The process includes:

- A defined team will be responsible for downloading external data and using it to cross reference against internal records. The team will analyse this data to identify any sites that appear on the external data, but not on the company's systems (and therefore appear to be unregistered). The team will be responsible for monitoring progress of sites being confirmed as being put into charge or confirmed as not existing;
- confirmed unregistered sites will be passed on to the relevant teams to input into the system and take further steps to bring into charge, as appropriate; and
- the company will use a minimum of three data sources in each quarter. These sources are not defined, but are likely to include examples such as Experian, Royal Mail postcode address file (PAF), Land Registry etc. These will be reviewed further for suitability and quality as the company starts testing the process.

The final reported measure is noted as either, 'Process completed' or 'Process not completed'.

Performance commitment	ER02: Empty household properties ('void properties')
Unit of measure	Percentage of household properties classed as void, to two decimal places.
Boundaries	This measure excludes non-household properties. Properties that are not billed as it is uneconomical to do so are not counted. Uneconomical is defined as the incremental cost of sending a bill and the normal incremental cost of processing a payment

	made promptly in response to the bill is likely to be greater than the bill itself.

Reporting criteria

This measure is the number of household properties classified as void as a percentage of the total number of household properties served by the company.

Void properties are defined as properties, within the company's supply area, which are connected for either a water service only, a wastewater service only or both services but do not receive a charge, as there are no occupants. Additionally, a property connected for both services that is not occupied, only counts as one void property. Where details of a property have been received but the property is yet to be created for billing purposes, an assumption is made that they are all occupied metered properties.

The proportion of void properties is measured as an average over the year. The same method to calculate the average will be used each year:

1. Adding together the total number of voids at the start of the regulatory year and the total number of voids at the end of the regulatory year and dividing this by two
2. Adding together the total number of (active and void) properties at the start and end of the regulatory year and dividing by two
3. Dividing the average voids for the year by the average properties for the year 4. multiplying the resultant figure by 100

Performance commitment	EW01: Abstraction incentive mechanism (AIM)
Unit of measure	Megalitres to one decimal place
Boundaries	For the 2020/21 reporting year, the cumulative AIM score, and cumulative normalised AIM score are not in scope, and only one active site, Axford, is reported for the year.

Reporting criteria

The abstraction incentive mechanism (AIM) reduces abstraction of water at environmentally sensitive sites when flow or levels are below an agreed point otherwise known as a trigger. The measure is expressed in megalitres and based on the financial year (1 April 2020 - 31 March 2021).

Detailed guidance and the methodology used to prepare the AIM measures can be found in the following link:

https://www.ofwat.gov.uk/wp-content/uploads/2016/02/gud_pro20160226aim.pdf

The following abstraction sites are in scope of this measure:

- River Lee new gauge pumping stations (London WRZ);
- Pangbourne (Kennet Valley WRZ);
- Axford pumping stations (SWOZ WRZ);
- Pan Mill pumping station (SWA WRZ); and
- North Orpington PS (London WRZ).

Performance commitment	EWS08: Empty business properties
Unit of measure	Number of properties to zero decimal places
Boundaries	Properties should only be counted if it is billed as a result of the notification. Only properties meeting following criteria will be reported under this performance commitment: • property status had been changed to Occupied by Thames Water using the Vacancy Change Application (VCA) process; or • property status had been changed to Occupied by Retailer, following an intervention by Thames Water VCA process is described in the Market Arrangements Code (MAC) and the Wholesale Retail Code (WRC). that govern the non-household retail market.

Reporting criteria

This measure is the number of non-household properties recorded as Void in Central Market Operating System (CMOS), which the company identifies as Occupied and which are subsequently billed. The information on location and evidence of occupancy is then passed on to the retailer in order that they challenge occupancy status and bring the property into billing.

The following properties will be included towards the EWS08 Empty Business Properties performance commitment:

- Properties that were in Vacant status in CMOS for 6 months on the 1st April 2020 and are retrospectively changed to Occupied for a period of 6 months or longer, even if this period has not yet been fully billed to the Retailer.
- Properties that were Vacant for 6 months and are retrospectively changed to Occupied for less than 6 months and will be monitored until they reach the 6-month requirement at which point they would be included in the performance result, even if the 6 months period has not yet been fully billed to the Retailer.

Thames Water consider that the record of the wholesaler billing the retailer is sufficient to meet the requirement of “subsequently billed” . Thames Water notes Ofwat’s ruling on this, which stated “We confirm that Thames Water’s record of billing the retailer can be used to satisfy the ‘subsequently billed’ requirement" and Thames Water's interpretation is that this does not require them to wait until after final settlement (16 months) in order to include the premises into the EWS08 performance result.

If work around identification of the occupied property took place in the previous reporting year, it can still be claimed in the following year as soon the property meets the ODI eligibility criteria.(e.g. If work took place in 2020/21 to identify occupied status, it will be eligible for inclusion in 2021/22 at the time when the ODI requirements are met). Commentary will be provided to Ofwat to outline the number of properties included for the PC that were initially identified as a potential lead in the previous year to ensure transparency of reporting. With regards to the end of the reporting period, any claims for the final year (March 2025) will only include those that meet the eligibility criteria within the reporting period.

Performance commitment	M01: Installing new smart meters in London
Unit of measure	Number of smart meters to zero decimal places
Boundaries	This measure only applies to residential customers' meters and excludes business customers' meters. A smart meter can only be counted once in the five-year period for a property. For example, if a smart meter fails within the five years and is replaced, it cannot be recounted towards this performance commitment. This measure excludes the installation of new smart meters for new connections and excludes the replacement of existing basic meters with smart meters.

Reporting criteria

This measure relates to the cumulative number of new smart meters installed in the London water resources zone (WRZ) from 1 April 2020. We define new smart meters in this performance commitment as new meter installations that use Advanced metering infrastructure (AMI) technology that enables them to be read remotely through an integrated system of smart meters, communications networks, and data management systems.

This system will comply with the company's obligations under competition law and have the capability to:

- Record consumption data and comply with the appropriate regulations governing cold water meters.
- Allow ready access to this data by customers (directly or via contractors/agents) and the company at near real time, with data updated daily at a minimum, and made available at a minimum granularity of 1 hour intervals, or such greater frequency and/or granularity as reasonably requested by the customer or its contractors/agents.
- Enable the capability for automated leak alarms to be communicated to the customer and company.
- Transfer consumption data to the company remotely without requiring access to the meter or property.
- Communicate with the internet.

Existing meters are defined as meters that were installed in the Thames Water network prior to 1 April 2020 without smart meter capability.

The performance commitment measures the total number of smart meters installed in the reporting year (1 April 2020 - 31 March 2021) for the following categories of meters defined by the company:

- meter installed at a property that previously paid unmetered charges. This includes residential customers that have opted for a meter or where the company has selectively installed a meter); and
- small bulk meters, that provide additional benefit to meters already installed – i.e. not replacements of bulk meters.

The total performance commitment levels relate to the installation of smart meters on existing connections only.

Performance commitment	M02: Replacing existing meters with smart meters in London
Unit of measure	Number of smart meters to zero decimal places
Boundaries	This measure only applies to residential customers' meters and excludes business customers' meters. A smart meter can only be counted once in the five-year period for a property. For example, if a smart meter fails within the five years and is replaced, it cannot be recounted towards this measure.

Reporting criteria

This measure relates to the cumulative number of existing installed meters replaced with smart meters per reporting year in the London water resources zone (WRZ) from 1 April 2020.

Replacement smart meters are defined as replacement meter installations that use Advanced metering infrastructure (AMI) technology that enables them to be read remotely through an integrated system of smart meters, communications networks, and data management systems.

Existing meters are defined as meters that were installed in the Thames Water network prior to 1 April 2020 without smart meter capability.

