



STRATEGIC REVIEW OF CHARGES 2027-2033: GUIDANCE AND DEFINITIONS TO THE BUSINESS PLAN TABLES

Version 4

28 August 2025

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EDITION CHANGES

Edition		Description of Change
1	2 September 2024	Creation of SRC27 data tables guidance document.
2	7 October 2024	Recognition of the linkage between outcome measures and the Scottish Government National Performance Framework. Additional outcome measures added for drinking water quality. Clarification on the base year for the leakage, per capita consumption and business demand outcome measures.
3	12 December	Updates following workshops and consultation responses.
4	28 August 2025	Updates following Scottish Water's draft business plan submission.

Common definitions

Confidence grading

The confidence grade system has been developed to provide a reasoned basis for Scottish Water to qualify information in respect to reliability and accuracy. It is essential that proper care and a high level of application is given by Scottish Water to the assignment of confidence grades to data requiring such annexation.

There are two elements to the confidence grades:

- Reliability bands (A to D); and
- Accuracy bands (1 to 6).

The reliability bands are assigned according to the source of the information.

Reliability band	Description
A	Sound textual records, procedures, investigations or analysis properly documented and recognised as the best method of assessment.
B	As A but with minor shortcomings. Examples include old assessment, some missing documentation, some reliance on unconfirmed reports, some use of extrapolation.
C	Extrapolation from limited sample for which Grade A or B data is available.
D	Unconfirmed verbal reports, cursory inspections or analysis.

Accuracy bands provide the margin of error around the central estimate.

Accuracy band	Accuracy to or within +/-	but outside +/-
1	1%	-
2	5%	1%
3	10%	5%
4	25%	10%
5	50%	25%
6	100%	50%
X	Accuracy outside +/- 100 %, zero or small numbers or otherwise incompatible, see example below.	

The X grade is generally only likely to be appropriate where a zero has been entered.

The overall confidence grade is a combination of the reliability and accuracy band. For example:
A2: Data based on sound records etc. (A, highly reliable) and estimated to be within +/- 5% (accuracy band 2);
C4: Data based on extrapolation from a limited sample (C, unreliable) and estimated to be within +/- 25% (accuracy band 4);
AX: Data based on sound records etc. (A, highly reliable) but value too small to calculate any meaningful accuracy percentage (accuracy band X).

The table below provides a list of compatible confidence grades.

Compatible confidence grades				
Accuracy band		Reliability band		
	A	B	C	D
1	A1			
2	A2	B2	C2	
3	A3	B3	C3	D3
4	A4	B4	C4	D4
5			C5	D5
6				D6
X	AX	BX	CX	DX

As shown in the table above, certain reliability and accuracy band combinations are incompatible – for example, D1 or D2.

Scenarios

In line with the expectations of Scottish Ministers, as set out in the Commissioning letter, Scottish Water is requested to provide alternative charge paths for services in SRC27.

Scottish Water should set out a range of possible charge paths that demonstrate the extent of progress towards the Objectives of Scottish Ministers and the levels of risk of service failure associated with different levels of investment in the short, medium, and long-term.

These charge paths are referred to as ‘Reference Scenario A’ and Scenario B and Scenario C.

The full set of data tables should be fully completed for the ‘Reference Scenario A’. The assumptions, constraints and boundaries of this reference scenario should be described within the business plan.

There are two alternative scenarios, where investment will deviate from the Reference scenario.

The final business plan guidance and data tables include additional columns in tables 1, 2 and 3 to capture Scenario B and Scenario C.

Scottish Water should use the drop-down menu in table 5, column 4, to indicate the scenario to which each project is assigned. The total expenditure for each project in each scenario should be entered in table 5.

Table 8 will automatically populate the total operating expenditure for each scenario. Scottish Water should manually input any adjustments to operating expenditure under Scenarios B and C in table 7.

Scottish Water should examine whether it is feasible to deliver the Ministerial Objectives with a charge path of CPI + 2% and, if so, include it as one of the charge path scenarios (either replacing one of or in addition to the three charge paths in the draft business plan). This recognises that CPI + 2% was the long-term price path set out in SRC21. If Scottish Water decides to provide this new scenario in addition to its existing scenarios, Scottish Water should update the business plan tables accordingly to make space for it.

WICS requests that Scottish Water formally submit the financial model for each price scenario alongside the final business plan. To support this, Scottish Water should provide a commentary document which explains the assumptions behind the inputs to the financial model.

Price base

We will use a 2024-25 price base (based on financial year average) for the 2027-33 regulatory period. However, due to the timing of the draft business plan, the draft business plan should be presented in 2023-24 prices, before being updated to 2024-25 prices for the final business plan.

Testing alignment on Ministerial Objectives

It is essential for Scottish Water to ensure there is a shared view among stakeholders that Scottish Water's investment plan will meet the Ministerial Objectives. From WICS' perspective, this includes explaining whether the proposed investment aligns with the expectations of both DWQR and SEPA in relation to the Ministerial Objectives that apply to them. We expect the final business plan to clearly set out how this alignment has been tested, and how Scottish Water has ensured that the plan has the support of customers and its regulators. If there are areas of misalignment, we expect Scottish Water to provide further information on these areas to enable WICS to make a determination, e.g. the standard information required on the investment programme if related to investment.

Operating-based solutions

The final methodology recognises that Scottish Water may be able to deliver some drinking water, environmental or other levels of service improvements through alternative operating-based solutions, or through partnership approaches. Such solutions may increase Scottish Water's operating expenditure but bring wider environmental and social benefits such as increased biodiversity.

Scottish Water should evidence that it has fully considered the opportunities for operating-based solutions. Scottish Water should explain its specific plans for operating-based solutions in its final business plan and indicate where each of these solutions are included, if at all, in the final business plan data tables.

Balance between repair, refurbishment and replacement

WICS expects the final business plan to explain how Scottish Water has:

- sought to achieve an appropriate balance between repair and refurbishment and asset replacement investment in 2027-33; and
- factored the increase in repair and refurbishment investment in its top-down analysis of long-term replacement costs considering some of this investment will extend the life of assets and thus defer the need for full end-of-life replacement.

1. Outcomes

1.1. Purpose

This table presents Scottish Water's outcomes and associated level of service for customers, the environment, and other stakeholders. For each outcome, the forecast level of service is required annually for 2025-26, 2026-27, for each year of the SRC27 period and then in the final year for each of the three subsequent periods: SRC33, SRC39 and SRC45. For alternative Scenarios B and C, a forecast level of service in Year 6 of SRC27 is required.

We expect Scottish Water to translate its contribution towards the high-level outcomes from the sector vision into tangible measures and milestones over the long term. Based on these measures, Scottish Water should show how it plans to meet the Ministers' Statement of Objectives for the 2027-33 regulatory period as an important step in achieving the long-term sector vision. Scottish Water should then set the investment plan (investment outputs) consistent with making that progress and the required resources (inputs) over 2027-33.

This data table serves as an initial view of outcomes and performance measures. As Scottish Water develops its business plan, it may propose alternative or additional measures, recognising that it may want to test measures through customer research or that other measures may be more appropriate to capture given the composition of the investment programme. However, we would not expect Scottish Water to change the definitions of the current outcome measures in table 1. We would also expect Scottish Water to provide evidence to explain why alternative or additional measures are appropriate.

We believe the final list of outcomes from the business plan should be used to measure Scottish Water's performance during SRC27 through the Water Industry Investment Group (WIIG).

The initial list of outcome measures is mapped against the 2050 Vision for the Scottish Water Sector and the Scottish Government Water Sector Principles¹ in Table 1 below, where the Principles are defined as:

1. Water is a precious resource – it is essential for life. It supports our lives, agriculture and businesses (including distilleries and manufacturing etc.) and supports our environment. We will need to consider the water needed to water crops to maintain food supplies, or make different choices about the crops we grow, support tourism and to support new lower carbon industry, such as hydrogen production. At the same time, we must ensure we have enough water to provide drinking water supplies which are essential for public health and to protect Scotland's environment.

¹ Scottish Government (2023), *Water, Wastewater and Drainage Policy Consultation*, November 2023.

2. Safe drinking water is important to our health. We need to make sure that we are able to provide a reliable supply of water during dry periods and act to protect the water supplies quickly during these times. We also need to make sure that the water that reaches our taps remains safe to drink, which requires us to consider all the possible risks.
3. The changing climate means we are seeing more extreme weather events such as periods of very heavy and/or intense rainfall which can lead to spills from drainage systems to the environment and/or cause flooding to homes and businesses. We need to make greater changes in the way we manage the consequences of extreme weather events as their frequency increases.
4. Many of Scotland's wastewater treatment works are located along the coast and are vulnerable to sea level rises. This means that we need to change our approach to managing our wastewater network. Unless we respond to the changing climate by adapting our sewage services now, the costs to households, businesses and the environment arising from floods from sewers will be much higher. We also want to maximise the opportunity to use resources from wastewater and to make it easier to adopt new and future technologies.

Table 1: Scottish Water outcomes mapped against the 2050 Vision for the Scottish Water Sector and the Scottish Government Water Sector Principles

Principle	Outcome	Strategic category
1	CEM (dCEM)	Customer
1	CEM (nhCEM)	Customer
1	CEM (R-Mex)	Customer
1	CEM (hCEM)	Customer
1	CEM (UKCSI)	Customer
1	CEM (Communities)	Customer
1	Leakage	Water continuity
1	Leakage	Water continuity
1	Business demand	Water continuity
1	Per capita consumption (PCC)	Water continuity
1	Customers receiving low pressure	Water continuity
1	Unplanned interruptions	Water continuity
1	Planned and unplanned interruptions	Water continuity

Principle	Outcome	Strategic category
1	Unplanned interruptions	Water continuity
1	Water availability (drought)	Water continuity
1	Water availability (peak demand)	Water continuity
2	Drinking water aesthetics (taste and odour)	Drinking water quality
2	Drinking water aesthetics (aesthetics)	Drinking water quality
2	Drinking water quality (lead pipes)	Drinking water quality
2	Drinking water quality (lead)	Drinking water quality
2	Drinking water quality	Drinking water quality
2	Drinking water quality (risk)	Drinking water quality
2	Drinking water quality (incidents)	Drinking water quality
3, 4	Internal sewer flooding	Customer
3, 4	Internal sewer flooding	Customer
3, 4	External sewer flooding	Customer
3, 4	External sewer flooding	Customer
1	Discharge Permit Compliance	Water environment
1	Serious pollution incidents (EPI Cat 1/2)	Water environment
1	Total pollution incidents (all categories)	Water environment
1	Sludge compliance	Water environment
3, 4	Sewerage infrastructure discharges	Water Environment
1	River water quality	Water environment
3	Net zero emissions	Climate change mitigation
3	Operational emissions (water)	Climate change mitigation
3	Operational emissions (wastewater)	Climate change mitigation
3	Operational emissions (reduction to baseline)	Climate change mitigation
3	Operational emissions (net emissions)	Climate change mitigation
3	Climate change mitigation (investment emissions)	Climate change mitigation

Principle	Outcome	Strategic category
3	Climate change mitigation (carbon capture)	Climate change mitigation
3	Climate change mitigation (biodiversity)	Climate change mitigation
3	Climate change mitigation (biodiversity)	Climate change mitigation
1	Resource recovery	Water environment
3, 4	Asset health	Water environment

Scottish Water should also examine how its proposed outcome measures map onto the Scottish Government's National Performance Framework (NPF).² Scottish Water should consider whether additional outcome measures are required to address any gaps between its proposed outcome measures and the indicators that form the Scottish Government's NPF.

1.2. Guidance

As part of its business plan, Scottish Water should provide its forecast performance on each measure over the regulatory period.

Scottish Water should set out its current performance on the outcome measures and explain and evidence its forecasts for 2026-27, especially where Scottish Water forecasts a deterioration in performance.

Scottish Water should indicate in the commentary when each forecast was set, to provide an audit trail and to help stakeholders to understand how the final business plan forecasts relate to those elsewhere.

Scottish Water should then identify which of the forecasts represent targets against which it will be held accountable for delivering to customers over the regulatory period as part of the regulatory contract. Scottish Water can also propose additional outcome measures as part of its business plan submission, e.g. arising from its SRC27 customer research programme.

By setting out its annual targets before they come into effect, Scottish Water provides WICS and other stakeholders with an opportunity to comment on their reasonableness (e.g. in terms of how they are set or the overall destination over the six years and the long-term). The subsequent delivery plan and annual updates should reflect any revisions to these targets.

² Additional information on the National Performance Framework is available online at: Scottish Government, 'National Performance Framework', webpage.

Following our consultation on the draft business plan tables and guidance, we have also identified several outcome measures that require further development, covering:

- benefits to customers and communities, as a refinement or complement to the customer experience measures;
- the impact of Scottish Water's partnerships with customers, communities and other stakeholders (e.g. demand side initiatives such as information campaigns);
- environmental performance; and
- sewerage infrastructure discharges.

These are set out as placeholders in the table below for Scottish Water to propose in its business plan submission.

If Scottish Water is unable to develop appropriate measures and forecasts in these areas (e.g. sewerage infrastructure discharges), we may decide to add our own measures as part of our Draft and Final Determination.

In finalising outcome measures and setting targets, we consider that Scottish Water should also commit to the following principles:

- The measures should align with both the outcomes outlined in the Scottish Ministers' Objectives and the outcomes Scottish Water is expected to deliver as part of the water sector vision to help track progress towards achieving the water sector vision.
- The annual targets should be stretching while maintaining the incentive for outperformance.
- Scottish Water should engage with stakeholders to ensure that they have confidence in the measures and targets.
- The measures should allow Scottish Water to demonstrate its progress against its current commitments (e.g. Scottish Water's target to reduce operational emissions by at least 75% by 2030).³
- Scottish Water has a measure (or measures) covering asset condition, to allow stakeholders to understand the impact of maintenance activities on the asset base.
- Comparisons with performance over time should be retained, where appropriate (e.g. in relation to drinking water quality measures).
- Scottish Water should propose annual targets or commitments on the performance measures in its business plan, taking account of the investment programme proposed in the plan (recognising that this may change) and historic performance.
- WICS and Scottish Water should assess performance against the measures set out in the Final Determination with any management or employee incentives aligning with these measures, notwithstanding that Scottish Water may track other measures (e.g. health and safety).

³ Scottish Water (2020), '*Net Zero Emissions Routemap*', 13 September 2020.

- Outcome measures should cover all benefits that customers receive, and these measures should be mapped to the Scottish Government’s National Performance Framework (NPF). We consider that Scottish Water should identify whether there are gaps between outcome measures and the NPF and seek to fill these gaps.

It is important to note that measures for monitoring investment delivery are not included in this table and will be developed through the WIIG.

Data submitted should be subject to a rigorous, high-quality assurance process. This is critical to providing confidence to the regulator, customers, and other stakeholders that the information reported is accurate and reliable.

Scottish Water should ensure that no input cell is left blank and can include zero if applicable. The commentary should explain the source of the information and the basis for any assumptions used to populate the tables.

Each line item has a specified unit.

WICS’ feedback on the draft business plan clarifies that Scottish Water should take ownership of developing the asset health measure as the asset owner with the necessary expertise. Recognising the significant maintenance expenditure proposed for the 2027-33 regulatory period, WICS requires that the business plan include a tangible measure with forecasts for the 2027-33 regulatory period. Scottish Water should also demonstrate further that it has fully met the requirement from the final methodology to translate the impact of its maintenance activities into tangible consequences that customers will understand.

As part of this evidence, Scottish Water could explain how its maintenance activities over 2021-27 have impacted the asset base and customer outcomes. Such an assessment could help Scottish Water justify maintenance requirements for the 2027-33 regulatory period, especially for asset categories where Scottish Water proposes maintenance investment in line with current levels.

1.3. Definitions

Scottish Water is expected to include details of the methodology and forecasting approach in its business plan submission. The blank lines below identify current gaps in outcome measures. For these gaps, we ask that Scottish Water proposes measure(s) and associated unit(s) and definition(s).

The outcome measures marked with an asterisk are those that we consider there is scope to align with the measures in England and Wales.

Scottish Water should specify reporting year basis in column 1, i.e. whether it is reported per calendar year or per financial year.

Scottish Water should specify the base year against which it will track the performance in column 2.

Reference	Measure of Level of Service	Level of Service	Unit	Definition
1.01	CEM	dCEM Developer Customer Experience Measure	Number	The Developer Customer Experience Measure (dCEM) score. Scottish Water should provide its minimum expectation for performance in each year.
1.02	CEM	nhCEM Non Household Customer Experience Measure	Number	The Non-Household Customer Experience Measure (nhCEM) score. Scottish Water should provide its minimum expectation for performance in each year. [Definition of CEM and potential alignment with the CEM measure in England and Wales to be discussed with Scottish Water. Further alignment in business end user survey and addition of market performance metrics should be considered.]
1.03	CEM	R-MeX Retailer Experience Measure	Number	Survey of retailers (licensed providers) regarding their experience of service levels from Scottish Water as wholesaler.

Reference	Measure of Level of Service	Level of Service	Unit	Definition
				Mirrors MOSL's bi-annual RMeX survey in England. Conducted by external partner on Scottish Water's behalf in liaison with MOSL to ensure alignment
1.04	CEM	hCEM Household Customer Experience Measure	Number	The Household Customer Experience Measure (hCEM) score. Scottish Water should provide its minimum expectation for performance in each year. [Definition of CEM and potential alignment with the CEM measure in England and Wales to be discussed with Scottish Water.]
1.05	CEM	UKCSI UK customer Satisfaction Index	%	The UK Customer Satisfaction Index (UKCSI) is the national barometer of customer satisfaction published twice a year by The Institute of Customer Service since 2008. It is an independent, objective benchmark of customer satisfaction on a consistent set of measures on 282 organisations and organisation types across 13 sectors.
1.06	CEM	Communities experience measure		[Measure to be proposed.]
1.07	Leakage	Percentage reduction of three-year average leakage*	%	The percentage reduction of three-year average leakage in MI/d from a 2024-25 baseline. Three-year average values are calculated from annual average values for the reporting year and two preceding years and expressed in MI/d. Annual average leakage is defined as the sum of distribution system leakage, including service reservoir losses, trunk main leakage, and customer supply pipe leakage. It is reported as the annual arithmetic

Reference	Measure of Level of Service	Level of Service	Unit	Definition
				mean daily leakage expressed in MI/d. It is reported as a post-Maximum Likelihood Estimation (MLE) figure.
1.08	Leakage	Leakage reduction in areas with supply-demand balance deficit*	%	The percentage reduction of three-year average leakage in MI/d from a 2024-25 baseline for zone defined as being in supply demand deficit in 2024-25. Three-year average values are calculated from annual average values for the reporting year and two preceding years and expressed in MI/d. Annual average leakage is defined as the sum of distribution system leakage, including service reservoir losses, trunk main leakage, and customer supply pipe leakage. It is reported as the annual arithmetic mean daily leakage expressed in MI/d. It is reported as a post-Maximum Likelihood Estimation (MLE) figure.
1.09	Business demand	Percentage reduction of consumption at non-household premises*	%	The percentage net reduction of three-year average business demand in mega-litres per day (MI/d) from a 2024-25 baseline. Three-year average values are calculated from annual average values for the reporting year and two preceding years expressed in MI/d. Non-household premises include businesses, charities and public sector organisations. The measure uses post-MLE (maximum likelihood estimation) data. [Methodology to be further developed, e.g. to accommodate for economic changes such as the addition of a new or loss of an industrial user]

Reference	Measure of Level of Service	Level of Service	Unit	Definition
1.10	Per capita consumption (PCC)	Three-year average per capita consumption*	l/person /d	The three-year average PCC in litres per person per day (l/person/d). Three-year average values are calculated from annual average values from unmeasured household use for the reporting year and two preceding years expressed in l/person/d.
1.11	Customers receiving low pressure	Number of properties on the low pressure register	Number	The total number of properties on the low pressure register at the end of the year.
1.12	Unplanned interruptions	Unplanned interruptions greater than 6 hours, excluding 3rd party	Number	The weighted number of properties affected by interruptions of more than six hours' duration to supply which are unplanned or not receiving a warning (excluding overruns of planned and warned interruptions) except for those caused directly by third parties. It includes interruptions for which customers are notified less than 48 hours in advance and weather-related and health and safety concern incidents. The calculation uses the number of properties affected by interruptions lasting between 6 and 12 hours, between 12 and 24 hours, and over 24 hours, with respective weightings of 1, 2 and 4.
1.13	Planned and unplanned interruptions	Average minutes lost due to water supply interruptions (over 3 hours)*	Minutes	The average number of minutes lost per customer for the whole customer base for interruptions that lasted three hours or more. Performance should be calculated using the following equation: <i>((Properties with interrupted supply $\geq$ 180 mins) $\times$ Full duration of interruption) / Total number of properties supplied (year</i>

Reference	Measure of Level of Service	Level of Service	Unit	Definition
				<i>end</i>) = average number of minutes lost per customer. This includes planned and unplanned interruptions to supply, and third party interruptions to supply.
1.14	Unplanned interruptions	Repeat interruptions to water supply	Number	[Measure to be defined, may include measuring the number of postcodes with [6] or more contacts relating to an unplanned interruption in 1 year and/or [10] more contacts relating to an unplanned interruption in 3 years.]
1.15	Water availability	Customers supplied by systems not capable of meeting demand during a worst historic drought	Number	[Measure to be defined, may be based on critical period supply demand balance assessment against the water resource yield of 1:150 adjusted for the forecast effects of climate change.]
1.16	Water availability	Customers supplied by systems not capable of meeting peak demand	Number	[Measure to be defined, may be based on peak period against water treatment work capacity and Controlled Activities Regulation (CAR) licence.]
1.17	Drinking water aesthetics	Taste and odour contacts*	Number	The number of times customers contact the company due to the taste and odour of drinking water reported per 1,000 population. The calculation is the number of contacts for all taste, and odour contacts as reported to the Drinking Water Quality Regulator (DWQR) multiplied by 1,000 divided by the resident population. The measure is reported based on the calendar year.
1.18	Drinking water aesthetics	Discolouration and aeration contacts*	Number	The number of times customers contact the company because the drinking water is not clear reported per 1,000 population. The

Reference	Measure of Level of Service	Level of Service	Unit	Definition
				calculation is the number of contacts for all appearance contacts as reported to the Drinking Water Quality Regulator (DWQR) multiplied by 1,000 divided by the resident population. The measure is reported based on the calendar year.
1.19	Drinking water quality	Estimated number of lead pipes remaining in public network	Number	Estimated number of lead pipes remaining in public network. [Calculation method to be agreed through engagement between Scottish Water and DWQR.]
1.20	Drinking water quality	Indicator of lead in customers supply pipes	%	Percentage of random daytime regulatory samples with lead levels not greater than 3 µg/l.
1.21	Drinking water quality	Total drinking water compliance	%	Percentage of regulatory samples compliant with the regulations across all asset base – zones to use baseline sampling - including Cryptosporidium (non-UV irradiated). [Detailed methodology to be agreed by Scottish Water with DWQR]
1.22	Drinking water quality	Drinking water quality risks across all systems above long-term tolerable threshold.	Number	[Measure to be defined through engagement between Scottish Water and DWQR.]
1.23	Drinking water quality	Number of DWQR declared incidents	Number	The number of all Significant, Serious and Major events declared by DWQR for the calendar year.
1.24	Internal sewer	Number of internal	Number	The number of internal sewer flooding incidents due to Scottish Water

Reference	Measure of Level of Service	Level of Service	Unit	Definition
	flooding	sewer flooding incidents*		assets, including incidents where assets were overwhelmed by severe weather events, per 10,000 sewer connections. This measure includes flooding due to overloaded sewers (hydraulic flooding- FOS) and due to other causes (Flooding Other Causes - FOC). For the purpose of this outcome measure, a flooding incident means the total number of properties flooded during each flooding event from a Scottish Water sewer. The forecast provided in the business plan should include flooding incidents due to severe weather. Recognising that forecasting flooding incidents due to severe weather events will involve more uncertainty given climate change, Scottish Water may specify its forecast of the number of incidents arising due to severe weather events in its commentary.
1.25	Internal sewer flooding	Number of properties at risk of internal flooding	Number	The number of properties at risk of internal sewer flooding incidents per 10,000 sewer connections.
1.26	External sewer flooding	Number of external sewer flooding	Number	The number of external sewer flooding incidents due to Scottish Water assets, including incidents where assets were overwhelmed by severe weather events, per 10,000 sewer connections. This measure includes flooding due to overloaded sewers (hydraulic flooding) and due to other causes (Flooding Other Causes - FOC). For the purpose of this outcome measure, a flooding incident means the total number of areas flooded during each flooding event from a

Reference	Measure of Level of Service	Level of Service	Unit	Definition
				Scottish Water sewer. It includes all areas inside and outside property curtilage and areas such as roads, highways, and public amenities. The forecast provided in the business plan should include flooding incidents due to severe weather. Recognising that forecasting flooding incidents due to severe weather events will involve more uncertainty given climate change, Scottish Water may specify its forecast of the number of incidents arising due to severe weather events in its commentary.
1.27	External sewer flooding	Number of areas at risk of external flooding	Number	The number of areas at risk of external sewer flooding incidents per 10,000 sewer connections.
1.28	Discharge Permit Compliance	Percentage compliance with SEPA discharge permits	%	Percentage of wastewater treatment works (WwTWs) complying with their Scottish Environment Protection Agency (SEPA) discharge permit requirements.
1.29	Serious pollution incidents (EPI Cat 1/2)	Number of serious pollution incidents*	Number	The number of serious environmental pollution incidents (EPIs) categorised as 1 and 2 as set out in the reporting guidance from SEPA during the calendar year. This covers EPIs emanating from a discharge or escape of a contaminant from a water company sewerage asset or water supply asset affecting the water environment.
1.30	Total pollution incidents (all categories)	The total number of pollution incidents from a sewerage asset affecting the water	Number	Total number of pollution incidents are reported as the total number of pollution incidents (categories 1 to 3) in a calendar year. This covers pollution incidents emanating from a discharge or escape of a contaminant from a sewerage asset affecting the water environment

Reference	Measure of Level of Service	Level of Service	Unit	Definition
		environment*		per 10,000km of sewer length from wastewater assets for which Scottish Water is responsible. Total pollution incidents are defined in the total environmental pollution incidents (EPIs) metric set out in the reporting guidance from SEPA.
1.31	Sludge compliance	Percentage unsatisfactory sludge disposal	%	The percentage of total sludge disposal that is unsatisfactory.
1.32	Sewerage infrastructure discharges			[Measure(s) to be developed through engagement with Scottish Water and other stakeholders. The measure or series of measures should include discharges related to intermittent discharges, discharges from combined sewer overflows (CSOs), emergency overflows, settled storm sewage overflows and surface water overflows. We expect Scottish Water to develop and propose a measure as part of its business plan submission. If Scottish Water is unable to develop appropriate measures and forecasts in these areas (e.g. sewerage infrastructure discharges), we may decide to add our own measures as part of our Draft and Final Determination.
1.33	River water			[Measure(s) to be developed through engagement with Scottish Water

Reference	Measure of Level of Service	Level of Service	Unit	Definition
	quality			and other stakeholders.]
1.34	Net Zero Emissions	Net Zero Emissions	tCO2e	Net emissions are calculated as the balance between operational and capital investment emissions, and carbon captured using the latest available data and emission factors in each reporting year.
1.35	Operational emissions	Operational emissions (water)	tCO2e	Greenhouse gas emissions expressed in tonnes CO ₂ e (carbon dioxide equivalent) associated with operating water infrastructure. Relevant emissions are calculated using the latest UK Water Industry Research Ltd (UKWIR) Carbon Accounting Workbook (CAW).
1.36	Operational emissions	Operational emissions (wastewater)	tCO2e	Greenhouse gas emissions expressed in tonnes CO ₂ e (carbon dioxide equivalent) associated with operating wastewater infrastructure. Relevant emissions are calculated using the latest UK Water Industry Research Ltd (UKWIR) Carbon Accounting Workbook (CAW).
1.37	Operational emissions	Percentage reduction in operational emissions compared to 2006-07 baseline	%	The percentage reduction in greenhouse gas emissions expressed in tonnes CO ₂ e (carbon dioxide equivalent) compared to the 2006-07 baseline. Relevant emissions are calculated using the latest UK Water Industry Research Ltd (UKWIR) Carbon Accounting Workbook (CAW).
1.38	Operational emissions	Operational emissions (net emissions)	tCO2e	Greenhouse gas emissions expressed in tonnes CO ₂ e (carbon dioxide equivalent) net of carbon capture, electricity export or other relevant reductions. Relevant emissions are calculated using the latest UK Water Industry Research Ltd (UKWIR) Carbon Accounting Workbook (CAW). Carbon capture is assessed using methods agreed for the NZE metric.
1.39	Climate Change Mitigation	Investment emissions	tCO2e	Measurement of Scottish Water's investment emissions is calculated by taking the carbon intensity figures in the year and multiplying by the

Reference	Measure of Level of Service	Level of Service	Unit	Definition
				total investment expenditure. This approach provides total investment emissions as a figure in tCO₂e. For the purposes of the business plan, this means that: • a 2023-24 price base will be used for preparing investment emission forecasts for the draft business plan; and • a 2024-25 price base will be used for preparing investment emission forecasts for the final business plan.
1.40	Climate Change Mitigation	Carbon capture/sequestration	tCO ₂ e	Carbon captured or lost is reported as tonnes CO ₂ e and expressed as the midpoint of a range given the uncertainty.
1.41	Climate Change Mitigation	Biodiversity and Nature Based Solutions (interim measure)	Land footprint (m ²)	Increase in the cumulative area of land positively managed for nature by Scottish Water irrespective of ownership.
1.42	Climate Change Mitigation	Biodiversity and Nature Based Solutions (final measure)	Biodiversity net gain or improvement	[Measure to be developed based on discussion of a national measure involving Scottish Water, NatureScot and Scottish Government. Biodiversity and nature based solutions combined into a Biodiversity net gain unit aligned with NatureScot and Scottish Government. Full definition and unit to be agreed as the development work progresses.]
1.43	Resource recovery	Resource recovery	tCO ₂ e	Carbon reduction from resource recovery activities. Scottish Water's 'SRC27 Process for Climate Mitigation Outcome Measures' document covers this in more detail.
1.44	Asset health	Equipment/asset health index		[Measure to be developed through engagement with Scottish Water and other stakeholders.]

2. Enhancement and growth outputs

2.1. Purpose

This table covers Scottish Water’s enhancement and growth investment outputs and expenditure forecasts. Enhancement investment and outputs relate to incremental improvements in service levels, while growth investment and outputs relate to increasing the supply of water and capacity available to remove wastewater and surface water drainage in response to new demand for these services. The data required is the outputs and the associated expenditure forecast annually over the SRC27 period and then at an aggregate level for any applicable subsequent control periods. For alternative Scenarios B and C, the aggregate outputs and associated expenditure forecast over the SRC27 period is required.

This will allow for assessment of the proposed delivery of enhancement and growth investment and associated outputs with a clear line of sight to both:

- the relevant high-level investment driver, e.g. legislative need; and
- the longer-term plan and context set out in the sector vision.

It will also inform the baseline that WICS will assess Scottish Water’s performance against over the SRC27 period (and that Scottish Water will report against).

Scottish Water currently defines its investment proposals on a rolling basis through the Water Industry Investment Group (WIIG). It is recognised that when Scottish Water publishes its business plan in February 2026, its investment proposals will be at different stages of maturity, and these proposals may change as its investment progresses through the WIIG process.

2.2. Guidance

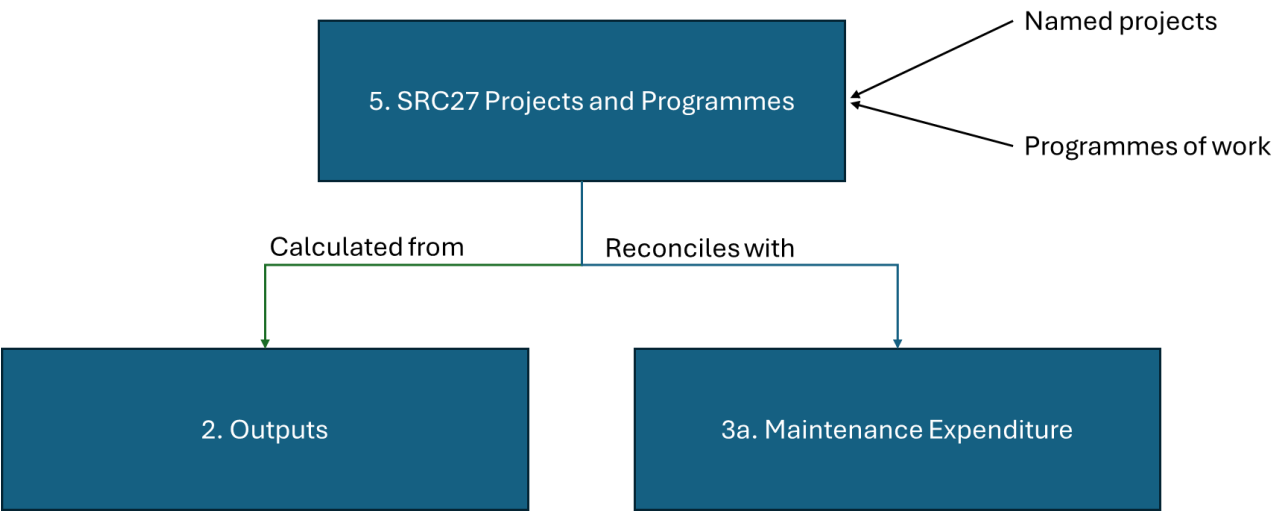
Each line is an input. Scottish Water should report expenditure data in 2024-25 price base. The units of expenditure are £m to 3 decimal places. The expenditure forecasts in this table should be inclusive of risk allowances. Units for each output are given in the definitions below.