This system will comply with the company's obligations under competition law and have the capability to:

- Record consumption data and comply with the appropriate regulations governing cold water meters.
- Allow ready access to this data by customers (directly or via contractors/agents) and the company at near real time, with data updated daily at a minimum, and made available at a minimum granularity of 1 hour intervals, or such greater frequency and/or granularity as reasonably requested by the customer or its contractors/agents.
- Enable the capability for automated leak alarms to be communicated to the customer and company.
- Transfer consumption data to the company remotely without requiring access to the meter or property.
- Communicate with the internet.

The performance commitment measures the total number of installed existing basic meters replaced in the reporting year (1 April 2020 - 31 March 2021) for smart meters.

Section 3B: Wastewater Performance Commitments

The following Reporting Criteria are used for wastewater performance commitments.

Performance commitment	CS03: Internal sewer flooding
Unit of measure	Number of incidents per 10,000 sewer connections reported to two decimal places.
Boundaries	Exclusions to the measure include the following: • Coastal flooding; • Ground water which has not originated from a public sewer; • Flooding from water mains etc.; • Incidents caused by highway drains; or • Incidents caused by private assets (including drains). The Water UK "Guide to Transfer of Private Sewers Regulations 2011", published on 30th September 2011 shall be applied to assess if the flooding incident should be attributed to the undertaker or a private asset such as a drain.

Reporting criteria

The internal sewer flooding measure is defined in the reporting guidance for PR19 – Sewer Flooding, published on 28 April:

https://www.ofwat.gov.uk/publication/reporting-guidancesewer-flooding/

The measure is calculated as the number of internal sewer flooding incidents normalised per 10,000 sewer connections including sewer flooding due to severe weather events.
Companies might also want to present their performance commitments in absolute numbers to make it easier for customers and stakeholders to understand.
The definitive service levels are those expressed as the values normalised per 10,000 sewer connections.

The list below gives examples of what parts of buildings shall be included in the internal flooding category:

- The main parts of the building;
- Conservatories;
- Basements and cellars (even if unoccupied);
- Areas below suspended floors;
- Lift shafts;
- Stairwell/lobby area of flats (to be counted as 1 flooded property);
- Any shared car parking areas beneath the main building where access to the parking area is from within the building (to be counted as 1 flooded property);
- Studios and workshops, which are an integral part of the main building;
- Porches; or
- Garages which are an integral part of the house with an adjoining door to the occupied building.

Performance commitment	ES01: Pollution Incidents
Unit of measure	Number of pollution incidents per 10,000 km of the wastewater network reported to two decimal places.
Boundaries	Category 4 incidents are excluded from the measure. The definitions of these are also set out in the Environment Agency guidance link.

Reporting criteria

This measure relates to the total number of pollution incidents (categories 1 to 3) per 10,000km of sewer length for which the company is responsible in a calendar year (1 January 2020 to 31 December 2020).

The measure specifically records the Category 1 to 3 pollution incidents to the water environment from failures on foul sewers, combined sewer overflows, sewage pumping stations, rising mains, storm tanks, sewage treatment works, other water industry premises and polluted surface water outfalls. This measure will be reported as both the absolute number of pollution incidents and a normalised value of pollution incidents per 10,000km of sewer.

Category 1, 2 and 3 pollution incidents are defined as:

Category 1 – Major, serious, persistent and/or extensive impact or effect on the environment, people and/or property
Category 2 – Significant impact or effect on the environment, people and/or property
Category 3 – Minor or minimal impact or effect on the environment, people and/or property

The total sewer length for the company is defined in the following guidance for PR19:

https://www.ofwat.gov.uk/wp-content/uploads/2017/12/WatCoPerfEPAmethodology_v3-Nov-2017-Final.pdf

The determination of the category of an incident is made by the Environment Agency. Further information can be found in the following Environment Agency guidance:

https://www.ofwat.gov.uk/wp-content/uploads/2017/12/20171129-Incidents-and-their-classification-the-Common-Incident-Classification-Scheme-CICS-23.09.16.pdf

Performance commitment	CS02: Sewer Collapses
Unit of measure	Number of collapses per 1,000km of sewer network, reported to two decimal places.
Boundaries	Exclusions are as defined in the guidance

Reporting criteria

Sewer collapses is defined in the reporting guidance - sewer collapses per 1,000km (updated), published on 4 April 2019:

https://www.ofwat.gov.uk/publication/reporting-guidance-sewer-collapses-per-1,000km/

Number of sewer collapses per thousand kilometres of all sewers that have not been identified proactively by the company and causing an impact on service to customers or the environment. (1 April 2020 - 31 March 2021)

As stated in the Ofwat guidance a collapse will only be included for this performance commitment where both the following actions have occurred:

- There has been a failure to a sewer which is confirmed as the root cause of the resulting customer contact for impact on service or escape (flooding or pollution), leading to the detection of a collapse; and
- This has resulted in the need to replace or repair the pipe to reinstate normal service.

The measure includes:

- rising mains;
- pipe bridges;
- failures on the infrastructure network, including inputs into the inlet of treatment works and terminal pumping station rising mains; and
- all public sewer and lateral collapses recorded by the company inclusive of those incidents that have been reported as flooding or pollution failures, if the primary cause of the flooding or pollution was a sewer collapse.

Per the guidance, collapses should be reported in the year that the collapse was reported, rather than the date that the repair work has been completed. Currently the data is provided based on the 'Activity Raised Date' within the system. This should be populated when work is requested after an incident is reported, however there is a delay between a potential collapse being reported, the activity being requested and then also following this the verification of whether this is actually a collapse (rather than a blockage or other incident type). Therefore filtering only based on the 'Activity Raised Date' is likely to mean that collapses from the prior period will be included, and collapses at the end of the reporting period will be excluded in this reporting period and shown within the next year.

Performance commitment	CS01: Treatment work compliance
Unit of measure	Percentage compliance, reported to two decimal places.
Boundaries	None

Reporting criteria

This measure is the percentage of treatment works with discharges compliant with numeric environmental permits in each year.

The discharge permit compliance metric is reported as the number of failing sites (as a percentage of the total number of discharges) and not the number of failing discharges. This is based on the calendar year (1 January 2020 - 31 December 2020). It is a measure of the capability of the company's wastewater and water treatment works to treat and dispose of wastewater in line with the company's discharge permit conditions. It is calculated as follows:

(B - A) / B * 100

Where:
A = No. of sites (STWs and WTWs) with numeric limits confirmed as failing relevant conditions in the calendar year; and
B = No. of discharges on the EA register during the calendar year (in force).

A non-compliant discharge is defined as a level of concentration of a parameter in a wastewater/water quality sample taken at a treatment works that falls out of the acceptable level as defined in the individual treatment works permit.

A sample is defined as a wastewater/water quality sample in line with the Environment Agency guidance, as set out in the links below. The samples are tested for the concentration of a range of parameters as set out the individual permits for each treatment works. The samples are taken at the designated sampling point at each sewage treatment works and are carried out under a UKAS accredited process.

The measure is governed by guidance and regulations issued by the Environment Agency which can be found in the following links:
https://www.gov.uk/government/publications/water-companies-operator-self-monitoring-osm-environmental-permits/water-companies-operator-self-monitoring-osm-environmental-permits; and
https://www.gov.uk/government/publications/waste-water-treatment-works-treatment-monitoring-and-compliance-limits/waste-water-treatment-works-treatment-monitoring-and-compliance-limits

https://www.ofwat.gov.uk/wp-content/uploads/2017/12/WatCoPerfEPAmethodology_v3-Nov-2017-Final.pdf

Performance commitment	CS04: Clearance of blockages
Unit of measure	Number of sewer blockages to zero decimal places
Boundaries	The following are excluded from the blockages reporting figure: 1. Duplicate records where more than one sewer blockage clearance has been recorded for the same clearance activity in the same sewer (located within 250 metres) and within the same hour. 2. Hydraulic overloads incidents 3. Activities where no clearance was required or blockage detected. 4. Jobs identified as pro-active slit or blockage removal 5. Sewer blockages occurring in privately owned sewers 6. 50% adjustment on disputes over ownership of sewers where the outcome is not available.