Where Scottish Water considers projects and associated outputs will span more than one regulatory control period, it should report forecast expenditure and expected outputs for each year of the SRC27 period (and in total for SRC27) and then at an aggregate level for subsequent regulatory control periods out to the end of SRC45. The ‘Total’ column captures the cumulative position over applicable periods.

Scottish Water should only report outputs in the year they come into beneficial use for customers or the environment.

Tables 2 and 3a are intended to be a subset of the project and programme expenditure captured in table 5. To the best of its ability, Scottish Water should ensure that the majority of enhancement and growth outputs and expenditure are captured in the existing named lines in table 2. If there is remaining expenditure in table 5 which cannot be attributed to named output lines in table 2 and there is a misalignment in the total enhancement and growth expenditure between the two tables, then Scottish Water should use the “Other enhancement expenditure” and “Other growth expenditure” lines in table 2 to capture that difference. We would expect that less than 20% of the total enhancement and growth expenditure will be captured in these lines based on the lines carried forward from the Annual Return 2024 (AR24). Scottish Water should then explain the composition of these lines in its commentary (including associated outputs and why such balancing items do not align with the criteria noted immediately above for inclusion in this table).

The outputs and associated expenditure in table 2 should be directly calculated from the projects and programmes of work in table 5. The relationships between tables 2, 3a, and 5 are shown in the diagram below.



An investment driver is a primary reason for investment, linking workload and output to achieve a defined standard of service. In its table commentary, Scottish Water should set out if it has directly allocated the expenditure associated with the output, if it has had to allocate costs indirectly, or if costs reflect a mix of direct and allocated costs. It should also set out the basis on which it has – and rationale for – allocated costs (i.e., the drivers it used). Scottish Water may need to provide such commentary where, for example, a project delivers multiple enhancement or growth outputs. Where outputs and expenditure must be allocated between maintenance and enhancement, Scottish Water should again set out and justify the driver in the table commentary.

Responding to the effects of climate change should be fully embedded in how Scottish Water develops its investment programme. As such, Scottish Water should invest in a way that mitigates

the carbon emitted from investment (responding to the mitigation challenge) and future-proofs its services to the effects of a changing climate (responding to the adaptation challenge). There may be some areas of the investment programme where the sole driver or purpose for the investment is related to climate change – e.g. responding to flash flooding and improving resilience to power interruptions. In these cases, Scottish Water could include climate change as a distinct category of the enhancement investment programme. However, this needs to relate to an incremental improvement in resilience in the system – restoring resilience to its original level through replacing an ageing asset should be considered asset replacement.

The population equivalent should be calculated assuming that the resident connected population contributes 60g BOD₅/head/day.

Outputs that Scottish Water shall not substitute are marked with an asterisk in table 2 and in the definitions below. These outcomes are required for benchmarking Scottish Water's performance.

2.3. Definitions

For the purpose of these definitions, a ‘scheme’ covers both programmes of work and projects.

ENHANCEMENT AND GROWTH OUTPUTS AND INVESTMENT DATA

Column Title	Description	Units
Output area	Pre-populated. Output area associated with the output.	N/A
Output category	Pre-populated. Description of the output category.	N/A
Unit	Pre-populated. The standard of measure of output.	N/A
Related outcomes	Main outcome in table 1 that the output has been mapped to. Where an output may contribute towards more than one outcome, outputs should be mapped to the main outcome they contribute to.	N/A
Service	The broad service the output is associated with. Entries should be limited to Water; Foul Sewage & Surface Water Shared; Foul Sewage Only; Surface Water Only; or Water & Wastewater Shared.	N/A
Forecast output	The tangible deliverables in each year of the regulatory control period for SRC27, and then aggregated for each subsequent regulatory control period post SRC27. Scottish Water shall also provide the aggregate outputs for SRC27 for alternative Scenarios B and C respectively. Outputs should be reported for each year rather than cumulatively.	As per ‘Proposed units’
Capex £m	The enhancement and growth investment expenditure associated with delivering the specified outputs profiled in each year of the regulatory control period for SRC27, and then aggregated for each subsequent regulatory control period post SRC27. Scottish Water shall also provide the aggregate expenditure for SRC27 for alternative Scenarios	£m in 2024-25 price base

Column Title	Description	Units
	B and C respectively. Expenditure should be reported for each year rather than cumulatively.	

OUTPUTS DEFINITIONS

Reference	Output category	Definition	Units
2.1	Increase in Part 4 capacity at WTW	Outputs and expenditure associated with mega-litres per day (Ml/d) increases at (water treatment works) WTW to meet additional strategic capacity.	Ml/d
2.2	Increase in Part 4 capacity to meet wastewater growth requirements	Outputs and expenditure associated with increases in population equivalent (p.e) capacity for removing and treating both foul sewage and surface water to meet additional strategic capacity.	Population equivalent
2.3	Additional Part 3 capacity enabled from strategic water network reinforcement	Outputs and expenditure associated with additional Ml/d Capacity enabled from strategic water network reinforcement.	Ml/d
2.4	Additional Part 3 capacity enabled from strategic wastewater network reinforcement	Outputs and expenditure associated with additional p.e capacity enabled from strategic wastewater network reinforcement. Expenditure on assets related to foul sewage only or surface water only should also be reported in this line.	Population equivalent

Reference	Output category	Definition	Units
2.5	Number of lead communication pipes replaced	Outputs and expenditure associated with number of lead communication pipes replaced.	Number
2.6	Capacity at WTW with new or optimised phosphate equipment	Outputs and expenditure associated with new or optimised phosphate equipment at water treatment work (WTW) sites.	MI/d
2.7	Capacity at WTW sites with new auto-shutdown risk control interventions	Outputs and expenditure associated with new auto shutdown risk control interventions at WTW sites.	MI/d
2.8	Capacity at WTW sites made compliant with standards	Outputs and expenditure associated with making WTW sites compliant with standards.	MI/d
2.9	Capacity at WTW sites with improved treatment process	Outputs and expenditure associated with improved treatment processes at WTW sites (exclude outputs and expenditure from line 2.8 Capacity at WTW sites made compliant with standards for bringing sites into compliance).	MI/d
2.10	Number of raw water supplies with improved water quality	Outputs and expenditure associated with improving the water quality of raw water supplies.	Number
2.11	Number of Event Duration Monitors (EDM) deployed*	Outputs and expenditure associated with number of event duration monitors deployed (duty/standby monitors at the same point should be counted as one).	Number
2.12	Number of unsatisfactory intermittent discharges (UID) improved or removed	Outputs and expenditure associated with unsatisfactory intermittent discharges (UIDs) improved or removed for water quality and/or aesthetic purposes.	Number

Reference	Output category	Definition	Units
2.13	Number of sites with Water Framework Directive improvements	Outputs and expenditure associated with Water Framework Directive (WFD) improvements at regulatory abstraction and impoundment sites.	Number
2.14	Number of sites with reservoir drawdown enhancements	Outputs and expenditure associated with reservoir drawdown enhancements at regulatory abstraction and impoundment sites.	Number
2.15	Increase in renewable energy generated	Outputs and expenditure associated with increased renewable energy generation.	GWh / Annum
2.16	Population equivalent of WWTW sites with environmental pollution risk reduced	Outputs and expenditure associated with reductions in environmental pollution risk at wastewater treatment work (WwTW) sites.	Population equivalent
2.17	Area of carbon capture sites established or supported	Outputs and expenditure associated with carbon capture sites established or supported.	Hectares
2.18	Number of sludge treatment centres achieving compliance with Industrial Emissions Directive	Outputs and expenditure associated with achieving compliance with the Industrial Emissions Directive (IED) at sludge treatment centres through compliance actions plans.	Number
2.19	Reduction in energy usage through improved energy efficiency	Outputs and expenditure associated with a reduction in operational energy usage through improved energy efficiency.	GWh / Annum
2.20	Number of properties where persistent low pressure is	Outputs and expenditure associated with resolving persistent low pressure at	Number

Reference	Output category	Definition	Units
	resolved	properties.	
2.21	Number of properties with reduced risk of flooding from mains	Outputs and expenditure associated with interventions to reduce the risk of flooding from mains.	Number of properties
2.22	Number of properties with improved resilience of water supply	Outputs and expenditure associated with improving the resilience of the water supply.	Number of properties
2.23	Number of properties removed from internal flooding at risk register	Outputs and expenditure associated with removing properties from internal flooding at risk register. Do not include properties or expenditure associated with temporary internal flood prevention measures.	Number
2.24	Number of properties removed from external flooding at risk register	Outputs and expenditure associated with removing properties from external flooding at risk register.	Number
2.25	Number of sites enabled for community access	Outputs and expenditure associated with enabling sites for community access.	Number
2.26	Number of new top-up-from-the-tap points	Outputs and expenditure associated with new top-up-from-the-tap points.	Number
2.27	Number of properties with meter installations for first time registered non-domestic premises	Outputs and expenditure associated with meter installations for first time registered non-domestic premises.	Number

Reference	Output category	Definition	Units
2.28	Number of domestic smart meters installed	Outputs and expenditure associated with domestic smart meter installation.	Number
2.29	Population equivalent of WTW sites with legacy sludge issues resolved	Outputs and expenditure associated with resolving legacy sludge issues at WTW.	Population equivalent
2.30	Length of service relocations - water mains	Outputs and expenditure associated with service relocations of water mains.	km
2.31	Length of service relocations – sewers	Outputs and expenditure associated with service relocations of sewers.	km
2.32	Number of wastewater treatment improvement studies	Outputs and expenditure associated with wastewater treatment improvement studies.	Number
2.33	Number of climate change audits and studies	Outputs and expenditure associated with climate change audits and studies.	Number
2.34	Increase or replacement of capacity of treated water storage for enhancement or growth purposes	Outputs and expenditure associated with installing treated water storage capacity for enhancement or growth purposes. Include increased capacity from service reservoirs and water towers based on installed/increased design/construction capacity. Include treated water reservoirs at water treatment works and any secondary disinfection plant on reservoir sites. Include break pressure tanks. Exclude decommissioned assets. This is the same as Ofwat RAG4.12 6B.2-3.	MI/d

Reference	Output category	Definition	Units
2.35	Increase or replacement of capacity of raw water storage for enhancement or growth purposes	Outputs and expenditure associated with installing raw water storage capacity for enhancement or growth purposes. Include increased capacity of all reservoirs used for holding raw water. This line shall include new or expanded impounding reservoirs, pumped storage reservoirs, bank side storage facilities and balancing reservoirs used for holding transported raw water. Increased capacity should be based on their installed/increased design/construction capacity. This is the same as Ofwat RAG4.12 5A.19 & 6A.2.	MI/d
2.36	Increase or replacement of wastewater storage volume for enhancement or growth purposes	Outputs and expenditure associated with installing wastewater storage volume in the combined sewerage network to meet new or tightened spill frequency requirements. This is for enhancement or growth purposes. The volume reported should be the volume required to meet the permit conditions (most commonly the storage volume that must be filled before any discharge takes place), rather than what was constructed (which may be different due to factors related to the design or construction). Increases due to increases in combined/trunk sewer capacity and network attenuation/flow management should be included, where a reduction in storm overflow spills is the driver. Exclude additional storage at WWTW and growth-driven schemes. This is the same as Ofwat RAG4.12 7E.13-14; Ofwat PR24 BP table guidance CWW3.31-3.45.	m3

Reference	Output category	Definition	Units
2.37	Increase in storage capacity delivered through Blue-Green Infrastructure	Outputs and expenditure associated with increasing surface water storage capacity outside of the combined sewerage network (to the benefit of the combined sewerage network) to meet new or tightened spill frequency requirements through new or additional blue-green infrastructure. We recognise that there is relatively higher uncertainty in this area and that Scottish Water may need to provide estimates. This is the same as Ofwat PR24 BP table guidance CWW3.25-3.27.	m3
2.38	Demand-side improvements delivering benefits (excluding benefits from metering and leakage reductions)*	Outputs and expenditure that enhance the supply-demand balance. This should only include expenditure associated with projects delivering demand-side (water efficiency options) enhancements. This excludes benefits from leakage and metering activities as these are captured in other lines in this table This is the same as Ofwat RAG4.12 4L.23-25.	MI/d
2.39	Area subject to interventions to improve biodiversity*	Outputs and expenditure associated with interventions to improve biodiversity on Scottish Water land.	Hectares
2.40	Meter upgrades – households*	Outputs and expenditure associated with upgrades to existing household meters. Includes existing residential customer meter installations where basic meters were upgraded to/replaced with automatic meter reading (AMR) or advanced metering infrastructure (AMI) meters during the report year; and where AMR meters were upgraded to/replaced with AMI meters during the report year.	Number

Reference	Output category	Definition	Units
		This is the same as Ofwat RAG 4.12 6D.17-18.	
2.41	Meter upgrades - non-households*	Outputs and expenditure associated with upgrades to existing non-household meters. Includes existing non-household customer meter installations where basic meters were upgraded to/replaced with AMR or AMI meters during the report year; and where AMR meters were upgraded to/replaced with AMI meters during the report year.	Number
		This is the same as Ofwat RAG 4.12 6D.19-20	
2.42	Length of potable water mains renewed*	Outputs and expenditure associated with renewal of potable water mains. Include mains where the primary purpose is a renewal of an existing main, even where the existing main remains in service (i.e. is not abandoned immediately on commissioning of new main). Include mains sleeving/pipe cracking/slip lining if used for this category of work	km
		This is the same as Ofwat RAG 4.12 6C.3.	
2.43	Additional WAFU benefit from supply interconnectors*	Outputs and expenditure associated with additional water available for use (WAFU) benefits arising from supply interconnectors. Interconnectors reported here should actively increase WAFU over just providing increased zonal interconnectivity/resilience. Outputs should account for all water resource zones and represent the total WAFU benefit from internal interconnections delivered during the year to	MI/d

Reference	Output category	Definition	Units
		provide supply demand balance benefit.	
		This is the same as Environment Agency WRMP24 table instructions B10-12 & E4.	
2.44	Length of new supply interconnectors*	Outputs and expenditure associated with new supply interconnectors. Interconnectors reported here should actively increase WAFU over just providing increased zonal interconnectivity/resilience.	km
		This is the same as Environment Agency WRMP24 table instructions B10-12 & E4.	
2.45	Length of new resilience interconnectors*	Outputs and expenditure associated with new resilience interconnectors. Interconnectors reported here would not provide additional WAFU benefit.	km
2.46	Increase in total flow to full treatment*	Outputs and expenditure associated with increasing flow to full treatment at WWTW.	l/s
		This is the same as Ofwat RAG4.12 4M.10-12.	
2.47	Number of flow monitors installed at WWTW*	Outputs and expenditure associated with installation of flow monitoring at WwTW or last in line sewage pumping stations. Scottish Water should clearly set out in its table commentary how much of the costs for these lines are for: • permit changes only;	Number

Reference	Output category	Definition	Units
		• simple meter installations; or • more complex civils installations/works. This is the same as Ofwat RAG4.12 4M.7-9; Ofwat PR24 BP table guidance CWW3.4-3.6.	
2.48	Population equivalent of WWTW sites made compliant with standards - chemical removal*	Outputs and expenditure associated with making WwTW sites compliant with chemical removal standards. Output and expenditure should be linked to WwTW at which new or tightened permit conditions for chemicals or other hazardous substances are required to achieve good chemical status, prevent deterioration in chemical status, or achieve standstill limits for chemicals, delivered in the report year. This is the same as Ofwat RAG4.12 7D.22.	Population equivalent
2.49	Population equivalent of WWTW sites made compliant with standards – phosphorus*	Outputs and expenditure associated with making WwTW sites compliant with phosphorous standards. Outputs and expenditure should be linked to biological filter WwTWs or activated sludge WwTWs at which new or tightened consent conditions for phosphorus are met by legislatively driven projects delivered in the report year. This is the same as Ofwat RAG4.12 7D.17.	Population equivalent
2.50	Population equivalent of WWTW sites made	Outputs and expenditure associated with making WwTW sites compliant with sanitary parameter standards. Output and expenditure should be linked to WwTWs	Population equivalent

Reference	Output category	Definition	Units
	compliant with standards - sanitary parameters*	at which new or tightened consent conditions for one or more sanitary parameters are met by legislatively driven projects delivered in the report year. This is the same as Ofwat RAG4.12 7D.19.	
2.51	Population equivalent of WWTW sites made compliant with standards - other	Outputs and expenditure associated with making WwTW sites compliant with other standards. Output and expenditure should be linked to WwTWs at which new or tightened consent conditions for one or more sanitary parameters are met by legislatively driven projects delivered in the report year.	Population equivalent
2.52	Number of screens installed*	Outputs and expenditure associated with new or upgraded screening to storm overflows. This is the same as Ofwat PR24 BP table guidance CWW3.46-3.48.	Number
2.53	Number of studies completed*	Outputs and expenditure associated with investigations and options appraisals that aim to identify actions or determine impacts, costs and/or technical feasibility of meeting environmental targets. Investigations are likely to be linked to the different categories such as WFD (Flow Investigations) Water; WFD (Water Quality); WFD-Ground Water; and WFD Water. This is the same as Ofwat PR24 draft determinations: Price control deliverables appendix, page 75 & this PR24 draft determination file)	Number

Reference	Output category	Definition	Units
2.54	Reduction in leakage*	Outputs and expenditure associated with incremental leakage enhancement reductions for each year. This is expected to include but not be limited to expenditure on active leakage control, pressure management and mains replacement. Expenditure on maintaining leakage should be excluded. Report reductions as negative numbers. This is the same as Ofwat RAG4.12 6D.22-23.	MI/d
2.55	Number of properties connected to Scottish Water's network from private water supplies	Outputs and expenditure associated with properties connecting to Scottish Water's network when previously supplied by a private supply. Include the costs associated with any meter, communication pipe and stop tap required, and any requisition mains (e.g., to connect the private supply/supplies to the existing network). This is the same as Ofwat RAG4.12 4N.1.	Number
2.56	Number of lead communication pipes relined	Outputs and expenditure associated with relining lead communication pipes for quality reasons (as per any agreed programme and schedule of works with the DWQR and the associated instruments of works). Include all lead communication pipes replaced at customers' request through water quality regulations. This is the same as Ofwat RAG 4.12 6C.21.	Number
2.57	Reduction in emissions	Outputs and expenditure associated with reducing operational and investment emissions. Output in terms of emissions should be consistent with the emissions	tCO2e

Reference	Output category	Definition	Units
		outcomes defined in table 1 above.	
2.58	Other enhancement expenditure	A balancing line for enhancement-related expenditure where the expenditure total in this table does not align with the total enhancement-related expenditure in table 5. Output columns for this line are not applicable.	£m
2.59	Other growth expenditure	A balancing line for growth-related expenditure where the expenditure total in this table does not align with the total growth-related expenditure in table 5. Output columns for this line are not applicable.	£m
2.60	Total	Total enhancement and growth expenditure. Output columns for this line are not applicable.	£m

3. Maintenance expenditure and asset health

The draft tables, guidance and definitions to the business plan contained one “Table 3. Maintenance expenditure” which aimed to capture both expenditure and asset health. Following Scottish Water’s response to the consultation on this draft, the final tables split the reporting of this data into “Table 3a. Maintenance Expenditure” and “Table 3b. Asset Health” to allow asset health to be reported by the asset categories Scottish Water uses for its asset modelling.

3.1. Table 3a: Maintenance expenditure

3.1.1. PURPOSE

This table captures the asset maintenance work planned for SRC27. This expenditure on each asset category is categorised as either replacement, repair or refurbishment. The table includes information relating to the overall asset inventory of Scottish Water in order to capture the difference between economic depreciation and asset maintenance expenditure. This table provides information on:

- the expenditure of asset replacement, repair and refurbishment interventions forecast in each year of the SRC27 regulatory control period;
- the number of assets, their unit cost of replacement, capacity, asset value and expected asset lifetime; and
- the asset replacement surplus or deficit generated in SRC27, i.e., the difference between the actual replacement expenditure and the average annual run-rate for replacement calculated based on the asset value divided by the assumed asset life.

3.1.2. GUIDANCE

Maintenance expenditure is investment in assets in order to maintain existing service levels to customers. This can comprise fixing an existing asset to ensure it meets its expected life (asset repair), extending the life of an existing asset (asset refurbishment) or replacing the asset outright (asset replacement). This may also be referred to as capital maintenance.

Table 3a has an input line for each sub-asset category. There are sub-total lines for each service level and a total line that captures the position over applicable regulatory control periods. Scottish Water should report maintenance expenditure in 2024-25 price base. The units of expenditure are £m to 3 decimal places. The expenditure forecasts in this table should be inclusive of risk allowances. Units

for other asset inventory data are given in the definitions below. Data is requested annually over the SRC27 period, with a calculated total for aggregating the six years.

For those investment projects or programmes involving the replacement of an asset with another that provides a higher level of service or additional capacity, the allocation to asset replacement should be the optimised replacement cost of the asset. Optimised replacement is defined as replacing an asset with one with the equivalent productive capacity, taking account of modern materials, techniques and design. Any incremental expenditure over and above the optimised replacement cost of the asset should either be allocated to:

- enhancement – if the project involves replacement of an asset with another that provides a higher level of service in response to a legislative or other requirement; or
- growth – if the project involves the replacement of an asset with another that provides additional capacity.

For the avoidance of doubt, this guidance uses optimised replacement and Modern Equivalent Asset Value (MEAV) interchangeably.

See chapter 2.2 for how climate change should be treated.

Tables 2 and 3a are intended to represent a subset of the project and programme expenditure captured in table 5.

WICS expects the final business plan to explain how Scottish Water has sought to achieve an appropriate balance between repair and refurbishment and asset replacement investment in 2027-33, and how Scottish Water has factored the increase in repair and refurbishment investment in its top-down analysis of long-term replacement costs considering some of this investment will extend the life of assets and thus defer the need for full end-of-life replacement.

3.1.3. DEFINITIONS

An asset intervention relates to activity carried out by Scottish Water on an asset. The definition of intervention(s) depends on the type of investment. These definitions for maintenance investments are:

- asset replacement: the number or length of assets replaced;
- asset refurbishment: the number of discrete refurbishments carried out on an asset; and
- asset repair: the number of discrete repairs carried out on an asset.

Confidence grades should be assigned in accordance with the guidance in chapter 'Common Definitions'.

Column Reference	Column Title	Description	Units
N/A	Block A: Assets	Assets are classified as: <u>Service:</u> Water, Foul sewage & surface water shared assets, Foul sewage only, Surface water only <u>Functional Activity:</u> Source, Water Network, Wastewater Network, Water Treatment, Wastewater Treatment, Discharge, Business Services <u>Asset category:</u> aligned to AR24 table G2 <u>Sub-asset category:</u> aligned to AR24 table G2	N/A
1 to 21	Block B: Capital Expenditure (£m) (2024-25 Price Base)	The annual expenditure over the SRC27 period for each sub-asset category. Data is classified as either Replace(ment), Repair or Refurbish(ment) as per the definitions above.	£m in 2024-25 price base

Column Reference	Column Title	Description	Units
22	Number of assets	The number of Scottish Water's assets as of 31 March 2025 split by asset category and sub-asset category.	Nr
23	Units	The standard unit of measure of the sub-asset category.	N/A
24	Unit cost of replacement (£m; 2024-25 price base)	The total expenditure which would be incurred to replace one unit of the sub-asset category as of 31 March 2025. If the assets have varying capacities, then this average should be weighted by the asset capacity.	£m in 2024-25 price base
25 26	Asset capacity Units	The total capacity of all assets in the sub-asset category as of 31 March 2025. Enter the associated unit measure.	MI/d or m3 for water assets and population equivalent or m3 for wastewater assets
27 28	Asset value (£m) (2024-25 price base) Confidence grade	The total Modern Equivalent Asset Value (MEAV) of all assets in the sub asset category as of 31 March 2025. This should be provided on an optimised replacement cost basis or a consistent basis as the high-level asset replacement work completed for the Strategic Review of Charges 2021-27 (SRC21). This analysis can be found on page 64 of the WICS's SRC21 draft determination. Optimised replacement is defined as replacing an asset with one with the equivalent productive capacity, taking account of modern materials, techniques and design. The asset value should have a confidence grade assigned, in line with the definition in chapter 'Common Definitions'.	£m in 2024-25 price base

Column Reference	Column Title	Description	Units
29	Assumed asset life (years)	The lifetime of Scottish Water’s assets split by asset category and sub-asset category. This should be a weighted average based on asset value. Asset lifetime is the amount of time (measured in years) that elapses from installation to the end of the asset’s useful life (the point at which the asset is decommissioned and replaced with an alternative means of providing the service). The assumed asset life should have a confidence grade assigned, in line with the definition in chapter ‘Common Definitions’.	Years
30	Confidence grade		
31	Annual run-rate (£m) for replacement	The expected annual expenditure of the sub-asset to fully recover the replacement cost.	£m in 2024-25 price base
32	Block D: Asset Replacement Surplus/Deficit in SRC27 (£m) (2024-25 Price Base)	The forecast cumulative difference over the SRC27 period of expenditure and average annual run rate for replacement. This column is calculated based on data reported in previous columns.	£m in 2024-25 price base
33 to 41	Block E: Average Annual Capital Expenditure by Scenario (£m) (2024-25 Price Base)	The average annual capital expenditure over the SRC27 period for each sub-asset category and for each of the three scenarios as per chapter ‘Common Definitions’. Data is classified as either Replace(ment), Repair or Refurbish(ment) as per the definitions above.	£m in 2024-25 price base

The assets should be split between five service levels – water, foul sewage and surface water shared assets, foul sewage only, surface only and water and wastewater shared assets (or business services).

GUIDANCE FOR LEAD PIPES

The capital expenditure associated with Water Mains: Communication pipes - lead line should equal the costs reported in table 2 associated with output “Number of lead communication pipes replaced.” In table 3a, these costs will be compared to the total asset inventory and the average annual run-rate. However, these costs should be excluded from the asset replacement expenditure totals in table 3a (the total line for Water assets and, subsequently, the total line for all assets).

In Block B and Block E, total expenditure on water assets excludes expenditure on lead communication pipes to avoid double counting with table 2, line 2.5. In Block C and D lead communication pipes are included in the calculations for total asset value of water assets, annual run-rate (£m) for replacement of all water assets, and the asset replacement surplus/deficit for all water assets.

3.2. Table 3b: Asset health

3.2.1. PURPOSE

This table captures the health of the asset base in the base year (as at 31 March 2025) of the SRC27 period, at the end of the SRC27 period as impacted by the capital maintenance expenditure proposed in the business plan, and at the end of Scottish Water's Long-Term Investment Strategy (LTIS) period in 2050-51 as impacted by the long-term planned maintenance expenditure in SRC33, SRC39 and SRC45 periods.

Asset health is reported for those assets which Scottish Water has model information on (referred to as 'modelled assets').

This assessment is being undertaken to understand the potential requirements for asset replacement over SRC27. The data can be used to check whether replacement interventions are keeping pace with deterioration and to determine whether it can provide further insight into emerging asset risks.

3.2.2. GUIDANCE

WICS's methodology sets out that Scottish Water should, as far as possible, translate the impact of maintenance activities on asset condition into tangible consequences that customers will understand. This is important for allowing stakeholders to understand the impact of maintenance activities on the asset base.

Scottish Water has proposed to capture this using its Equipment Health Index (EHI) measure as defined in the table below.

Scottish Water has explained that this measure is at an early stage of maturity and would require further development during the SRC27 period.

As such, we require Scottish Water's business plan to include an improvement plan to address the data and knowledge gaps in its asset condition reporting and forecasting. We expect the improvement plan to be detailed, covering the expected milestones and the due dates for making the proposed improvement activities that Scottish Water could be held accountable for meeting. We also request that for each improvement activity Scottish Water indicates when the information would be reported to WICS with reference to the annual return submission in a specific year. This will allow us to assess whether Scottish Water is making appropriate progress in improving the gaps in its data and knowledge of the condition of its assets.

Confidence grades should be assigned in accordance with guidance in chapter ‘Common Definitions’.

3.2.3. DEFINITIONS

EQUIPMENT HEALTH INDEX BAND DEFINITIONS

Asset lifetime is defined as the amount of time (measured in years) that elapses from installation to the end of the asset's useful life (the point at which the asset is decommissioned and replaced with an alternative means of providing the service).

Band	Description
1	Length of network with actual asset age less than 65% of expected asset life
2	Length of network with actual asset age between 65% and 85% of expected asset life
3	Length of network with actual asset age between 85% and 100% of expected asset life
4	Length of network with actual asset age more than 100% of expected asset life
X	Unable to quantify

Column Reference	Column Title	Description	Units
N/A	Block A: Assets	Assets are split into three categories: Modelled Assets, Infinite-Life Assets and Unmodelled Assets. The Modelled Assets are classified as per Scottish Water's Level 1 asset models. The Infinite-Life Assets and Unmodelled Assets follow the classification in table 3a.	N/A
1 to 6	Asset health as at 31 March 2025 (% total assets)	The percentage of the total number of assets for each asset line which falls under each EHI band as at 31 March 2025. The sum across columns 1 to 5 should total	%

Column Reference	Column Title	Description	Units
	Confidence grade	100%.	
7 to 8b	Total SRC27 maintenance expenditure (£m) (2024-25 price base)	These columns are calculated fields which bring forward the expenditure from table 3a.	£m in 2024-25 price base
9 to 14	Asset health as at 31 March 2033 (% total assets) Confidence grade	The forecast percentage of the total number of assets for each asset line which falls under each EHI band as at 31 March 2033. The sum across columns 9 to 13 should total 100%.	%
15 to 17	Long-term planned maintenance expenditure (£m) (2024-25 price base)	The long-term planned maintenance expenditure as per Scottish Water's Long-Term Investment Strategy for each of the subsequent regulatory periods: SRC 2033-39, SRC 2039-45 and SRC 2045-51.	£m in 2024-25 price base
18 to 23	Asset health as at 31 March 2051 (% total assets) Confidence grade	The forecast percentage of the total number of assets for each asset line which falls under each EHI band as at 31 March 2051. The sum across columns 18 to 22 should total 100%.	%
24 to 35	Block C: Asset Health Under Alternative Scenarios Confidence grade	The Scenario B and Scenario C forecast percentage of the total number of assets for each asset line which falls under each EHI band as at 31 March 2033. The sums across columns 24 to 28 and across columns 30 to 34 should each total 100%.	%

4. Mains and sewers condition

4.1. Purpose

This table will contribute towards meeting the methodology requirement for Scottish Water to “provide a measure (or measures) of asset condition across its asset base and, as far as possible, translate the impact of maintenance activities on asset condition into tangible consequences that customers will understand”. The data in this table is more granular than the data on infrastructure assets in table 3b.

This assessment is being undertaken to understand the potential requirements for asset replacement over SRC27. The data can be used to check whether replacement interventions are keeping pace with deterioration and to determine whether it can provide further insight into emerging asset risks.

Confidence grades should be assigned in accordance with guidance in chapter ‘Common Definitions’.

4.2. Definitions

The tables below show the requirements for asset performance/condition by material type, condition grade relative to the burst rate, and Equipment Health Index (EHI), which measures actual age relative to expected asset lifetime.

WATER MAINS DATA

Line Reference	Block Title	Description	Units
4.1 to 4.7	Block A: Length of Water Mains (km) by Condition Grade as at 31 March 2025	Provide the length of main classified by each material type and condition grade (as defined in the table below) as a baseline as at 31 March 2025.	km
4.8 to 4.14	Block B: Length of Water Mains (km) by Condition Grade as at 31 March 2033 (No Investment, Asset Deterioration Case Only)	Provide the length of main classified by each material type and condition grade (as defined in the table below) as at 31 March 2033 assuming no investment takes place between 31 March 2025 and 31 March 2033. In other words, this data should represent the asset condition as affected only by asset deterioration.	Number
4.15 to 4.21	Block C: Length of Water Mains (km) by Condition Grade as at 31 March 2033 (Proposed Investment Case)	Provide the length of main classified by each material type and condition grade (as defined in the table below) as at 31 March 2033 assuming that Scottish Water delivers the proposed investment in SRC27 under (Reference) Scenario A. In other words, this data should represent the asset condition as affected by both asset deterioration and the proposed investment.	Number
4.22 to 4.27	Block D: Length of Water Mains (km) by Equipment Health Index Band as at 31 March 2025	Provide the length of main classified by each material type and Equipment Health Index (EHI) band (as defined in the table below) as a baseline as at 31 March 2025.	km

Line Reference	Block Title	Description	Units
4.28 to 4.33	Block E: Length of Water Mains (km) by Equipment Health Index Band as at 31 March 2033 (Proposed Investment Case)	Provide the length of main classified by each material type and Equipment Health Index (EHI) band (as defined in the table below) as at 31 March 2033 assuming that Scottish Water delivers the proposed investment in SRC27 under (Reference) Scenario A. In other words, this data should represent the asset condition as affected by both asset deterioration and the proposed investment.	km

WATER MAINS CONDITION GRADING

Baseline data as at 31 March 2025 should be based on the average of the annual number of bursts from 1 April 2021 to 31 March 2025. Forecast data as at 31 March 2033 should be based on the average of the annual number of bursts from 1 April 2029 to 31 March 2033.