Reporting criteria

This measure is the total number of sewer blockages on the company's sewer network (including sewers transferred in 2011) in a reporting year.

A blockage is an obstruction in a sewer which causes a reportable problem (not caused by hydraulic overload), such as flooding or discharge to a watercourse, unusable sanitation, surcharged sewers or odour.

The reported figure is the number of sewer blockages cleared in the year because the blockages are not confirmed to be reportable blockage (i.e. could be a duplicate/privately-owned) until it has been cleared and reviewed. Thames Water consider that this process is sufficient to meet the definition of the 'total number of sewer blockages on the company's sewer network in a reporting year'.

Performance commitment	CS05: Sewage pumping station availability
Unit of measure	Percentage to one decimal place
Boundaries	The measure excludes: • terminal sewage pumping stations, i.e. pumping stations located within the boundary of sewage treatment works; • pumping stations where asset availability is not reported through SCADA. (Typically because they are recently adopted S105a pumping stations.); and • local package sewage pumping stations that are designed to protect individual properties from flooding following heavy rainfall.

Reporting criteria

This measure is the average asset availability of pumps in network catchment sewage pumping stations across the company's region in the reporting year (1 April 2020 - 31 March 2021). The performance commitment includes all sewerage pumping stations that are reported dynamically through the company's Supervisory Control And Data Acquisition (SCADA) system. This equates to about 2,800 pumping stations with 6,000 pumps in total and 95% of its larger sewage pumps. This number includes all installed pumps in the SCADA connected facilities including those that are rarely used.

- A sewage pumping station is defined as a site used to move wastewater to higher elevations in order to allow transport by gravity flow.

Weekly data sets are collated for monthly reporting from SCADA. The weekly data is then averaged over 52 weekly points in the reporting year to give the average weekly asset availability of pumps within the Waste Network catchment sewage pumping stations. This is expressed as a percentage value.

Availability is calculated as:

Availability (%) = ((total pumps – total unavailable pumps) / total pumps)) x 100

Where:

- 'total pumps' = total number of installed pumps matching method definition
- 'total unavailable pumps' = pumps unavailable through maintenance (or status suppressed) + pumps where SCADA status is unavailable or failed or inhibited

Extreme events, such as severe flooding, can prevent access to our sites for extended periods of time for health and safety reasons. Where Thames Water are unable to access and repair a pump due to reasonable exceptional circumstances, Thames Water will record and report these incidents and make a suitable adjustment to the reported availability to reflect the extenuating circumstances outside normal operating conditions.

Performance commitment	DS02: Surface water management
Unit of measure	Number of hectares to two decimal places
Boundaries	This performance commitment is not applicable for contributing area which already drain to surface/foul sewer networks. Any schemes on site delivery before 31 March 2020.

Reporting criteria

The hectares of surface area disconnected from the combined sewer system or from which the flow of surface water is attenuated by a sustainable drainage system from 1 April 2020.

The company will measure the total 'effective contributing area', that is, the area that generates surface water which communicates with its assets, which is then through appropriate surface water management diverted and passes through either a sustainable drainage system or new surface water system that does not communicate with combined sewers.

As per the PR19 Final Determination the company will prioritise the areas where it seeks to reduce the flow to its combined sewer network by combining four different approaches:

- headroom capacity assessment using the 21st century drainage programme approach, modified to improve accuracy where specific issues exist within catchments e.g. groundwater infiltration and basements;
- fifty-year resilience approach as developed by the 21st century drainage programme;
- historical modelling using information from the company's sewer flooding history database, pollutions database and past studies; and
- pipe volume capacity – using the company's known map of sewers. Calculating the total volume of storage within the sewer network and comparing it to the population or expected inflow at appropriate points.

Each of the above is used to develop a thematic map whereby the company differentiates between sewer drainage area catchments (SDACs) with relatively high or low headroom. These maps are then reviewed for accuracy by the company's asset planning team. The company may supplement the above prioritisation approach or propose new more accurate approaches than the one specified above. However, any amendments to the prioritisation approach must be robustly justified and in line with surface water management best practices.

Any outperformance or underperformance payments will be calculated and applied based on the cumulative total in 2024-25.

Performance commitment	ES02: Environmental measures delivered
Unit of measure	Number of WINEP schemes completed each year to zero decimal places
Boundaries	This performance commitment excludes schemes that were uncertain on 11 June 2019 "amber schemes". The WINEP also lists the Thames Tideway Tunnel as an environmental measure, for delivery in the 2020-25 period. However, achieving that output is not part of this performance commitment as it forms part of the Thames Tideway Tunnel price control.

	The measure also excludes three non-WINEP schemes under section 101A of the Water Industry Act 1991. For the 2020/21 reporting period, due to Covid-19, the completion date for all schemes was extended from March to September 2021. This was agreed with the EA. In light of this, Thames Water has reported a forecast figure which includes schemes they have completed and schemes which they are on-track to deliver by the extended deadline of September 2021.

Reporting criteria

The measure is the cumulative number of 'green' WINEP schemes completed since 1 April 2020. This metric measures compliance with the requirements of the WINEP and is limited to the schemes with 'green' status as at 11 June 2019.

The company's agreed measures can be divided into the following eight main categories:

- Wastewater treatment works upgrades – Investment to enhance wastewater treatment to improve or protect the quality of the receiving waterbody;
- Monitoring and investigation schemes – Investment to understand better how the company's operational activities may impact on the environment and how these could be improved to reduce this impact.
- Conservation schemes – Investment to meet specific conservation measures to reduce the company's impact on protected sites or biodiversity.
- Investigations into emerging risks – Investment to understand emerging risks facing the water industry such as microplastics and antimicrobial resistance or to understand if abstractions are having a negative impact on ecology;
- Catchment management activities – Investment to manage pesticides, nitrates and herbicides in surface and groundwaters through catchment activities;
- Alleviating low flows – Investment to investigate or undertake work to alleviate the impacts that the company's abstractions have on low flows;
- Reducing environmental impact of river structures – Investment to improve fish passage in waterbodies through work on the company's assets where they have been proven to be a blocker; and
- Addressing invasive non-native species (INNS) – Investment to investigate and implement measures reduce the risk of INNS associated with the company's activities.

The full list of included schemes and relevant WINEP driver codes is provided in:

https://www.ofwat.gov.uk/publication/pr19-winepprogramme-annual-update-for-2019/

For the purposes of this performance commitment, only the total number of "green" measures delivered will matter, rather than the specifics of which exact ones.
Any site where the regulatory obligation has been discharged by the Environment Agency should be considered as being delivered.

The company secures confirmation from the Environment Agency that performance has been correctly reported. The view of the Environment Agency will be definitive.

Performance commitment	ES03: Sludge treated before disposal
Unit of measure	Percentage to one decimal place
Boundaries	Sludge exported out of the company's region is excluded if it is treated before disposal. This is estimated using the best available data whereby location of farms is used to determine the number of farms we export to that are based outside our region.
Reporting criteria The percentage of sludge sent to treatment prior to disposal. Sewage sludge is a product of the wastewater treatment process. As per the PR19 Final Determination the performance commitment is defined as the percentage of wastewater sludge treated before disposal, where treatment includes chemical, biological and thermal processes. This includes all sludge collected from wastewater network plus and any third party sludge (such as sludge traded in from other water companies) that has been either transported by road, pipeline or indigenous collocated sludge, and treated at one of the company's sludge treatment centres (STCs).	