Grade	Description
1	Excellent Bursts average up to 125/1000km/annum over four years, (equivalent to 2000 metres or more between bursts over the four-year period).
2	Good Bursts average greater than 125 up to 250 burst/1000 km/annum over four years, (equivalent to less than 2000 metres down to 1000 metres between bursts over the four-year period).
3	Adequate Bursts average greater than 250 up to 500 bursts/1000km/annum over four years (equivalent to less than 1000 metres down to 500 metres between bursts over the four-year period).
4	Poor Bursts average greater than 500 up to 1000/1000 km/annum over four years (equivalent to less than 500 metres down to 250 metres between bursts over the four-year period).

Grade	Description
5	Very Poor Bursts average greater than 1000/1000 km/annum over four years (equivalent to less than 250 metres between bursts over the four-year period).

EQUIPMENT HEALTH INDEX BAND DEFINITIONS

Asset lifetime is defined as the amount of time (measured in years) that elapses from installation to the end of the asset's useful life (the point at which the asset is decommissioned and replaced with an alternative means of providing the service).

Band	Description
1	Length of network with actual asset age less than 65% of expected asset life
2	Length of network with actual asset age between 65% and 85% of expected asset life
3	Length of network with actual asset age between 85% and 100% of expected asset life
4	Length of network with actual asset age more than 100% of expected asset life
X	Unable to quantify

WASTEWATER SEWERS DATA

Line Reference	Block Title	Description	Units
4.34 to 4.40	Block F: Length of Wastewater Sewers (km) by Condition Grade as at 31 March 2025	Provide the length of sewer classified by each sewer type and condition grade (as defined in the table below) as a baseline as at 31 March 2025.	km

Line Reference	Block Title	Description	Units
4.41 to 4.47	Block G: Length of Wastewater Sewers (km) by Condition Grade as at 31 March 2033 (No Investment, Asset Deterioration Case Only)	Provide the length of sewer classified by each sewer type and condition grade (as defined in the table below) as at 31 March 2033 assuming no investment takes place between 31 March 2025 and 31 March 2033. In other words, this data should represent the asset condition as affected only by asset deterioration.	Number
4.48 to 4.54	Block H: Length of Wastewater Sewers (km) by Condition Grade as at 31 March 2033 (Proposed Investment Case)	Provide the length of sewer classified by each sewer type and condition grade (as defined in the table below) as at 31 March 2033 assuming that Scottish Water delivers the proposed investment in SRC27 under (Reference) Scenario A. In other words, this data should represent the asset condition as affected by both asset deterioration and the proposed investment.	Number
4.55 to 4.60	Block I: Length of Wastewater Sewers (km) by Equipment Health Index Band as at 31 March 2025	Provide the length of sewer classified by each sewer type and Equipment Health Index (EHI) band (as defined in the table above) as a baseline as at 31 March 2025.	km
4.61 to 4.66	Block J: Length of Wastewater Sewers (km) by Equipment Health Index Band as at 31 March 2033 (Proposed Investment Case)	Provide the length of sewer classified by each sewer type and Equipment Health Index (EHI) band (as defined in the table above) as at 31 March 2033 assuming that Scottish Water delivers the proposed investment in SRC27 under (Reference) Scenario A. In other words, this data should represent the asset condition as affected by both asset deterioration and the proposed investment.	

SEWER CONDITION GRADING

Baseline data as at 31 March 2025 should be based on the average of the annual number of bursts from 1 April 2021 to 31 March 2025. Forecast data as at 31 March 2033 should be based on the average of the annual number of collapses from 1 April 2029 to 31 March 2033.

Grade	Description
1	Excellent Collapse average up to 12/1000km/annum over four years, (equivalent to 20km or more between collapses over the four-year period)
2	Good Collapse average greater than 12 up to 25 burst/1000 km/annum over four years, (equivalent to less than 20km metres down to 10km between collapses over the four-year period).
3	Adequate Collapse average greater than 25 up to 50 collapses/1000km/annum over four years (equivalent to less than 10km down to 5km between collapses over the four-year period).
4	Poor Collapse average greater than 50 up to 100/1000 km/annum over four years (equivalent to less than 5km down to 2.5km between collapses over the four-year period).
5	Very Poor Collapse average greater than 100/1000 km/annum over four years (equivalent to less than 2.5km between collapses over the four-year period).

5. SRC27 projects and programmes

5.1. Purpose

The purpose of this table is to provide cost and benefit data on Scottish Water's projects and programmes of work over the SRC27 period. This should form an evidence-based, forward-looking plan for investment projects and programmes and nature-based solutions. This data will provide a baseline for monitoring the delivery and outturn performance of these projects and programmes, which will ultimately benefit Scottish Water customers. It will also inform the baseline that WICS will assess Scottish Water's performance against over the SRC27 period (and that Scottish Water will report against), recognising that the investment programme will change as investment progresses through the Water Industry Investment Group (WIIG) process.

5.2. Guidance

BASIS FOR REPORTING THE PROPOSED INVESTMENT PLAN

In this table Scottish Water should report the total value of the investment plan it proposes to deliver in the SRC27 period. This should consist of two types of line items:

- identified projects which have a total project value of at least £6m or have a total project value of less than £6m but are considered novel or contentious⁴; or
- programmes of work – these are groups of projects each of which has a total project value of less than £6m and is not considered novel or contentious.
 - In the context of asset maintenance, we define programmes of work as investment activities that relate to the same type of assets (i.e. projects are grouped into programme of works by sub asset category), involve repeatable work of similar construction requirements and risk profiles, and the location of the asset may not be known. Some of this work may be demand driven (e.g. fixing a main that bursts), while others may be proactive. Scottish Water may find it helpful to distinguish between demand driven programmes and proactive programmes.
 - In the context of enhancement and growth, we define a programme of works as comprising investment that shares the same characteristics, involves the delivery of the same group of investment outputs, involves repeatable work of similar construction requirements and risk profiles, and where the location of the investment may not be known. Examples would be a programme to remove unsatisfactory intermittent discharges or combined sewer overflows.

Scottish Water shall use one line per project or programme of works.

⁴ A novel or contentious project is defined as per Scottish Water's Project Investment Appraisal guidelines.

For the avoidance of doubt, any identified project with a total project value of at least £6m should be reported in a separate line. This does not appear to have been the case in the draft business plan submission. For example, Scottish Water's response to WICS' Query 20 indicated that a project with a total value of £6.2m was included within a programme.

For these programmes of work by sub asset category, we expect Scottish Water to show its assumptions for the:

- proposed number of maintenance interventions;
- overall level of expenditure; and
- impact on asset condition.

Scottish Water shall develop programmes of work that cover assets of the same type and size. This will ensure that the reported unit costs are representative and not skewed by large and small assets being in the same programme of work. An example would be a programme comprising the replacement of similar-sized pumps (as measured by throughput). If unit costs are skewed due to assets of two different sizes, we expect Scottish Water to disaggregate the programme into two (or more) separate programmes. Scottish Water shall also ensure that the programme description provides information on the type and size of asset, to enable unit costs to be derived.

All individual projects which can be benchmarked (i.e. those which are phosphorus removal projects, sanitary tightened permit condition projects, storm overflows projects, or water resources projects) should be reported as separate lines regardless of their total value. In other words, the £6m threshold does not apply to those projects.

An asset intervention relates to activity carried out by Scottish Water on an asset. The definition of intervention(s) depends on the type of investment. These definitions are:

- asset replacement: the number or length of assets replaced;
- asset refurbishment: the number of discrete refurbishments carried out on an asset; and
- asset repair: the number of discrete repairs carried out on an asset.

The table allows each project/programme to have a primary and a secondary element of the following items: outputs, interventions, sub-asset categories, and outcomes. If a project/programme has more than 2 of these items, Scottish Water should explain in the commentary how those additional items and their associated expenditure are captured in tables 1, 2, and 3a so that consistency between these tables and table 5 is preserved.

GUIDANCE FOR PRE GATE 50 INVESTMENT

Scottish Water is expected to clearly explain the rationale for the investment need as well as the assumptions for the benefits and costing of investment pre-Gate 50 within the final business plan submission. This includes explaining the methodology used for calculating the estimates as well as the underpinning assumptions. Example programmes include the UID programme and the AR3

programme for returning PFI assets where Scottish Water should explain how the programme costs have been calculated, e.g. if based on units cost, then WICS would want to understand what those unit costs are and how they have been derived.

GUIDANCE FOR ENHANCEMENT AND GROWTH PROJECTS AND PROGRAMMES OF WORK

Enhancement investment relates to incremental improvements in levels of service, while growth investment relates to increasing the supply of water and capacity available to remove wastewater and surface water drainage in response to new demand for these services. We propose further disaggregating the enhancement and growth programme or any investment involving an element of enhancement or growth into three categories reflecting the different level of maturity of Scottish Water's investment proposals. For the avoidance of doubt, any investment that involves an element of enhancement and growth should be subject to the requirements below.

The table below shows the three categories and associated information requirements.

Investment stage	Information requirements
Investment pre-development (Pre Scottish Water internal Gate 50)	• Programmes of work • Assumptions for indicative costings and outputs, including explanation of the rationale for the investment need and the methodology and underlying assumptions used to calculate estimates
Investment in-development/ pre-commitment (Scottish Water internal Gates 50 to 90, inclusive)	• Programmes of work • Discrete projects where investment $\geq$ £6m, or where investment is $<$£6m but the project is novel or contentious • Forecast costs • Outputs • Interim milestones for when Scottish Water expects a decision for the project to be committed
Investment post-commitment (Post Scottish Water internal Gate 90)	• Programmes of work • Discrete projects where investment $\geq$ £6m, or where investment is $<$£6m but the project is novel or contentious • Costs (in real prices and outturn prices) • Outputs • Project milestones

An output represents a tangible deliverable which will be provided by an investment that is driven by legislative or other requirements and will contribute towards meeting the investment driver. The

output could also be a measurable contribution towards an outcome that Scottish Water play a part in achieving.

Information on four enhancement areas is requested as candidates for benchmarking in blocks K-N, covering:

- Phosphorus removal;
- Sanitary permits;
- Storm overflows; and
- Water resources.

If a project covers more than one enhancement area such as phosphorus removal and addressing sanitary permits, Scottish Water should allocate the proposed expenditure to these different areas and report the allocated expenditure and corresponding cost drivers in separate lines.

If an enhancement or growth investment involves an element of replacement, Scottish Water should include the percentage allocation to replacement in the relevant column.

GUIDANCE FOR MAINTENANCE PROJECTS AND PROGRAMMES OF WORK

Maintenance expenditure is investment in assets in order to maintain existing service levels to customers. This can comprise fixing an existing asset to ensure it meets its expected life (asset repair), extending the life of an existing asset (asset refurbishment) or replacing the asset outright (asset replacement). This may also be referred to as capital maintenance.

For those investment projects or programmes involving the replacement of an asset with another that provides a higher level of service or additional capacity, the allocation to asset replacement should be the optimised replacement cost of the asset. Optimised replacement is defined as replacing an asset with one with the equivalent productive capacity, taking account of modern materials, techniques and design. Any incremental expenditure over and above the optimised replacement cost of the asset should either be allocated to:

- enhancement – if the project involves replacement of an asset with another that provides a higher level of service in response to a legislative or other requirement; or
- growth – if the project involves the replacement of an asset with another that provides additional capacity.

INVESTMENT RELATED TO CLIMATE CHANGE MITIGATION AND ADAPTATION

As explained in chapter 2.2, responding to the effects of climate change should be fully embedded in how Scottish Water develops its investment programme. As such, Scottish Water should invest in a way that mitigates the carbon emitted from investment (responding to the mitigation challenge) and future-proofs its services to the effects of a changing climate (responding to the adaptation challenge). There may be some areas of the investment programme where the sole driver or

purpose for the investment is related to climate change – e.g. responding to flash flooding and improving resilience to power interruptions. In these cases, Scottish Water could include climate change as a distinct category of the enhancement investment programme. However, this needs to relate to an incremental improvement in resilience in the system – restoring resilience to its original level through replacing an ageing asset should be considered asset replacement.

For any project or programme of work line in table 5, Scottish Water should indicate in column 12 how much of the total investment expenditure for that line relates to climate change adaptation and mitigation. For avoidance of doubt, this column provides a secondary categorisation of the investment expenditure which is separate to the allocations to replacement, repair, refurbishment, enhancement, and growth.

INVESTMENT CASE INFORMATION

We require Scottish Water to provide standard information for aggregated programmes of work and projects which are in development and post commitment, i.e. Scottish Water’s internal Gate 50 onwards when Scottish Water conducts a strategic options review. We expect the standard information for both projects and for programmes of work to cover:

- the range of options considered (both traditional and non-traditional) to meet the need for an investment including the risk of not doing anything, recognising that a ‘do nothing’ option still has a cost associated with it. We also acknowledge that in some cases Scottish Water may have less flexibility in deciding how and when to deliver investment outcomes, particularly if the situation is urgent and/or poses high risk to public health;
- whether the investment has the support of the quality regulators, DWQR and SEPA;
- how the investment will support climate change adaptation and align with the Scottish Government’s policy development work;
- the cost-benefit analysis undertaken to select the proposed solution, taking account of factors such as the level of risk associated with the different options and benefits in terms of what the investment is expected to achieve. Scottish Water should also consider non-financial costs and benefits such as the carbon impact (both operational and embodied carbon), natural and social capital;⁵
- evidence that the proposed costs for the proposed solution are efficient, which could be evidenced through different methods such as comparisons to past projects or the use of industry cost benchmarks (efficiency is covered in more detail below) or external assurance on the robustness of the cost estimates;
- whether the investment involves partners, recognising the expectation in the Commissioning letter for Scottish Water to continue working closely with partners to identify more sustainable solutions (such as the adoption of blue-green infrastructure and utilising existing legislation such

⁵ Natural and social capital are two capitals that form the six capitals approach. The six capitals approach covers financial, manufactured, intellectual, human, social and relationships and natural capital. See Association of Chartered Certified Accountants, ‘*Integrated reporting and performance management*’, webpage.

as section 29e⁶ to explore innovative solutions) and, if so, how costs will be shared with the partners including the funding arrangements;

- if Scottish Water has already engaged with communities in terms of project design, how those community views have informed the choice of the proposed solution; and
- the output(s) and benefits that will be delivered from the proposed solution and the outcomes that the investment will contribute to in the context of the Objectives of the Scottish Ministers and Scottish Water's contribution to the sector vision.

We are also placing additional requirements on two specific categories of projects:

- large projects, defined as projects with a total project value above £100m;⁷ and
- Private Finance Initiative funded projects, recognising that Ministers have requested WICS undertake a full examination of Scottish Water's approach to establishing the options and costs of the 4 PFI contracts maturing in the 2027-33 regulatory period.

For these projects, we require Scottish Water to provide external assurance on the proposed approach and the robustness of the cost estimates.

We would expect Scottish Water to have this standard information regardless of the criteria for defining projects and programme of works. For the business plan submission, we require Scottish Water to provide separate investment cases for projects exceeding £6m in value or are considered novel or contentious, and for all programmes of work to ensure there is visibility of the full investment programme.

WICS must ensure that it has the information required to review Scottish Water's investment proposals and set a baseline. As such, we request that Scottish Water provides a list of the projects and programmes that it expects will meet the final methodology criteria by the time of the final business plan by 29 September 2025.

In its responses to the draft business plan queries, Scottish Water has applied further thresholds to reduce the number of investment cases it proposes to submit. We do not agree with the application of additional criterion and still expect any investment meeting the existing final methodology criteria to be covered by an investment case.

CHARGE PATH SCENARIOS

The Commissioning letter requests a range of charge paths for household and non-household customers covering drinking water, wastewater and drainage services. The methodology outlined

⁶ Section 29e of the Water Industry (Scotland) Act 2002.

⁷ Ofwat has developed an alternative approach for investment for large schemes with a value greater than £100 million and where there are concerns around scope, cost and complexity. The approach involves enhanced engagement and the use of investment gates. Our threshold is consistent with that used by Ofwat. Ofwat (2024), 'PR24 draft determinations: Expenditure allowances', 11 July 2024.

how the charge path scenarios should have one reference scenario, with Scottish Water identifying the projects and programmes of work that would be subtracted and/or added to the reference scenario in each of the other charge path scenarios to allow us to set a baseline on any of the charge paths. The charge path scenarios should be shown through the projects and programmes in table 5.