Performance commitment	ET01: Readiness to receive tunnel flow at Beckton STW
Unit of measure	Number of full months after the SCCD, with the first month running from the day after the SCCD. Zero decimal places.
Boundaries	The Tideway programme is on track to deliver to regulatory dates, with tunnel construction completed and commissioning started by 17 October 2022. In the event of tunnel construction being delayed it would not be in customers' interests to deliver the inlet modifications ahead of these being required. In these circumstances the company would not qualify for underperformance payments against the 17 October 2022 date. Instead, if delays in construction result in a change in the SCCD, the revised SCCD will be the relevant date for calculating underperformance payments.
Reporting criteria This measure is the delivery of the capital works associated with the inlet works under solution reference S29184 in the PR19 capital programme, which is part of the upgrade to the Beckton sewage treatment works (STW). Every full month of delay beyond the SCCD will result in underperformance payments. However, the SCCD has been changed from 17 October 2022 to the 2 October 2023. Therefore, underperformance payments will not apply until 2022/23. The scheme has been designed in outline during the 2015- 20 period and is due for detailed design after the company's PR19 final determination. The exact scope to be delivered, therefore, is still evolving as detailed design has not yet been completed so the achievement of the performance commitment is based upon the completion of the scheme, as will be confirmed and agreed through detailed design and construction. The indicative outline design scope is shown below. The scope of this capital project includes a number of elements at Beckton STW. The current indicative scope (from outline design) includes: • 2 new grit lanes and associated grit removal equipment, along with 2 new 50 mm 1D trash screens installed upstream;	

- 8 new 15 - 20 mm 1D bar screens installed downstream of the trash screens and upstream of the grit channels (6 existing and 2 new channels);
- new duty/standby trash and screenings transfer belt or screw conveyors, screenings compactors and skip compactors for the 50 mm 1D trash screens;
- new duty/standby screenings transfer screw conveyors, screenings compactors and skip compactors for the 15 – 20 mm bar screens;
- new grit removal, handling and washing plant along with associated equipment;
- new standby generation;
- clear accumulated grit and debris from intermediate northern outfall sewer (NOS) barrels; and
- modify existing control philosophy to allow all available plant to operate to minimise the hydraulic impact on the NOS, minimise deposition of solids and potentially reduce peak solids loading during first flush scenarios.

The unit of measurement for this performance commitment shall be the beneficial use delivery of the scheme. For the purposes of this performance commitment, "delivery" shall be defined as the date of the Benefits Fulfilled (BenF) form, which forms part of the project completion document suite within our standard workflow process. The 'BenF' form is dated and signed by the relevant approvers and hence forms an auditable basis of measurement of scheme delivery. The outcome, that will be part of the BenF sign off, will be the provision of sufficient assets such that, during out of service scenarios, the Inlet Works operates in accordance with Thames Water Asset Standards and good operating practice.

Performance commitment	ET04: Critical asset readiness for the London Tideway Tunnels (LTT)
Unit of measure	Number of full months to zero decimal places
Boundaries	None

Reporting criteria

This measure is the number of full months, in the reporting year, that readiness is reported as 'insufficient readiness', after the SCCD. This performance commitment incentivises the company to ensure enabling works are completed and critical assets are sufficiently ready in advance of the SCCD. Every full month of delay beyond the SCCD will result in underperformance payments.

'Sufficient readiness' means that the company will:

1. Complete and deliver against an Integrated Operating Plan, setting out how it will operate the London Tideway Tunnel assets in a timely, coordinated and integrated manner, and in compliance with relevant environmental permits, consents and the London Tideway Tunnels Operating Techniques.
2. Demonstrate to stakeholders that critical assets are ready to operate in compliance with the London Tideway Tunnels Operating Techniques and support timely system commissioning. This will be achieved through advanced preparation of critical assets reporting aligned with the Tideway Project Master Programme, the System Commissioning Plan and readiness for the system commissioning commencement.

This involves the following critical assets (some of which are in the company's wider wastewater network):

- Operational resilience of Beckton sewage treatment works (STW) to treat sustained peak flow for extended periods – for the avoidance of doubt, this excludes the inlet works dealt with in performance commitment ET01;

- Reliable operation of Beckton STW Tideway sewage pumping station (SPS);Reliable and accessible flow data from Abbey Mills SPS to Beckton STW;
- Reliable and accessible level and flow data from Greenwich SPS to Crossness STW;
- Reliable flow control at Abbey Mills SPS;
- Reliable flow control at Greenwich SPS;
- Certified Commissioning Ready Tideway Tunnel to Beckton STW Flow Transfer System;
- Certified Commissioning Ready Tideway Storm Bypass Tunnel;
- Certified Commissioning Ready Tideway combined sewer overflow (CSO) Overflow Shaft;
- Reliable operation of key SPSs with an interface to TTT that are considered critical to the adequate functioning of the London sewerage system.

The SCCD has been changed from 17 October 2022 to the 2 October 2023. Therefore, underperformance payments will not apply until 2022/23. The sources of information required for the measurement and tracking of this Performance Commitment are: -

- Tideway monthly reporting to the Interface Committee – For SCCD target date for the Performance Commitment
- TWUL Level 1 Programme PAWS 5c – For Integrated Operating Plan Completion
- TWUL Level 1 Programme – For Construction completion forecasts
- LTT Requirement Document – For Critical Asset Definition of Integrated Operating Requirements
- Critical Asset Grid – For Forecast Critical Asset Sufficient Readiness Dates and Critical

Asset Notice status

- Tideway Certification Process – For Compliance of Asset with Interface Agreement obligations for Critical Asset readiness.

The method statement includes a process diagram that illustrates the process for establishing and then approving readiness of TWUL assets for the operation of the London Tideway Tunnels system (LTT). The process is split into 4 distinct stages and obligations are contained within the Interface Agreement, Liaison Agreement, Joint Approach Agreement to Handover and Acceptance and PR19 Final Determinations Thames Water Performance Commitment Appendix . These stages are:

1. Integrated Operating Plan
2. Critical Asset Status Assessment
3. Critical Asset Reporting
4. Certification

Performance commitment	EWS01: Enhancing biodiversity
Unit of measure	Biodiversity units to zero decimal places
Boundaries	None

Reporting criteria

This measure is the cumulative net gain in biodiversity units at the company's 253 sites of biodiversity interest (SBIs) plus any net change from additional land where specific biodiversity offsetting measures have been implemented from 1 April 2020.

Biodiversity units are as defined by the Defra Offsetting Metric. Calculation of biodiversity units is done through application of the Defra Biodiversity Offsetting tool. Net gain is measured by comparing the total biodiversity units at Thames Water's 253SBIs at the end of 2019/20 to the total biodiversity units at the 253 SBIs plus any net change from additional

land where specific biodiversity offsetting measures have been implemented at the end of 2024/25.

The latest version of the Biodiversity Offsetting Tool available will be applied for each year of assessment, with the original baseline position rescored using the same tool for consistency and direct comparison wherever the scoring system has changed.

Biodiversity Net Gain (BNG) assessment for the year ending 31 March 2021 has been performed by AECOM Ltd (third party) commissioned by Thames Water. The purpose of the assessment is to quantify the increase of biodiversity units across 61 of its Sites of Biodiversity Interest (SBI) where habitat enhancement measures have been put in place on site to improve the biodiversity value of the habitats. The BNG assessment has been undertaken using Thames Water Net Gain Assessment Tool produced by AECOM in 2018. The assessment involves making a comparison between the biodiversity value of habitats present for each site prior to works (i.e. the 'baseline') and following the enhancement works (i.e. 'post intervention').

Performance commitment	EWS02: Smarter water catchment initiatives
Unit of measure	Number of catchments to zero decimal places
Boundaries	None

Reporting criteria

Number of catchments that have an agreed catchment plan (which extends for at least 10 years) created in collaboration with the company's partners for each catchment as evidenced by formal support by relevant stakeholders and delivery of the actions set out in the catchment plan for the relevant reporting year. The term 'partner' used in the AMP7 Final Determination refers to the external 'steering group members'.

Delivery of the company's smarter water catchments initiative to undertake whole-river catchment interventions designed to address multiple environmental issues simultaneously. Initiatives will be delivered in partnership with at least one other organisation within the company's operational area.

The company has identified three river catchments (Crane, Evenlode and Chess) where it considers there are multiple environmental challenges or issues that have relevance to its activities and in which the company has already have established working relationships with local stakeholders and catchment partnerships.

Thames Water will publish assurance by an appropriately qualified external third party that:

- all appropriate stakeholders in a catchment have been approached to be engaged in the partnership in each catchment;
- all partners agreed to the catchment management plan;
- all actions have been delivered in the report year; and
- the contribution by other organisations delivered additional benefit.

Performance commitment	EWS03: Renewable energy produced
Unit of measure	Gigawatt hours (GWh) to zero decimal places
Boundaries	None

Reporting criteria

The measure is the Gigawatt hours (GWh) of renewable energy produced from the company's operational business.

The aim of the measure is for the company to increase the amount of renewable energy (electricity, heat and gas) produced from its operational business. Renewable energy comes from sources such as biofuel, biomass/biogas, geothermal, hydropower, solar energy, tidal power, heat and wind power.

The company will measure the gross and net output of each of its renewable generators using smart metering which meets the Elexon Code of Practice 4 (CoP4) industry standard. The methodology for reporting all renewable energy generation is defined by the industry standard UK Water Industry Research Ltd (UKWIR) Carbon Accounting Workbook published on 8 May 2019.

Performance commitment	ET07: Managing early handback of Tideway project land
Unit of measure	Number of months to zero decimal places
Boundaries	None

Reporting criteria

The measure is the number of months early that the company receives land back from Tideway once necessary works related to the Thames Tideway Tunnel have been completed. This performance commitment is aligned to the Joint Approach to Handover and System Acceptance (the 'Joint Approach') agreed between Thames Water and Tideway in April 2019, which divides 21 sites into 90 handback areas.

The list of relevant handback areas as an annex to the PR19 final determinations: Thames Water – Outcomes performance commitment appendix:

https://www.ofwat.gov.uk/publication/pr19-final-determinations-thames-water-outcomes-performance-commitment-appendix/

It includes 87 handback areas instead of 90 as listed in the Joint Approach agreed between Thames Water and Tideway because three areas relating to Dormay Street are not intended to be handed back.

It has been agreed that the target date for handback of each of the handback areas will be three full months after that area has been certified as being ready for handback. The actual target date will, in all cases, be three full months after certification, whenever certification occurs. Outperformance payments will apply based on the number of full months before the target date that the land is received by the company. The company will have one full month after the target date before underperformance payments apply. Underperformance payments will therefore apply based on the number of full months after one full month after the target date that the land is received by the company.

This performance commitment is measured by the net total number of full months before the target date for each handback area that the company accepts the land. This means that the company will report the total number of months before the target date for each handback area that the company receives the land less the total number of months after one month after the target date for each handback area that the company receives the land. On this basis, performance commitment levels can be negative.

Section 3C: Customer Measure of Experience (C-MeX)

The following Reporting Criteria are used for customer measure of experience.

Performance commitment	AR01: C-MeX
Unit of measure	Score out of 100 to two decimal places
Boundaries	The following exclusions are applied to the data submitted to Agent: a) outbound contacts; b) deceased customers; c) non-customer Contacts; d) non-household or private network customers; e) developer services; f) ex-directory; g) wrong numbers - contacts from customers who have contacted Thames Water when they should have contacted another organisation; h) contractor 0.5% rule - customer contacts from external service providers who take less than 0.5% of total calls for a business unit; i) Feedback requests - customer contacts that are returned on or alongside company requests for feedback or surveys; j) for social media postings, customer comments exclusively about another customer's posting should not be included; k) enquiries from CCWater on behalf of a customer; and l) Ofwat DNCs.

Reporting criteria

This measure is the customer measure of experience (C-MeX) and is a measure of customer satisfaction.

A company's C-MeX score is calculated as the weighted average of customer satisfaction (CSAT) scores from customer service (CS) and customer experience (CE) surveys. The customer measure of experience is a customer satisfaction survey of a randomly selected sample of a company's overall residential customer base which asks them how satisfied they are with their company and the customer measure of satisfaction is a customer satisfaction survey of a sample of residential customers who have contacted their company which asks them how satisfied they are with how the company has handled their issue.

C-MeX score is calculated as 50% $*$ CS-$CSAT$ + 50% $*$ CE-$CSAT$

Thames Water is notified via email to the nominated individual(s) by 1000hrs on the Monday morning of the week following the designated period. All inbound customer contacts for the previous week are provided to Accent, via the online portal, by 1700hrs on Tuesday of the same week. This includes all contact methods on digital and non-digital channels (including where digital contacts made where an email address is not present, and non-digital contacts made where a telephone number is not present). The channel sources offered by Thames are CIS, CRM, Social Media, RightNow, Spring, Webchat and OAM. Customers who opted as DNC for Thames Water are submitted to Ofwat agent in line with C-MeX guidance. Only customer contacts who are opted for DNC for Ofwat are excluded. Contacts received by third parties and contractors working on behalf of the Thames Water (i.e. Advantis, Moorcroft etc)

are also included (if volume is above 0.5% of total volume received by Thames) in line with Ofwat guidance. The company will provide a statement that confirms whether the company offered at least five communication channels for receiving customer contacts and complaints and at least three online channels throughout the reporting year.

Section 3D: Developer Measure of Experience (D-MeX)

The following Reporting Criteria are used for developer measure of experience.

Performance commitment	AWS01: D-MeX
Unit of measure	Score out of 100 to two decimal places
Boundaries	In line with Ofwat guidance, the following can be excluded from the qualitative submission for D-Mex: a) Ofwat DNCs' b) Transactions where there is an ongoing dispute with the customer of such severity that approaching the customer to take part in a survey may not be appropriate. https://www.ofwat.gov.uk/wp-content/uploads/2020/03/D-MeX-guidance-for-2020-25.pdf

Reporting criteria

D-MeX is a measure of customer satisfaction. A company's overall D-MeX score is calculated from two components that contribute equally:

- qualitative D-MeX score, based on the ratings provided by developer services customers who transacted with the company throughout the reporting year to a customer satisfaction survey; and
- quantitative D-MeX score, based on the company's performance against a set of selected Water UK performance metrics throughout the reporting year.

The survey results which are used to calculate the qualitative component of the company's D-MeX score will be supplied by a survey agent appointed by Ofwat. This is supplied out of 100 to form the score for the qualitative component of D-MeX.

The set of Water UK performance metrics which are used to calculate the quantitative component of the company's D-MeX score, are set out in the link below. Note that there was a change in the metrics reported in October 2020. Therefore, the document below shows the set of metrics reportable from 1 April to 30 September 2020 and 1 October 2020 to 31 March 2021. Therefore, the overall D-MeX score comprises of the results from both halves of the year.
https://www.ofwat.gov.uk/wp-content/uploads/2020/07/Changing-the-Water-UK-metrics-in-D-MeX-our-decisions.pdf

The Water UK metrics are designed to measure compliance against Levels of Service (LoS) to customers. Each metric has a target cycle time which is set by Water UK, these are measured from the receipt of the application or the relevant date where all payments and information has been received. Compliance is calculated using the total completed within target divided by the total completed in period. These metrics apply to both waste and clean water journeys provided by the Developer Services & Wholesale Market Services Departments. For each metric, a percentage is reported and a simple average of these metrics is taken. This is rescaled to be out of 100 to form the score for the quantitative component of D-MeX.