We believe that there are two options for this to be achieved and are happy for Scottish Water to choose the option that best suits them:

1. Projects should indicate to which charge path scenario they belong to. For each programme of work, there should be:
 - a. one row for the reference scenario; and
 - b. a further row for each other scenario that shows what interventions would be subtracted and/or added to the reference scenario.
2. Three separate table 5s are populated, one for each of the scenarios.

For the chosen method, the calculations in table 8 should be adjusted accordingly to ensure that the totals provided are correct.

PROJECTS SPANNING MORE THAN ONE REGULATORY PERIOD

Due to the rolling investment programme, some of the investment will span the 2021-27 and 2027-33 regulatory control periods. Of these:

- some will relate to investment that Scottish Water always planned to span the two regulatory periods; and
- some will relate to investment that Scottish Water expected to complete by the end of the regulatory period (31 March 2027) but has been delayed (e.g. due to projects taking longer than forecast during the construction phase).

We do not expect to see many investment projects in this latter category. However, we note that Scottish Water plans to carry forward some projects originally planned for 2015-21 into the 2027-33 regulatory period.

For investment that spans two regulatory periods, we require clarity over the funding source for these projects. As such, we will require Scottish Water to identify the source of funding for each of these projects, detailing how much will be funded by the 2021-27 investment allowances and how much is expected to be funded by customers during the 2027-33 period.

OVERHEADS AND RISK ALLOWANCES

One area where we see the benefit of exploring further is the balance between expenditure on direct activities (e.g. the cost to replace an asset) versus other items of allowances that Scottish Water adds to proposed project costs, such as overheads and risk allowances. On risk, for example, we would like to understand better how Scottish Water sets the allowance for risk and how this

compares to good practice, recognising that the rolling approach associated with the investment programme reduces uncertainty over project scope and some of the uncertainty over project costings at the time of commitment.

CATCHMENT VERSUS LOCALISED INVESTMENT SOLUTIONS

Column 6b of this table asks Scottish Water to identify whether each project or programme provides a catchment or a localised solution. This should be determined based on the definitions below.

Catchment Management

Catchment management is the holistic approach of managing the entire area of land that drains into a specific water body, such as a river, lake, or reservoir. This area, known as a catchment, encompasses all the land where rainfall collects and flows into these water bodies. The key aspects of catchment management include:

- **Preventing Pollution:** Catchment management aims to prevent pollutants from entering water supplies by addressing issues at their source, often through collaboration with local stakeholders such as farmers and landowners. This can involve implementing sustainable agricultural practices, restoring natural habitats, and managing land use effectively.
- **Integrated Approach:** It involves multiple stakeholders, including water companies, local authorities, and communities, working together to improve water quality and ecosystem health. This collaborative effort is often formalised through catchment partnerships focusing on specific geographical areas.
- **Sustainability and Cost-Effectiveness:** By preventing pollution at the source, catchment management can be more sustainable and cost-effective than traditional methods, such as building large water treatment facilities. It also offers broader environmental benefits, such as enhancing biodiversity and reducing flood risks.

Localised Solutions

Localised solutions cover more focused interventions that address specific water quality or quantity issues within a smaller geographic area. These solutions can include:

- **Community-Based Initiatives:** Localised solutions often involve community engagement and localised strategies to improve water quality, such as rainwater harvesting, greywater recycling, and localised treatment systems.
- **Targeted Actions:** These solutions may focus on particular problems, such as reducing runoff from urban areas, managing stormwater, or treating wastewater locally. They are designed to be flexible and adaptable to the specific needs and conditions of the local environment.
- **Short-Term Focus:** While localised solutions can have immediate benefits, they may not always address the broader systemic issues present in the catchment area. They often require integration with catchment management strategies to ensure long-term sustainability and effectiveness.

In summary, while catchment management takes a comprehensive, ecosystem-based approach to managing water resources across a larger area, localised solutions focus on specific, localised interventions that can be implemented quickly to address immediate water quality or supply issues. Both approaches are essential for effective water resource management, but they operate at different scales and with different methodologies.

ALIGNMENT WITH OTHER TABLES

The forecast expenditure, associated outputs for enhancement and growth investment, and contributions to outcomes reported in this table should be consistent with table 1 and table 2.

The forecast expenditure and the associated asset interventions for asset replacement, repair and refurbishment reported in this table should be consistent with table 3a.

Scottish Water shall share any supplementary material to the business plan to show how tables 1, 2, 3a reconcile to table 5 and how table 5 reconciles with the annual return table G6a. This would also help to provide transparency over how Scottish Water has developed the aggregated programmes of work. This may be in the form of an additional sheet in the business plan tables as was discussed with Scottish Water during the consultation on the draft tables.

Scottish Water should ensure table 8 correctly represents the data in table 5 by investment activity and by charge path scenario.

5.3. Definitions

Block A: Project and Programme Data

The threshold for individual projects to be included in this table is £6m unless they are novel or contentious.

Investment categories

- **Enhancement** (which relates to incremental improvements in levels of service),
- **Growth** (which relates to improving the balance of supply and demand), and
- **Asset maintenance** (which relates to asset replacement, repair or refurbishment).

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference (if relevant)
1	Unique ID	Unique ID code assigned to each line within this table. All codes should be mutually exclusive.	N/A	1
2	Description	Description of the project or programme.	N/A	3
3	Service	Drop-down menu. Options: Water, Foul sewage and surface water shared assets, Foul sewage only, Surface water only, Water & wastewater shared assets.	N/A	
4	Charge path scenario	Drop-down menu. Options: (Reference) Scenario A, Scenario B, Scenario C.	N/A	
5	Capital-based or operating-based solution	Drop-down menu. Options: Capital-based solution, operating-based solution. Scottish Water should explain in the business plan commentary what	N/A	

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference (if relevant)
		criteria it has used for a project/programme of works to determine between the two options. If the project or programme contains capital- and operating-based elements, Scottish Water should select the option that represents the larger proportion of the total solution costs.		
6a	Benefit type: grey, hybrid or blue-green solution	Drop-down menu. Options: Grey solution, Hybrid solution, Blue-green solution.	N/A	
6b	Benefit type: catchment or local solution	Drop-down menu. Options: Catchment solution, Local solution. A catchment solution is one which aims to improve the water quality and/or environment of the entire area of land that drains into a specific water body, such as a river, lake, or reservoir, as per the definitions in the guidance section above. A local solution is a more focused intervention that addresses specific water quality or quantity issues within a smaller geographic area, as per the definitions in the guidance section above.	N/A	
7a	Primary Ministerial Objective	The primary Ministerial Objective towards which each investment line contributes.	N/A	
7b	Primary Delivery Vehicle	The primary supply chain Delivery Vehicle Scottish Water plans to use	N/A	

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference (if relevant)
		to deliver the investment line.		
8	Allocation of expenditure to maintenance: replacement (%)	The percentage of expenditure in the line allocated to asset replacement, including both responsive and planned replacement. For those investment projects involving the replacement of an asset with another that provides a higher level of service or additional capacity/demand, the allocation to asset replacement expenditure should be the optimised replacement cost of the asset.	%	13
9a	Allocation of expenditure to maintenance: repair (%)	The percentage of expenditure in the line allocated to repair, including both responsive and planned repairs.	%	14
9b	Allocation of expenditure to maintenance: refurbishment (%)	The percentage of expenditure in the line allocated to refurbishment, including both responsive and planned refurbishments.	%	15
10	Allocation of expenditure to enhancement (%)	The percentage of expenditure in the line allocated to enhancement investment. Enhancement relates to investment that results in incremental improvements in levels of service provided or levels of compliance, in line with the guidance.	%	16
11	Allocation of expenditure to growth	The percentage of expenditure in the line allocated to growth investment. Growth relates to investment to meet new demand, in line	%	17

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference (if relevant)
	(%)	with the guidance.		
12	Allocation of expenditure to climate change mitigation and adaptation (%)	The percentage of expenditure which is related to climate change mitigation and adaptation. For avoidance of doubt, this column provides a secondary categorisation of the investment expenditure which is separate to the allocations to replacement, repair, refurbishment, enhancement, and growth. Input an integer with 0 decimal point.	%	
13	Ex-PFI asset	Drop-down menu. Options: Yes, No. This column captures whether the project or programme impacts an asset that used to be under a Private Finance Initiative contract. Only select 'Yes' when the PFI asset has returned or is going to return to Scottish Water in SRC21, SRC27 or SRC33 periods.	N/A	
14	Investment period	Drop-down menu. Options: Delayed SRC15 completion, Delayed SRC21 completion, Planned for SRC27. "Delayed SRC15 completion" projects/programmes have a baseline forecast completion date before 31 March 2021. "Delayed SRC21 completion" projects/programmes have a Committed List forecast completion date (the forecast date when the project/programme entered the Committed List) before 31 March 2027.	N/A	99 and 100

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference (if relevant)
		“Planned for SRC27” projects/programmes have a Committed List forecast completion date (the forecast date when the project/programme entered the Committed List) after 31 March 2027.		
15	Committed status	Drop-down menu. Options: Investment pre-development, Investment in-development/pre-commitment, Committed List Named Project, Committed List Programme.	N/A	25
16	Forecast Commitment date (Gate 90)	Report the actual or current forecast date when the project/programme has passed or is expected to pass Gate 90: Commitment – Delivery Approval.	dd/mm/yyyy	27
17	Forecast Start On Site date	Report the actual or current forecast date when the project/programme has passed or is expected to pass the Start on Site milestone.	dd/mm/yyyy	28
18	Forecast Acceptance date (Gate 100)	Report the actual or current forecast date when the project/programme has passed or is expected to pass Gate 100: Project Acceptance.	dd/mm/yyyy	29
19	Committed List forecast Acceptance date (Gate 100)	Report the forecast date for Gate 100: Project Acceptance when the project/programme entered the Committed List.	dd/mm/yyyy	119
20	Forecast Financial	Report the actual or current forecast date when the	dd/mm/yyyy	30

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference (if relevant)
	Completion date (Gate 110)	project/programme has passed or is expected to pass Gate 110: Financial Completion.		
21	Committed List forecast Financial Completion date (Gate 110)	Report the forecast date for Gate 110: Financial Completion when the project/programme entered the Committed List.	dd/mm/yyyy	120

Block B: Capital Expenditure (£m; 2024-25 Price Base)

All lines for both projects and programmes of works should have the column for pre-SRC27 expenditure filled out. All lines for projects should have the columns for post-SRC27 expenditure filled out, but lines for programmes of works are not required to have these columns filled out.

Risk allowance is a subset of the forecast expenditure and covers Scottish Water's allowance for site-specific risk and programme wide uplift for risk.

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference
22	Pre-SRC27	The total post-efficiency capital expenditure prior to the SRC27 period for the project or programme.	£m in 2024-25 price base	66
23 to 28	Year 1 to 6	The post-efficiency capital expenditure for each year of the SRC27 period for the project or programme.	£m in 2024-25 price base	67-72
29	Total in SRC27	The total post-efficiency capital expenditure over the SRC27 period for	£m in 2024-25	77

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference
		the project or programme.	price base	
30	Total risk allowance in SRC27	The project/programme expenditure that relates to an allowance for risk in the SRC27 period. This should include Scottish Water's allowance for site-specific and programme-wide uplift for risk. For the avoidance of doubt, this column should show the risk allowance included in the expenditure in the previous columns.	£m in 2024-25 price base	
31 to 33	SRC33, SRC39, and SRC45	The total post-efficiency capital expenditure over each subsequent regulatory control period after SRC27 for the project or programme.	£m in 2024-25 price base	74, 75, 76
34	Total expenditure	The total post-efficiency capital expenditure over the whole life of the project or programme.	£m in 2024-25 price base	78
35	Total risk allowance	The project expenditure that relates to an allowance for risk across all regulatory control periods (i.e. over the whole life of the project or programme). This should include Scottish Water's allowance for site-specific and programme-wide uplift for risk. For the avoidance of doubt, this column should show the risk allowance included in the expenditure in the previous columns.	£m in 2024-25 price base	

Block C: Capital Expenditure (£m; Outturn Prices)

All lines for both projects and programmes of works should have the column for pre-SRC27 and SRC27 expenditure populated. All lines for projects should have the columns for post-SRC27 expenditure populated, but lines for programmes of works are not required to have these columns populated.

Column Reference	Column Title	Description	Units
36 to 49	All columns	Definitions as per Block B: Capital Expenditure (£m; 2024-25 Price Base) but values should be in outturn prices.	£m in outturn price base

Block D: Operating Expenditure (£m; 2024-25 Price Base)

All lines for both projects and programmes of works should have the column for pre-SRC27 and SRC27 expenditure populated. All lines for projects should have the columns for post-SRC27 expenditure populated, but lines for programmes of works are not required to have these columns populated.

Column Reference	Column Title	Description	Units
50 to 63	All columns	Definitions as per Block B: Capital Expenditure (£m; 2024-25 Price Base) but expenditure relates to operating expenditure.	£m in 2024-25 price base

Block E: Primary Benefits - Outputs or Interventions

The outputs in this table should be **consistent with** those submitted in **table 2**.

An asset intervention relates to activity carried out by Scottish Water on an asset. The definition of intervention(s) depends on the type of investment. These definitions are:

- asset replacement: the number or length of assets replaced;
- asset refurbishment: the number of discrete refurbishments carried out on an asset; and
- asset repair: the number of discrete repairs carried out on an asset.

An output represents a tangible deliverable that will be provided by an investment driven by legislative or other requirements and will contribute to meeting the investment driver. The output could also be a measurable contribution to an outcome that Scottish Water contributes towards achieving.

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference
64	Output or intervention type	Drop-down menu. Options: Enhancement output, Growth output, Replacement intervention, Repair intervention, Refurbishment intervention.	N/A	
65	Primary output	The primary tangible deliverable. Scottish Water should input a value in this column only if the project/programme's primary benefit relates to an enhancement or growth output as per column 64. Scottish Water should ensure the text input reconciles with the list of outputs in table 2 (unless it relates to output expenditure included in lines 2.58 and 2.59 for "Other enhancement expenditure" and "Other growth expenditure", respectively).	Text	41
66	Functional activity	Scottish Water should only input a value in this column if the project/programme's primary benefit relates to a replacement, repair or refurbishment intervention as per column 64. Scottish Water should ensure the text input reconciles with the list of functional activities in table 3a, column "Functional activity".	N/A	6
67	Asset category	Scottish Water should only input a value in this column if the project/programme's primary benefit relates to a replacement, repair or refurbishment intervention as per column 64. Scottish Water should ensure the text input reconciles with the list of asset categories in table 3a, column "Asset category".	N/A	4

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference
68	Sub asset category	Scottish Water should only input a value in this column if the project/programme's primary benefit relates to a replacement, repair or refurbishment intervention as per column 64. Scottish Water should ensure the text input reconciles with the list of sub asset categories in table 3a, column "Sub asset category".	N/A	5
69	Total number of assets in the sub asset category as at 31 March 2025	Total number of assets in the sub-asset category identified in column 68 as at 31 March 2025. This should reconcile with the value for the relevant sub-asset category reported in table 3a, column 22. Scottish Water should provide input in this column only if the project/programme's primary benefit relates to a replacement, repair or refurbishment intervention as per column 64.	Number	
70	Expected asset lifetime	The assumed lifetime of the assets impacted by the project or programme. Asset lifetime is defined as the amount of time (measured in years) that elapses from installation to the end of the asset's useful life (the point at which the asset is decommissioned and replaced with an alternative means of providing the service). Scottish Water should provide input in this column only if the project/programme's primary benefit relates to a replacement, repair or refurbishment intervention as per column 64.	Number of years	
71	Units	The units in which deliverables can be measured.	e.g. Km	43
72	Allocation of	The percentage of the expenditure reported in column 34 "Total	%	

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference
	expenditure to output/ intervention (%)	expenditure” allocated to the primary output or intervention.		
73-78	Year 1 to 6	For enhancement or growth outputs (as per input in column 64), this is the number of outputs forecast to be delivered in each year of the SRC27 period. For replacement, repair or refurbishment interventions (as per column 64), this is the number or length of interventions forecast to be delivered in each year of the SRC27 period.	Number	32-37 and 45-50
79	Total in SRC27	Calculated column: Sum of year 1 to 6.	Number	

Block F: Primary Benefits - Outcomes

The outcomes in this table should be **consistent with** those submitted in **table 1**. The columns in this block should be completed even when Primary Benefits – Outcomes are the same as Primary Benefits - Outputs or Interventions reported in Block E.

Column Reference	Column Title	Description	Units
80	Primary outcome	The primary measure of the long-term effects of the investment. Scottish Water should ensure the text input reconciles with the list of outcomes in table 1.	Text
81	Units	The units in which the outcome can be measured.	e.g. leakage

Column Reference	Column Title	Description	Units
			reduction %
82 to 87	Year 1 to 6	Number of outcomes delivered in each year.	Number
88	Total in SRC27	Calculated column: Sum of year 1 to 6.	Number

Block G: Secondary Benefits - Outputs or Interventions (not all projects/programmes will have a secondary benefit)

If a project/programme has a tertiary, quaternary or further output or type of intervention, Scottish Water should explain in the commentary how those additional outputs/interventions and their associated expenditure are captured in tables 2 and 3a so that the consistency between these tables and table 5 is preserved.

Column Reference	Column Title	Description	Units
89 to 104	All columns	Definitions as per Block E: Primary Benefits - Outputs or Interventions but relating to Secondary Benefits.	Various

Block H: Secondary Benefits - Outcomes (not all projects/programmes will have a secondary benefit)

If a project/programme has a tertiary, quaternary or further outcome, Scottish Water should explain in the commentary how those additional outcome benefits are captured in table 1 so that the consistency between table 1 and table 5 is preserved.

Column Reference	Column Title	Description	Units
105 to 113	All columns	Definitions as per Block F: Primary Benefits - Outcomes but relating to	Various

Column Reference	Column Title	Description	Units
Secondary Benefits.			

Block I: Partnerships

This block should capture the contribution made by the partner(s) but not any expenditure made by Scottish Water. All Scottish Water expenditures should be reported in Block B, C and D.

Column Reference	Column Title	Description	Units
114	Project delivered in partnership	Drop-down menu. Options: Yes, No.	N/A
115	Partner contribution (£m; 2024-25 price base)	Value of contribution by the other party/parties in the partnership.	£m in 2024-25 price base

Block J: Projects Spanning More Than One Regulatory Period

This block only applies to projects that were given an allowance at previous SRCs. All £m values relate to the **allowance** given at that time, and **NOT the actual spend**.

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference
116	SRC21 allowance (£m; 2024-25 price base)	Expenditure previously allowed at SRC21 for the SRC21 period.	£m in 2024-25 price base	
117	SRC27 allowance (£m; 2024-25 price base)	Expenditure previously allowed at SRC21 for the SRC27 period.	£m in 2024-25 price base	

Column Reference	Column Title	Description	Units	Annual Return 2023-24 Table G6a column reference
118	Total allowance (£m; 2024-25 price base)	Calculated column: Sum of columns 116 and 117.		

Blocks K, L, M and N: Enhancement and growth

The following additional data is required where the projects are either:

- Phosphorus removal project;
- Sanitary tightened permit condition project;
- Storm overflows project; or
- Water resources project.

All individual projects which can be benchmarked should be reported as separate lines regardless of their total value. In other words, the £6m threshold is not applied to these projects. If a project covers more than one enhancement area such as phosphorus removal and addressing sanitary permits, Scottish Water should allocate the proposed expenditure to these different areas and report the allocated expenditure and corresponding cost drivers in separate lines.

This data is to allow these projects to be benchmarked against similar schemes undertaken by the water/wastewater companies in England and Wales. As such the definitions are aligned to the requirements set out in Ofwat's PR24 data tables and guidance. References below refer to tables with the prefix CW (section 3). The guidance for these can be accessed at <https://www.ofwat.gov.uk/regulated-companies/price-review/2024-price-review/framework-and-methodology/final-methodology/pr24-final-methodology-submission-tables-and-guidance/>. For the purpose of these definitions, a 'scheme' refers to projects.

Some references link to Ofwat's Price Control Deliverable appendix to the PR24 Final Determinations which contains data definitions. The appendix can be accessed at <https://www.ofwat.gov.uk/publication/pr24-final-determinations-price-control-deliverables-appendix/>.

Column Reference	Column Title	Definition	Unit	Reference
Block K: Phosphorus Removal Project				
119	Is this a phosphorus	Drop-down menu. Options: Yes, No.	N/A	

Column Reference	Column Title	Definition	Unit	Reference
	removal project?	These are projects associated with expenditures to remove phosphorus to meet tighter consent levels driven by the Urban Wastewater Treatment Directive (UWWTD) and the Water Framework Directive (WFD).		
120	Population equivalent	Population equivalent served at WWTWs with an agreed phosphorus removal project. Scottish Water should complete this column only if the input in column 119 is "Yes".	Number	PCD number: PCDWW10 PR24 FD PCD appendix 4.3.2
121	Historical consent	The consent level on the historical phosphorus permit. Scottish Water should complete this column only if the input in column 119 is "Yes".	mg/l	PCD number: PCDWW10 PR24 FD PCD appendix 4.3.2
122	Enhanced consent	Tighter level of phosphorous consents on the enhanced phosphorus permit as driven by the Urban Wastewater Treatment Directive (UWWTD) and the Water Framework Directive (WFD). Scottish Water should complete this column only if the input in column 119 is "Yes".	mg/l	PCD number: PCDWW10 PR24 FD PCD appendix 4.3.2
Block L: Sanitary Tightened Permit Project				
123	Is this a sanitary tightened permit	Drop-down menu. Options: Yes, No.	N/A	

Column Reference	Column Title	Definition	Unit	Reference
	project?	These are projects or programmes to meet tightened permit conditions for one or more sanitary parameters.		
124	Population equivalent	Population equivalent served by site(s) under the project requiring removal of sanitary parameters (excluding nature-based or catchment solutions). Scottish Water should complete this column only if the input in column 123 is "Yes".	Number	PR24 FD PCD appendix 4.5.2
Block M: Storm Overflows Project or Programme				
125	Is this a storm overflows project?	Drop-down menu. Options: Yes, No. These are projects for reducing the spill from storm overflows.	N/A	
126	Project type	Drop-down menu. Options: Network grey/hybrid, WwTW grey/hybrid, Green. Scottish Water should complete this column only if the input in column 125 is "Yes".	N/A	PR24 FD PCD appendix 4.2.4
127	Storage equivalent (m ³)	Scottish Water should complete this column only if the input in column 125 is "Yes". Traditional storage calculation methods should be used for storage solutions. When developing non-storage solutions, equivalent storage should be calculated by running a hydraulic model with the alternative solution included within the model, and assessing the extent to which the storage requirement is reduced. Equivalent storage must be assessed against the storage volume required at the storm overflow, and not using theoretical conversion rates based on the area removed unless the impact of the alternative works on the required storm	m ³	PR24 FD PCD appendix 4.2.4

Column Reference	Column Title	Definition	Unit	Reference
		overflow storage volume can be clearly demonstrated. The model used should be fit for purpose and constructed in accordance with the Code of Practice for the Hydraulic Modelling of Urban Drainage Systems, CIWEM UDG, 2017.		
Block N: Water Resources Project				
128	Is this a water resources project?	Drop-down menu. Options: Yes, No. These are projects associated with the 25-year strategic Water Resource Plan (or the Water Resources Management Plans (WRMP) in England and Wales).	N/A	CW8
129	Project type	Drop-down menu. Options: 1. Demand-side improvements delivering benefits in 2027-32 (excluding leakage and metering) 2. Supply-demand balance improvements delivering benefits starting from 2032 3. Supply-side improvements delivering benefits in 2027-32 4. Internal interconnectors delivering benefits in 2027-32 Scottish Water should complete this column only if the input in column 128 is "Yes".	N/A	CW8
130	Delivery year (in use)	The year in which the project is forecast to come into use. Scottish Water should provide input in this column only if the input in column 128 is "Yes".	Year	CW8
131	Interconnectors only:	For interconnectors only (as per column 129), input the length of the	km	CW8

Column Reference	Column Title	Definition	Unit	Reference
	length (km)	interconnector.		
132	Interconnectors only: transfer capacity (MI/d)	For interconnectors only (as per column 129), input the additional water available for use (WAFU) benefit in terms of transfer capacity of the interconnector.	MI/d	CW8

6. Transformation initiatives

6.1. Purpose

We consider that there should be transparency over the transformation programme, recognising that funding on spend-to-save or transformation investment will mean that there is less funding available for investment in other areas in the short term.

This table provides cost and benefit data on Scottish Water's transformation programmes over the SRC27 period. This data will provide a baseline for monitoring these initiatives' delivery and outturn performance, ultimately benefitting Scottish Water customers.

6.2. Guidance

Scottish Water should enter data for each programme within the defined threshold. Different data is required depending on whether the programme objective is to reduce existing costs incurred or to avoid future costs materialising (i.e. avoided costs).

We expect Scottish Water to populate this table on an ongoing basis during the regulatory period as part of its initial and subsequent delivery plans. However, if there are any relevant initiatives that Scottish Water is aware of at the time of the business plan submission, we request that Scottish Water provide this information in the table for those initiatives as part of its business plan submission.

Scottish Water should outline how it will measure and report on whether the initiative is successful within the business plan narrative.

We also request that Scottish Water provides its overall approach to transformation in narrative form in its business plan submission.

6.3. Definitions

A transformation initiative is a programme which aims to evolve and grow Scottish Water’s capabilities and value to customers. These should be discrete initiatives that involve an upfront expenditure to generate additional cost savings and wider benefits that more than offset the initial outlay (when expressed on a net present value basis, discounted based on the company’s cost of capital). The following criteria apply for including transformation initiatives:

- a materiality threshold of £6m; or
- the initiative is novel or contentious.

TRANSFORMATION DATA TABLE

Column Reference	Column Title	Description	Units
1	Programme Name	To align with the business plan narrative.	N/A
2-8	Initial Expenditure	Expenditure on all the transformation programmes annually over the SRC27 period. Scottish Water should indicate in the commentary how much of the initial expenditure for each transformation initiative results in operating expenditure savings, as per Scottish Water’s response to WICS’ Query 25.	£m in 2024-25 price base
9	Programme Type	Classify whether the programme objective is reducing existing costs or avoiding future costs materialising. Select using the drop-down menu.	Two options: Reducing existing costs Avoiding future costs

Column Reference	Column Title	Description	Units
			materialising
10-16	Reduction in Operating Expenditure Compared to 2024-25	This data is only required for programmes that reduce existing costs. This is the forecast reduction in operating expenditure from the levels reported in 2024-25 for each year over the SRC27 period.	£m in 2024-25 price base
17-23	Reduction in Capital Expenditure Compared to 2024-25	This data is only required for programmes that reduce existing costs. Reduction forecast annually over the SRC27 period in capital expenditure from the levels reported in 2024-25 (e.g. this may apply if the transformation initiative relates to improving existing asset management processes).	£m in 2024-25 price base
24-51	The Counterfactual [Forecast Operating and Capital Expenditures in the Absence of Transformation Project], Forecast Operating and Capital Expenditure Avoided	This data is only required for programmes that are avoiding future costs materialising. If the initiative results in avoided costs, the forecast expenditure of both capital expenditure and operating expenditure in the absence of the transformation project annually over the SRC27 period should be provided. Forecast Operating and Capital Expenditure avoided: The operating or capital expenditure avoided by completing the transformation project, e.g., an investment forecast reducing through finding a better way to deliver the project and avoid costs.	£m in 2024-25 price base
52-60	Other Benefits (Not Related to Expenditure)	For all programmes, if the initiative delivers non-financial benefits, enter the benefit type and associated units with the predicted benefit expressed annually over the SRC27 period.	N/A
61	Other Reporting Commentary	Any other pertinent or explanatory information for the	N/A

Column Reference	Column Title	Description	Units
		transformation initiative.	
-	Total	The sum of expenditure columns for all projects.	£m in 2024-25 price base

7. Other costs and assumptions

7.1. Purpose

This table covers Scottish Water's operating expenditure (OPEX) forecasts, population and growth forecasts as well as a number of other financial assumptions and costs. The data required is forecast annually over the SRC27 period and then in the final year of each subsequent regulatory control period – i.e., 2038-39, 2044-45 and 2050-51.

This will allow for assessment of the OPEX aspects of the business plan, in relation to changes from the base position in 2024-25. It will also inform the baseline against which WICS will assess Scottish Water's OPEX performance over the SRC27 period.

7.2. Guidance

Scottish Water should report expenditure data in 2024-25 price base. The units of expenditure are £m to 3 decimal places. Units for each line are given in the definitions below.

There are sub-total and total lines in this table, which are calculations. Other lines are input fields.

The company should prepare its forecasts of OPEX and its forecasts of property/ population growth assumptions on a basis that is wholly consistent with annual return reporting for the E tables. Where Scottish Water deviates from such a basis, it should set out such deviation – along with the rationale and supporting evidence – in its table commentary.

Confidence grades should be assigned in accordance with guidance in chapter 'Common Definitions'.

We expect there will be step change increases and decreases from the reported operating expenditure in 2024-25 due to:

- the expiry of PFI contracts; and
- Scottish Water adopting operating-based solutions rather than capital solutions to deliver improvements.

We request that Scottish Water provide forecasts for operating expenditure in each of these areas for the six-year period, recognising that some may change during the period.

When a line reports a net change in projected OPEX due to different components of the line increasing and decreasing, Scottish Water should report the net increase or decrease in the line with details of the component movements in the commentary.

7.3. Definitions

Block A: Operating Expenditure

Line Reference	Title	Definition	Unit
7.1	Base operating expenditure in 2024-25	The operating expenditure in 2024-25 that will be used as the baseline for SRC27.	£m
7.2a - 7.2b	Projected changes in operating expenditure	Provide the forecast incremental change in OPEX annually across the SRC27 period and at three future years, 2038-39, 2044-45 and 2050-51. Working from a baseline total OPEX value in 2024-25. The line titles have been left as free text. Scottish Water should report a separate line for each item of expenditure that is forecast to change. This could include, for example, forecast changes in employment costs, local authority rates and taxes. Scottish Water should distinguish between each new line by adding a suffix (e.g. “a”, “b”, “c”) to the line reference.	£m 2024-25 Price base
7.3a - 7.3d	Projected additional costs of operating the returning PFI	Provide the forecast change in OPEX resulting from the additional costs of operating the returning PFI, relative to the baseline total OPEX value in 2024-25. Scottish Water should complete a separate line for each returning PFI and should assign a unique label to each returning PFI in the “Sub category” column. Scottish Water should distinguish between each new line by adding a suffix (e.g. “a”, “b”, “c”) to the line reference.	£m 2024-25 Price base

Line Reference	Title	Definition	Unit
7.4a - 7.4b	Projected changes attributed to Enhancement and Growth Projects - pre efficiency	Change in OPEX which is not captured within the categories above, attributed to specific, named enhancement and growth projects. Without any efficiency applied. Scottish Water should complete one line per project/programme. These lines could represent changes in OPEX attributed to projects such as: • projects where Scottish Water adopts operating-based solutions rather than capital solutions to deliver improvements; and/or • partnership arrangements with local authorities or other third parties. Scottish Water should indicate in the “Sub category” column whether each project is an operating based solution and/or partnership arrangement. For each enhancement and growth project reported in these lines, Scottish Water should provide a unique ID to allow cross-referencing against the corresponding table 5 entry.	£m 2024-25 Price base
7.5 - 7.6	Efficiency - projected changes	Provide the forecast efficiencies to reduce the OPEX increase annually across the SRC27 period and at three future years, 2038-39, 2044-45 and 2050-51. Working from a baseline total OPEX value in 2024-25. Efficiencies to reduce the OPEX increase should be attributed to: <u>Catch up</u>: efficiencies attributed to the categories of OPEX in lines 7.2 to 7.4. An aggregated value across all categories should be provided. <u>Frontier shift</u>: the ongoing efficiencies Scottish Water are forecasting	£m 2024-25 Price base

Line Reference	Title	Definition	Unit
		through ongoing productivity improvements. Scottish Water should indicate in the commentary how much of the catch-up and frontier efficiency each result from transformation projects, with reference to table 6.	
7.7	Total incremental operating expenditure post efficiency	Calculated total.	£m 2024-25 Price base
7.8	Total operating expenditure post efficiency	Calculated total.	£m 2024-25 Price base
Line Reference	Title	Definition	Unit
7.9	Difference in operating expenditure – Scenario B	Input change in OPEX relevant to the scenario. This will reflect different operating solutions compared to the reference scenario. This may be a negative value, representing fewer operational solutions, for example. The breakdown of projects and initiatives should be provided in the commentary.	£m 2024-25 Price base
7.10	Difference in operating expenditure – Scenario C	Input change in OPEX relevant to the scenario. This will reflect different operating solutions compared to the reference scenario. This may be a negative value, representing fewer operational solutions, for example. The breakdown of projects and initiatives should be provided in the commentary.	£m 2024-25 Price base