The company will report the process the company has taken to assure itself that its performance against the selected Water UK metrics in D-MeX are an accurate reflection of its underlying performance in the reporting year, and any findings that indicate this is not the case.

Section 3E: Non-financial Performance Commitments

The following Reporting Criteria are used for non-financial performance commitments.

Performance commitment	DW01: Risk of severe restrictions in a drought
Unit of measure	Percentage of population at risk reported to one decimal place
Boundaries	Thames Water's reporting for DW01 calculates the percentage of the population 'at risk' of facing emergency restrictions, were a 1:200-year drought to occur, in each year of the reporting period, and on average over a 25-year period as set out in the Ofwat guidance. Thames Water's reporting for the forward planning period is based on the WRMP19 final plan forecast and not the WRMP19 baseline forecast.

Reporting criteria

This metric is the percentage of the customer population at risk of experiencing severe restrictions in a 1-in-200 year drought.

The performance commitment drought risk is defined in the reporting guidance – Drought resilience metric, published on 13 March 2018: https://www.ofwat.gov.uk/publication/drought-resilience-metric-risk-of-severe-restrictions-in-a-drought/

Thames Water does not apply the average over a 25-year period in either baseline, performance commitment level or in-year performance reporting, as required by the guidance, and calculates the percentage of the population 'at risk' of facing emergency restrictions, were a 1:200-year drought to occur, for the report year instead.

The population is considered to be 'at risk' if the supply-demand balance calculation in each water resource zone (as used for water resource planning) for the 1-in-200-year drought event results in a shortfall (deficit). This will occur when the theoretical deployable output, minus an allowance for climate change, minus outage allowance (available supply), minus exports, plus imports (which should be included though not specifically mentioned in the Ofwat guidance but is consistent with the supply demand balance), is less than the dry year demand plus base year target headroom (demand plus uncertainty).

The process to calculate the metric follows Ofwat's specific guidance and is as follows:

1) Take the Water Available for Use (WAFU), where WAFU is equivalent to deployable output, minus the impact of climate change on deployable output, minus outage allowance, minus exports, plus imports, from the reporting year SOSI calculation spreadsheet which is used to calculate the SoSI number reported against the performance commitment DW02 – SoSI (see DW02 reporting criteria for the definitions).
2) From Water Resource Management Plan (WRMP) table 10 (the latest versions for each Water Resource Zone (WRZ) can be found on the Thames Water website) find the difference in water resource zone deployable output (DO) from worst historic to 1:200 drought severity.
3) Using the difference in DO from step 2 change the reported WAFU (step 1) to get a WAFU that reflects the 1:200 drought.
4) Screen for water resource zones where a deficit is shown by step 3.
5) Read off the percentage population at risk of deficit from the spreadsheet for each WRZ.

For this performance commitment, the position for AMP7, based on Thames Water's current WRMP, is that London will be in 1:200 deficit, and all the other WRZs will not be. Given that this is the case, Thames Water's performance in relation to the target will be dependent on London's population as a proportion of our whole company population. Thames Water's current assumption is that population growth will be in line with our WRMP 2019 forecast.

The certainty grade has been assigned based on an assessment taken from the Atkins Confidence Grading Assessment guidance. It is made up of two parts:
1. The methodological rigour or sophistication of the drought definition process; and
2. Risk score – which is how close each company may come to implementing restrictions.

For the first element Thames Water has selected an overall company level grading of C because all WRZs apart from London have a classification of C. London has been assigned category A because a sophisticated and comprehensive stochastic based analysis has been undertaken for this WRZ. Although London is the largest WRZ comprising approximately 70% of the company population, we have chosen to assign an overall classification of C as this is what is applied to the majority of our WRZs.

For the risk score we have applied the methodology set out in Drought resilience metric guidance, published y Ofwat on 13 March 2018.

Performance commitment	AR06: Priority services for customers in vulnerable circumstances
Unit of measure	PSR reach: percentage of applicable households, reported to one decimal place. Actual contacts: percentage of applicable households, reported to one decimal place. Attempted contacts: percentage of applicable households, reported to one decimal place.
Boundaries	On PSR Data-Checking, it is appropriate to exclude households that have been added within the last two years on the company's PSR. This is because these entries should be up to date and therefore we would not expect companies to attempt to contact households until after they have been on the PSR for over two years. The reporting of PSR measures is done at a household level. Multiple occupiers within our PSR will only count each household once when reporting this data line and Thames Water will report individuals separately.
Reporting criteria This performance commitment is defined in the following reporting guidance: https://www.ofwat.gov.uk/publication/pr19-draft-determinations-reporting-guidance-common-performance-commitment-for-the-priority-service-register/	

The Priority Services Register (PSR) performance commitment measures the number of households on the company's PSR as a proportion of all households in the company's region. This performance commitment consists of the following criteria:

● PSR Reach: This is defined as the percentage of households that the company supplies with water and/or wastewater services which are registered on the company's PSR. This is calculated as follows:

(Number of households on the PSR as at 31 March 2021 / Total number of households served as at 31 March 2021) x 100

● PSR Actual Contacts: This is defined as the percentage of distinct households on the PSR that the company has actually contacted over a two-year period.
This is calculated as follows:

(Distinct households on the PSR where the company had actual contact over a two-year period as at 31 March 2021 / Total number of households on the PSR over a two-year period as at 31 March 2021) x 100

An 'actual contact' refers to a circumstance where the company has made a proactive attempt to engage with a customer in a household on the PSR, and has received a response which has allowed it to re-confirm personal information and update its PSR where necessary, to improve the accuracy of customer data that it holds. It also includes instances where Thames Water has received confirmation from a third party that a customer in a household on the PSR has been contacted, and the refreshed information is used by the company to update its own records.

● PSR Attempted Contacts: This is defined as the percentage of distinct households on the PSR that the company has attempted to contact over a two-year period. This is calculated as follows:

(Distinct households on the PSR which the company has attempted to contact over a two-year period as at 31 March 2021 / Total number of households on the PSR over a two year period as at 31 March 2021) x 100

An 'attempted contact' is defined as a 'proactive attempt' to engage with a customer in a household on the PSR, or a representative of the customer, (for example, their attorney or nominated third party contact) to establish whether they are still receiving the right support'. Attempted contact volumes include actual contact volumes. This also applies to customer updates made on a reactive basis, where the customer makes contact with the company. If no actual contact is made then two proactive contacts on Thames Water's behalf by email, letter, SMS or phone will count as an attempted contact.

Thames Water consider the changes in the following data fields in the billing system to count towards the actual contact target as this data supports the delivery of a tailored priority service:

- Address
- Phone number
- Email
- Priority Service Circumstance
- Priority Service Services

- Alternative contact details
- Date of confirmation, where no change confirmed to these details

Thames Water provide the following information as part of their commentary to Ofwat:

● PSR Reach: Thames Water will present PSR membership by separately reporting annual figures for households registered to receive support through PSR services for a) communication, b) support with mobility and access restrictions, c) support with supply interruption, d) support with security, and e) support with other needs. Where a company has provided 'support with other needs' the company will explain what types of needs have been included in this category.

● PSR Data-Checking: Thames Water will report the number of households added and removed from the PSR if the data is not available on the number of individuals. Where possible, the company reports the corresponding figure for individuals alongside this.