Block B: PFI Expenditure

Line Reference	Title	Definition	Unit
7.11	Base PFI expenditure in 2024-25	The PFI expenditure in 2024-25 that will be used as the baseline for SRC27.	£m 2024-25 Price base
7.12a - 7.12d	Projected lower PFI fee for the returning PFI	Provide the forecast change in PFI expenditure resulting from lower PFI fees for the returning PFI, relative to the baseline PFI expenditure value in 2024-25. The input number should be negative. Scottish Water should complete a separate line for each returning PFI and should assign a unique label to each returning PFI in the “Sub category” column. Scottish Water should distinguish between each new line by adding a suffix (e.g. “a”, “b”, “c”) to the line reference.	£m 2024-25 Price base
7.13	Projected changes due to flows and loads	Provide the forecast change in PFI expenditure resulting from the changes in flows and loads, relative to the baseline PFI expenditure value in 2024-25. The input number can be either positive or negative.	£m 2024-25 Price base
7.14	Total change in PFI expenditure	Calculated total.	£m 2024-25 Price base
7.15	Total PFI expenditure	Calculated total.	£m 2024-25 Price base

Block C: Other Costs

Line Reference	Title	Definition	Unit
7.16	PFI costs	Regular payments to third-party organisations providing wastewater assets and services on behalf of Scottish Water for a period under legacy contracts. Equal to line 7.15.	£m 2024-25 Price base
7.17	Interest	The finance costs on Scottish Water's existing loans and additional borrowing that Scottish Water receives each year from the Scottish Government (less the interest on the loans repaid in the year). It is also net of any interest that Scottish Water receives on any cash balances that it holds.	£m 2024-25 Price base
7.18	Taxation	Corporation tax payable to HMRC on profits made during the financial year.	£m 2024-25 Price base
7.19	Reasonable Cost Contributions (RCC)	The gross costs associated with providing local distribution assets for water and wastewater services to provide for new customers with no net deterioration of existing service levels.	£m 2024-25 Price base
7.20	Total other costs	Calculated total.	£m 2024-25 Price base
7.21	Difference in other costs – Scenario B	Input change in other costs relevant to the scenario. This will reflect different interest or taxation compared to the reference scenario. This may be a negative value, representing less interest or tax. The breakdown of the different components should be provided in the commentary.	£m 2024-25 Price base

Line Reference	Title	Definition	Unit
7.22	Difference in other costs – Scenario C	Input change in other costs relevant to the scenario. This will reflect different interest or taxation compared to the reference scenario. This may be a negative value, representing less interest or tax. The breakdown of the different components should be provided in the commentary.	£m 2024-25 Price base

Block D: Financial Assumptions

Line Reference	Title	Definition	Unit
7.23	Price Profile	The annual price profile from the SRC27 business plan.	%
7.24	Level of Borrowing	Total borrowing in each year.	£m 2024-25 Price base
7.25 - 7.27	Measures of inflation	Scottish Water is to provide three measures of inflation: Consumer price index inflation for operating expenditure. The measure of inflation set out in the relevant contracts for PFI expenditure. The measure of capital price inflation for capital investments in the business plan. Scottish Water should use a published measure that it considers closely follows the capital price inflation that it observes.	%

Block E: Property/Population Growth Assumptions

The commentary for billed property and connected property lines should indicate the number of surface drainage only properties for each year.

Line Reference	Title	Definition	Unit
7.28 - 7.31	Water billed properties and active supply points	Billed properties to include number of: Household billed properties Non-household billed properties Licensed Provider supply points Total billed properties	Nr
7.32 - 7.35	Water connected properties & supply points	Connected properties to include: Household connected properties Non-household connected properties Licensed Provider connected supply points Total connected properties	Nr
7.36	Water population	Data to be provided on the: Household population connected to the water service	Nr
7.37 - 7.42	Wastewater billed properties and supply points	Billed properties to include number of: Household billed properties Non-household billed properties Licensed Provider supply points	Nr

Line Reference	Title	Definition	Unit
		Total billed properties Total billed properties not connected for property drainage Total billed supply points not connected for property drainage	
7.43 - 7.46	Wastewater connected properties & supply points	Connected properties to include number of: Household connected properties Non-household connected properties Licensed Provider connected supply points Total connected properties	Nr
7.47 - 7.48	Wastewater population	Data to be provided on the: Household population connected to the wastewater service Assumed percentage returned to sewer	Nr %

7.4. Additional areas to be covered in commentary but not in tables

EVIDENCE THAT SCOTTISH WATER HAS MET THE REQUIREMENTS OF THE SRC21 FINAL DETERMINATION

Scottish Water's business plan should also provide evidence on:

- whether it has achieved the Tier 1 efficiency challenge of 1% per annum from SRC21; and
- where those reductions in expenditure have been made with respect to the individual components of Tier 1 expenditure.

8. Summary costs

8.1. Purpose

This table summarises all capital expenditure and operating expenditure to provide a high-level overview of the SRC27 business plan costs.

8.2. Guidance

The table is split into three blocks with costs for the Reference Scenario A, Scenario B and Scenario C.

This table should be populated using data from table 5 SRC27 Projects and Programmes and table 7 Other Costs and Assumptions.

The capital expenditure lines should be calculated with table 5 using the percentage allocations for maintenance (replacement), maintenance (repair), maintenance (refurbishment), enhancement, and growth to provide the subtotals in each category.

The operating expenditure and other cost lines should align with table 7.

The price profile and level of borrowing should align with table 7 for Scenario A and should be manually input into the Scenario B and Scenario C blocks.

9. Enhancement and growth benchmarking

9.1. Purpose

The purpose of this data is to provide a basis for benchmarking analysis between Scottish Water and other water companies in England and Wales.

9.2. Guidance

The data lines align to the Ofwat PR24 data tables and guidance.

References below refer to tables with the pre-fix CW (section 3) and CWW (section 4). The guidance for these can be accessed here [PR24 Final methodology submission tables and guidance - Ofwat](#).

9.3. Definitions

For the following costs drivers, please provide the number of interventions in line with the reference. The data should be presented for each year of the SRC27 regulatory control period. For the purpose of these definitions, a 'scheme' covers both programmes of work and projects.

Line Reference	Title	Service	Definition	Unit	Reference
9.1a	Leakage activity	Mains replacement	The length of mains that will be replaced for the purpose of reducing leakage.	km	N/A
9.2	Investigations	Studies	The number of environmental studies to be undertaken.	Number	N/A

Line Reference	Title	Service	Definition	Unit	Reference
9.3a	Lead	Lead communication pipes replaced or relined for water quality	The number of lead communication pipes replaced or relined for water quality reasons.	Number	Ofwat CW6.21
9.3b	Lead	External lead supply pipes replaced or relined	Number of external lead supply pipes replaced or relined from the underground boundary box or property boundary to the internal stop tap or above ground boundary box (if fitted).	Number	Ofwat CW6.24
9.3c	Lead	Internal lead supply pipes replaced or relined	Number of internal lead supply pipes replaced or relined from the internal stop tap or above ground boundary box to the compliance point (kitchen tap).	Number	Ofwat CW6.26
9.4a	Metering	Total meters installed Basic/AMI/AMR	The total number of meters installed at existing residential or business properties during the reporting year. Include meters installed at properties fitted in any location (e.g. internal, external in garden, external at boundary etc). Meter types include basic meter, advanced meter infrastructure (AMI) and automatic meter reading (AMR).	Number	Sum of Ofwat lines CW7.6-CW7.8
9.4b	Metering	Total meters upgraded Basic/AMI/AMR	The number of existing residential or business customers where meters were upgraded to/or replaced with smarter meters during the reporting year. Upgrades can be: 1. Basic to AMR/AMI, or 2. AMR to AMI	Number	Sum of Ofwat lines CW7.11-CW7.14

Line Reference	Title	Service	Definition	Unit	Reference
9.5	Continuous river water quality monitoring	Continuous water quality monitor installed	Number of continuous water quality monitors to be installed under the storm overflow drivers.	Number	Ofwat CWW20.49
9.6	Flow monitoring at wastewater treatment works	Flow monitoring schemes applied and installed	The number of flow monitoring schemes at wastewater treatment works that require: 1. Changes to permits only, 2. Simple meter installations, or 3. Complex civils installations ('Complex civils' refers to the provision of monitoring that requires new permanent civils structure(s) to be built. This excludes simple installations e.g. standard monitor installations, whereby a monitor is fixed to a chamber with standard fixings or those requiring only minor adjustments/modifications.)	Number	Sum of Ofwat lines CWW20.33-CWW20.35
9.7	Event duration and flow monitoring for wastewater pumping station emergency overflows	New event duration and flow monitors installed	Number of new event duration monitors to be installed at wastewater pumping station emergency overflows and new flow monitors (for pass forward flow) to be installed at wastewater pumping stations with emergency and storm overflows.	Number	Sum of Ofwat lines CWW20.50-CWW20.51

Line Reference	Title	Service	Definition	Unit	Reference
9.8	Chemicals removal	Current population equivalent served by WwTWs with tightened/new permits for chemicals/hazardous substances	Population equivalent served by wastewater treatment works (WwTWs) at which new or tightened permit conditions for chemicals or other hazardous substances to achieve good chemical status, or to prevent deterioration in chemical status, or to achieve standstill limits for chemicals.	000	Ofwat CWW20.7

For the following expenditure, please provide the costs in line with the reference. The data should be presented for each year of the SRC27 period.

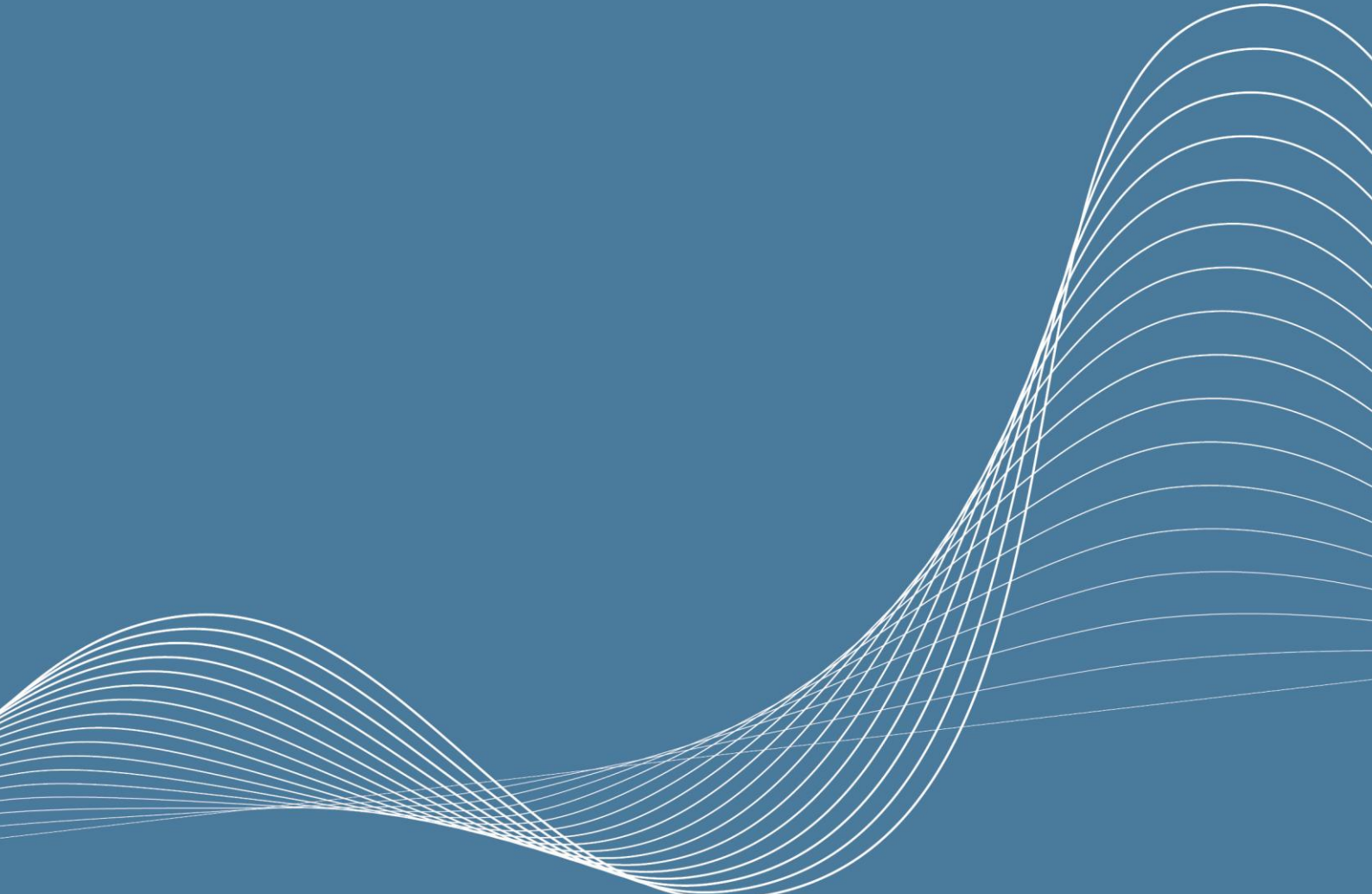
Line Reference	Title	Service	Definition	Unit	Reference
9.1a	Leakage activity	Mains replacement	Expenditure on mains replacement programmes with the purpose of leakage enhancement.	£m	N/A
9.1b	Leakage activity	Customer side leakage	Expenditure on programmes focusing on customer side leakage.	£m	N/A
9.1c	Leakage activity	Other	Expenditure on all other work programmes with the purpose of leakage enhancement.	£m	N/A
9.2	Investigations	Studies	Expenditure on environmental studies.	£m	N/A
9.3a	Lead	Lead communication pipes replaced or relined for water quality	Expenditure on replaced or relined lead communication pipes for water quality reasons.	£m	Ofwat CW3.108

Line Reference	Title	Service	Definition	Unit	Reference
9.3b	Lead	External lead supply pipes replaced or relined	Expenditure on external lead pipes replaced or relined from the underground boundary box or property boundary to the internal stop tap or above ground boundary box (if fitted).	£m	Ofwat CW3.111
9.3c	Lead	Internal lead supply pipes replaced or relined	Expenditure on internal lead supply pipes replaced or relined from the internal stop tap or above ground boundary box to the compliance point (kitchen tap).	£m	Ofwat CW3.114
9.4a	Metering	Total meters installed Basic/AMI/AMR	Expenditure related to the provision of meters to residential or business customers. This does not include costs related to smart meter infrastructure assets such as telemetry.	£m	Sum together Ofwat CW3.60- CW3.68
9.4b	Metering	Total meters upgraded Basic/AMI/AMR	Expenditure relating to the activity of upgrading or replacing meters for existing residential or business customers with a smarter meter. Upgrades can be: 1. Basic to AMR/AMI, or 2. AMR to AMI. This does not include costs related to smart meter infrastructure assets such as telemetry.	£m	Sum together Ofwat CW3.69- CW3.86
9.5	Continuous river water quality monitoring	Continuous water quality monitor installed	Expenditure on schemes to provide continuous river water quality monitoring. Schemes include: 1. Providing near real-time data, 2. Simple monitor installations, or 3. More complex civils installations/works.	£m	Sum together Ofwat CWW3.7- CWW3.9
9.6	Flow monitoring at wastewater	Flow monitoring schemes applied or installed	Expenditure on schemes to provide flow monitoring at wastewater treatment works or last in line wastewater	£m	Sum together Ofwat

Line Reference	Title	Service	Definition	Unit	Reference
	treatment works		pumping stations. Schemes include: 1. Permit changes only, 2. Simple meter installations, or 3. More complex civils installations/works.		CWW3.4- CWW3.6
9.7	Event duration and flow monitoring for wastewater pumping station emergency overflows	New event duration and flow monitors installed	Expenditure on schemes to provide monitoring at emergency wastewater pumping station overflows. Schemes include: 1. Event duration monitors only, 2. Event duration monitors and civils, 3. Event duration monitors and pass forward flow monitor, 4. Event duration monitors and pass forward flow monitor and civils, or 5. Permit change only.	£m	Sum together Ofwat CWW3.10- CWW3.12
9.8	Chemicals removal	Treatment for chemical removal	Expenditure on improvements to achieve good chemical status or to prevent deterioration in chemical status or to achieve standstill limits for chemicals, which include: 1. Treatment solutions, 2. Permitting changes.	£m	Sum together Ofwat CWW3.49- CWW3.51

For the following activities, please provide the associated benefit in the form of reduced leakage over the SRC27 period.

Line Reference	Title	Service	Definition	Unit	Reference
9.1a	Leakage activity	Mains replacement	The reduced leakage due to mains replacement programmes with the purpose of leakage enhancement.	MI/d	N/A
9.1b	Leakage activity	Customer side leakage	The reduced leakage due to programmes focusing on customer side leakage.	MI/d	N/A
9.1c	Leakage activity	Other	The reduced leakage due to all other work programmes with the purpose of leakage enhancement.	MI/d	N/A



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