Performance commitment	DS01: Risk of sewer flooding in a storm
Unit of measure	Percentage of population at risk, reported to two decimal places.
Boundaries	Exclusions are as defined in the guidance

Reporting criteria

Risk of sewer flooding in a storm is defined within the guidance titled, Reporting guidance – Risk of sewer flooding in a storm, published on 4 April 2019:

https://www.ofwat.gov.uk/publication/reporting-guidance-risk-of-sewer-flooding-in-a-storm/

This measure will record the percentage of the region's population at risk from internal hydraulic flooding from a 1 in 50-year storm, based on modelled predictions.

Performance commitment	AR05: Percentage of satisfied vulnerable customers
Unit of measure	Percentage to zero decimal places
Boundaries	None

Reporting criteria

This is a measure of how satisfied vulnerable customers on the company's PSR are with the services they receive.

The performance is measured for the reporting year (1 April 2020 - 31 March 2021) using the existing Rant and Rave survey, which captures customer satisfaction ratings (CSAT). Responses are extracted from those customers on the Priority Services Register (PSR).

There are 5 responses as follows:

- very satisfied,
- satisfied
- neither satisfied nor dissatisfied
- unsatisfied
- very unsatisfied

For the purposes of the measure, only those who respond that they are "very satisfied" or "satisfied" will be counted toward the total.

The survey should be planned and carried out following social research best practice, for example any sections of a relevant code such as that published by the Market Research Society. The sample size should be selected to give a reasonable statistical significance for the purpose of the performance commitment.

Performance commitment	AWS02: Proactive customer engagement
Unit of measure	Number of contacts to zero decimal places
Boundaries	The Net Promoter Score (NPS) measure per the Final Determination is no longer in use. This is due to the introduction of the C-Mex measure being used to measure customer satisfaction and engagement.

Reporting criteria

This measure is the total number of proactive customer contacts in the reporting year (1 April 2020 - 31 March 2021). The measure is calculated as the total of the following types of customer contacts:

- households who receive a smarter home visit;
- business premises receiving a smarter business visit;
- households which actively participate in the Greenredeem scheme;
- schools receiving a water audit;
- customers receiving a customer visit as a result of abnormal water usage patterns;
- lead communication pipes replaced, including contact with the customer on the potential health impacts of lead customer owned pipes and plumbing; and
- wastewater behaviour campaigns - generated off a range of proactive demand reduction activities, including smarter home and business visits, smart meter data and digital customer engagement / campaigns.

Virtual smarter home and education visits are included in this measure.
The company will report each of the sub-measures separately for transparency and will at least once during the five-year period publish a report to assess the benefits resulting from the performance commitment, as far as possible based on primary evidence. This will include the relative success of different activity types and approaches. The company should also consider other ways to share learning with other companies and wider stakeholders.

Performance commitment	BW11: Responding to major trunk mains bursts
Unit of measure	Average lost time per customer in hours:minutes:seconds
Boundaries	The performance measure only accounts for interruptions greater than or equal to 3 hours in duration. Any interruptions less than 3 hours are excluded from the measure.

Reporting criteria

This measure relates to the average number of minutes lost per customer for the whole customer base for water supply interruptions that lasted three hours or more in the financial year (1 April 2020 - 31 March 2021) where the cause is identified as failure of a trunk main (≥ 18"). The metric can be calculated as follows:

The average number of minutes are as defined in BW03: Water supply interruptions but are only included for those interruptions where the cause is identified as failure of a trunk main (≥ 18").

Performance commitment	ER03: Households on the Thames Water social tariff
Unit of measure	Number of households to zero decimal places
Boundaries	None

Reporting criteria

The measure is the number of households on the company's new enhanced tiered social tariff at the end of the financial year, billed directly and indirectly. This includes all discount bands within the new social tariff (including the bandings for 25%, 50% or 75% reductions) and customers who have not yet been transferred to the new scheme but receive reduced tariffs from pre-existing legacy schemes such as Watersure+.

The number reported comprises of:

1. The volume of customers receiving financial assistance through WaterHelp who are directly billed, or indirectly billed via a Local Authority or Housing Association (LAHA), for wastewater and water, or water only service.
2. The volume of customers receiving financial assistance through WaterHelp who are indirectly billed by WOC and WASC companies on our behalf.

Performance commitment	ET02: Effective stakeholder engagement
Unit of measure	The score to one decimal place. (The score attained is a simple average of scores from interviewees)
Boundaries	None

Reporting criteria

This measure relates to the effectiveness of engagement activities with key stakeholders in the Thames Tideway Tunnel (TTT) project at 31 March 2021. The main objective of this engagement is to gain regular and impartial understanding and monitoring of key stakeholders' views on the company's performance and interaction on the TTT project. The surveys are carried out by an appropriately qualified external third-party stakeholder research company. The stakeholders are:

- Bazalgette Tunnel Limited (Tideway);
- the Environment Agency (EA);
- the Department for Environment, Food and Rural Affairs (DEFRA);
- the Independent Technical Assessor (ITA); and
- the Consumer Council for Water (CCWater).

The average score of responses to the survey is determined based on the following scale:

- 6 – extremely well;
- 5 – very well;
- 4 – quite well;
- 3 – quite poorly;
- 2 – very poorly; or
- 1 – extremely poorly.

Performance commitment	ET05: Establish an effective system operator for the London Tideway Tunnels
Unit of measure	Percentage completion to zero decimal places
Boundaries	None

Reporting criteria

This measure is the percentage completion of the development of the organisational design and of the systems and capability required to deliver the London Tideway Tunnels Operating Techniques (LTTOT). This performance commitment includes the development of the management system and associated operational team for the LTTOT by 31 March 2022, on the current SCCD of 17 October 2022. If the SCCD changes, the date of 31 March 2022 will also change to a date 6 months before the revised SCCD.

The following key enablers will need to have been delivered or substantially progressed in order to secure the achievement of this performance commitment:

System set-up and procedures:

- Development of written documents required for Tideway's System Commissioning Plan;
- Development of the management system for O&M of the London Tideway Tunnels system;
- Plan for engagement with the EA on the Operating Techniques and securing any further required Environmental Permits for CSOs;
- Asset management plans including criticality analysis.

Organisational readiness:
Establishment of the system operator team for the London Tideway Tunnels.

Organisational design confirmed, and recruitment progressed to support training prior to System Commissioning Commencement. The benchmark for this organisational capability and capacity shall be defined by a management system that can be externally assessed as progressing towards certification under a suitable international standard for an appropriate management system (such as ISO14001 or similar).

The SCCD has been changed from 17 October 2022 to the 2 October 2023. Therefore, the target date for the development of the management system and associated operational team for the LTTOT is now 31 March 2023. The source of information for this Performance Commitment is the TWUL Thames Tideway Tunnel Level 1 Programme. An update of the One LTT Integrated Management System Implementation Programme is provided Monthly by the Integrated Management System Development Manager. The plan is consolidated within the overall programme and when complete is approved by the System Operator project manager. Other sources are provided by the Progressive Assurance Workstreams.

A baseline is established for the activities within the System Operator plan. Each individual activity is then progressed monthly and the Percentage of Completion (POC) of the Plan being reported against the established baseline to achieve the target dates specified with the Performance Commitment. The forecast System Commissioning Commencement Date (SCDD) is provided quarterly by Tideway. Agreed change to the SCCD triggers a revised target for completion of the activities associated with this Performance Commitment. Progress is assessed against each item with POC determined against key milestones. Overall completion percentage is calculated using the table noted in the method statement.

Performance commitment	ET06: Maximising the value of Tideway project land sales
Unit of measure	£m to one decimal place
Boundaries	The measure excludes any sites not included in the 12 plots scheduled to be sold in the 2020-25 period.

Reporting criteria

The measure is the total net profit or loss made on the actual sale of any of the 12 plots related to the Thames Tideway Tunnel project that are scheduled to be sold in the 2020-25 period.

This is the difference between the baseline value and sale value (or net proceeds) of each plot subject to adjustments.

The net profit or loss per plot is defined as:
Net profit or loss = net proceeds - baseline value

The net proceeds are the proceeds from the sale of the relevant plot after adjusting for the costs, receipts and savings reasonably attributable to or connected with the relevant disposal which shall include associated costs related to the Project Land, such as compensation and mitigation costs, to the extent that such costs, receipts and savings were not previously allowed for when a Relevant Determination was made.

The baseline value is defined as:
Baseline value = (P * A)

- P = the percentage of land that is sold. This is the £m value of the land that is sold divided by the £m value of the land that is sold plus the £m value of the land that is not sold.
- A = the acquisition price paid by the company when acquiring the plot (in £m).

The company will report its performance as the sum of the net profit or loss of all plots sold in that year. No adjustment is made for inflation within this performance commitment.

The surplus land acquired to date and scheduled for disposal in the 2020-25 period is as follows:

- Camelford House, Albert Embankment
- Chambers Wharf, Bermondsey
- Whiffin Wharf, Carnwath Riverside
- Carnwath Industrial Estate, Carnwath Riverside
- Cringle Wharf, Kirtling Street
- 80 Kirtling Street, Battersea
- 2a Battersea Park Road, Battersea
- 88 Kirtling Street (ex V&A Stores)
- 8 Brooks Court, Battersea
- 1 Brooks Court, Battersea
- Oyster Pier, Mooring berths 1, 2 & 3
- Oyster Pier, Mooring berths 5 & 6

Performance commitment	EWS04: Natural Capital Accounting
Unit of measure	Percentage to one decimal place
Boundaries	None

Reporting criteria

This measure is the percentage of the company's landholdings, as a percentage of total appointed business landholdings, where natural capital stocks are assessed and reported publicly at 31 March each year. The company measures and reports the amount of natural capital it has at its sites. Natural capital may include stocks of species, ecological communities, soils, freshwaters, land and minerals.

WSP (third party) was appointed to perform a natural capital assessment for 100% of Thames Water's land holdings. The scope of this natural capital assessment covers all Thames Water land holdings which comprises many small to medium-sized sites across large parts of Greater London, Luton, the Thames Valley, Surrey, Gloucestershire, Wiltshire and Kent. Thames Water owns a variety of sites including reservoirs, water treatment works, recreational sites and nature reserves covering an area of just over 6,500 hectares.

The natural capital concept chosen for this assessment essentially describes the natural environment in the surroundings as a valuable resource or range of assets all people and businesses depend upon. Natural capital is the sum of Thames Water's ecosystems, species, freshwater, land, soils, minerals, air and seas. These natural capital assets provide people with valuable goods and services, called ecosystem services, which include food, clean air and water, wildlife, energy, wood, recreation and protection from hazards. The results of the assessment were presented in a report from WSP to Thames Water, which shows the list of all site names assessed, their respective areas (ha) and the aggregated scores for each of the ecosystem services identified. The reporting figure in the APR is based on the results noted in the report.

Performance commitment	AR07: BSI standard for fair, flexible and inclusive services
Unit of measure	Text (achieved or not achieved, or maintained or not maintained)
Boundaries	None

Reporting criteria

This measure assesses the quality of the company's Priority Services Register scheme via the British Standard for Inclusive Service Provision certification BS 18477.

To meet this performance commitment, the company must achieve the BS 18477 standard by 2020-21 and maintain it for the rest of the period 2021-25. If this certification from BSI is not in place on 31 March of the reporting year, the performance commitment has not been met.

The performance commitment applies each reporting year, and demonstration that the certification is in place must be tested and reported each reporting year. The BS 18477 certification is awarded by the BSI Group (also known as the British Standards Institution). In the event that BSI Group cease providing certification for BS 18477 during the period 2020-25, the company should adopt any standard designed to directly succeed the existing standard. If one is not available, it will assess whether there exists other appropriate standards that can be used as an alternative independently assessed indicator of the quality of support for customers in vulnerable circumstances.

Performance commitment	NEP01: Delivery of water industry national environment programme requirements
Unit of measure	Text stating either “met” or “not met”.
Boundaries	No specific exclusions For the 2020/21 reporting period, due to Covid-19, the completion date for all schemes was extended from March to September 2021. This was agreed with the EA.

Reporting criteria

This measure tracks the completion of required schemes in each year, as per the latest WINEP programme published by DEFRA. If any scheme is not delivered by the time specified in the WINEP tracker titled “Completion Date (DD/MM/YY)”, the company will report “not met”. All WINEP schemes will be included including those reported under other performance commitments.

The performance commitment measures against the latest WINEP tracker in the reporting period (1 April 2020 - 31 March 2021) in which performance is being reported. Therefore, performance for the reporting period is based on the latest WINEP programme on 31 March 2021 and the schemes which have been delivered by this date.

The company secures confirmation from the Environment Agency (EA) that performance has been correctly reported. The view of the EA will be definitive. The company reports all requirements that it has not met in its Annual Performance Report (APR) and set out any interactions this performance measure has with any of its other performance commitments.

Performance commitment	DWMP: Drainage and wastewater management plans (DWMPs)
Unit of measure	The cumulative percentage of catchments in which the company implements the Level 1 water company DWMP, reported to zero decimal places.
Boundaries	None

Reporting criteria

A Drainage and Wastewater Management Plan (‘DWMP’) is a long-term, adaptive plan of wastewater service, developed to provide a resilient service to our customers that protects and enhances the environment. This measure relates to cumulative percentage of catchments in which Thames Water operates, the company implements the Level 1 water company DWMP in accordance with the guideline: A framework for the production of Drainage and Wastewater Management Plans, published September 2018 and updated May 2019. Link to framework:

https://www.water.org.uk/policy-topics/managing-sewage-and-drainage/drainage-and-wastewater-management-plans/

The percentage will be calculated as a simple average of the catchments that are completed according to the guidelines and published divided by the total number of catchments and expressed as a percentage.

Level 1 planning aims to provide a strategic, long-term plan for drainage and wastewater resilience and associated investment over the plan period. Level 1 planning ties the Level 3 and Level 2 plans together resulting in:

- the baseline planning objectives,

- an assessment of risks and vulnerability of the drainage and wastewater systems,
- the actions proposed to mitigate those risks, and
- the investments necessary to deliver the outcomes identified.

Partnership working and collaborative planning involving the relevant stakeholders is one of the key elements of developing DWMPs.

Performance commitment	CC: Understanding the risk of flooding and level of resilience within the Counters Creek catchment
Unit of measure	Text stating either “met” or “not met”
Boundaries	None

Reporting criteria

Performance on this measure will be “Met” or “Fail” and will be measured at the end of the 2023–2024 reporting year. There are two elements to this measure:

- by no later than the end of July 2023, the company must deliver a fully assured report, for the Counters Creek catchment (the Report), which sets out its understanding of the risk in the catchment and outlines its long-term strategy for alleviating flooding in the area; and
- the company must report annually, via its annual performance report, on how it is managing its network to ensure long-term resilience and reduce flood risk for customers, and how it is progressively developing its understanding of flood risk in the catchment.

If the company is not able to deliver these two elements, the performance commitment will be marked as, “Fail”. The Report must detail how the company will manage long term flood alleviation in the catchment. It must outline the current risks as well as the long-term strategy for the area. It must demonstrate how the company has developed a sufficient level of understanding of the risk of flooding and level of resilience within the Counters Creek catchment to provide confidence in its proposals.

It is expected that the company will undertake a holistic approach, giving due consideration to the full spectrum of risks, maintenance activities and potential solutions available to deliver long term customer value.


Thames
Water