WSX-D13 – Data tables commentary – Additional tables

Response to Ofwat's PR24 draft determination

Wessex Water
YTL GROUP

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WSX-D13 – Data tables commentary – Additional tables

CONTENTS

This document is part of Wessex Water's response to Ofwat's PR24 draft determination.

More information can be found at wessexwater.co.uk

1. ADD1 – Base expenditure analysis - water resources and water network+

1.1. Lines 1-3, 6-13

The OPEX is consistent across AMP8, ranging from £97m to £102m per annum across the 5 year period.

Power costs in AMP7 reduce by £1.2m from 2022-23 to 2023-24 and then £0.5m between 2023-24 and 2024-25 as a result of the expected stabilisation of power costs.

Other operating expenditure is forecast to decrease by £1.2m between 2023-24 and 2024-25 as a result of expected savings in treated water distribution as 23-24 experienced exceptional weather events, offset by increases in water treatment due to salary and materials increases.

Rates have decreased by £5.7m between 2022-23 and 2023-24 due to the change in process for assessment as this enters a new pricing period basis. Rates are also expected to increase in 26-27 by £3.3m due to assessment changes and increase again in 29-30 by £1.8m.

Most operating costs for the price controls presented here are forecast to remain consist across the remainder of AMP8 at 2022-23 prices with the exception of Other operating costs in Water Treatment, CW2.6, which shows £2.7m increase between 2024-25 and 2025-26 as a result of additional expected base expenditure costs to support leakage reduction which will primarily be related to increased detection. This is then expected to remain in place throughout the remaining years of AMP8.

No equity issuance costs are included in the forecasts presented.

This table is equivalent to CW2 but reflects capex pre-frontier shift and real price effects. Further information of frontier shift and real price effects can be found in the commentary for SUP11 in WSX-D10, and commentary on the individual capex lines for this table is reflected in the aforementioned equivalent table commentary.

2. ADD2 – Enhancement expenditure - water resources and water network+

2.1. Lines 1-143

This table is equivalent to CW3 but reflects capex and opex pre-frontier shift and real price effects. Further information of frontier shift and real price effects can be found in the commentary for SUP11 in WSX-D10, and commentary on the individual lines for this table is reflected in the aforementioned equivalent table commentary.

3. ADD3 – Third party costs by business unit for the wholesale water service

3.1. Lines 1-15

The third party operating expenditure for Water resources and Water network plus are expected to remain materially consistent across the entirety of AMP7 and AMP8, with no anticipated changes in activity that would generate material variances.

3.2. Lines 16-30

There is no capital expenditure forecast for AMP7 or AMP8.

4. ADD4 – Transitional expenditure - water resources and water network+

4.1. Lines 1-140

This table is equivalent to CW12 but reflects capex and opex pre-frontier shift and real price effects. Further information of frontier shift and real price effects can be found in the commentary for SUP11 in WSX-D10, and commentary on the individual lines for this table is reflected in the aforementioned equivalent table commentary.

5. ADD5 – Accelerated programme expenditure - water resources and water network+

5.1. Lines 1-140

This table has been left blank as there is no accelerated programme expenditure.

6. ADD6 – Base expenditure analysis - wastewater network + and bioresources

6.1. Lines 1-3, 6-13

The OPEX is consistent year on year throughout AMP8.

Power has remained consistent between 2022-23 and 2023-24 and then is forecast to reduce by £2.8m between 2023-24 and 2024-25 as a result of the stabilisation of power costs.

A further increase to power costs of circa £0.9m as a result of the transition of enhanced opex in AMP7 into base opex in AMP8. Across AMP8 the power costs re expected to decrease year on year with the exception of the final year where a large increase is expected to return cost levels to those seen at the start of the AMP.

Business rates are forecast to increase between 2022-23 and 2023-24 by £0.7m as a result of changing status of a number of sites which will result in a higher rates charge. A further increase is forecast between 23-24 and 24-25 of £1.9m for the same reason. Across AMP8 business rates are expected to increase by £9.1m due to assessment changes in 26-27 and 29-30 and ongoing site reassessments throughout the AMP.

Other operating expenditure increased by £11.5m between 22-23 and 23-24 as a result of labour and materials increases, with a further £1.4m increase in 24-25. Between 2024-25 and 25-26 there is a further £6.1m increase in other operating expenditure relating to additional costs in the Sewage Treatment and Sludge treatment price controls for additional costs relating to increased monitoring and health and safety initiatives. There are additional costs associated with pollution prevention initiatives which continue to add additional costs throughout AMP8 with a further £13.7m added by the end of the AMP.

No equity issuance costs are included in the forecasts presented.

This table is equivalent to CWW2 but reflects capex pre-frontier shift and real price effects. Further information of frontier shift and real price effects can be found in the commentary for SUP11 in WSX-D10, and commentary on the individual capex lines for this table is reflected in the aforementioned equivalent table commentary.

7. ADD7 – Enhancement expenditure - wastewater network+ and bioresources

7.1. Lines 1-195

This table is equivalent to CWW3 but reflects capex and opex pre-frontier shift and real price effects. Further information of frontier shift and real price effects can be found in the commentary for SUP11 in WSX-D10, and commentary on the individual lines for this table is reflected in the aforementioned equivalent table commentary.

8. ADD8 – Third party costs by business unit for the wholesale wastewater service

8.1. Lines 1-13

The third party operating expenditure for Bioresources and Waste water network plus are expected to remain materially consistent across the entirety of AMP7 and AMP8, with no anticipated changes in activity that would generate material variances.

8.2. Lines 14-26

There is no capital expenditure forecast for AMP7 or AMP8.

9. ADD9 – Transitional expenditure - wastewater network+ and bioresources

9.1. Lines 1-195

This table is equivalent to CWW12 but reflects capex and opex pre-frontier shift and real price effects. Further information of frontier shift and real price effects can be found in the commentary for SUP11 in WSX-D10, and commentary on the individual lines for this table is reflected in the aforementioned equivalent table commentary.

10. ADD10 – Accelerated programme expenditure - wastewater network+ and bioresources

10.1. Lines 1-195

This table has been left blank as there is no accelerated programme expenditure.

11. ADD11 – Developer services expenditure (excluding diversions) - water (English companies)

11.1. Lines 1-25

This table is equivalent to DS2e but reflects capex and opex pre-frontier shift and real price effects. Further information of frontier shift and real price effects can be found in the commentary for SUP11 in WSX-D10, and commentary on the individual lines for this table is reflected in the aforementioned equivalent table commentary.

12. ADD13 – Developer services expenditure (excluding diversions) - wastewater (English and Welsh companies)

12.1. Line 1-30

This table is equivalent to DS3 but reflects capex and opex pre-frontier shift and real price effects. Further information of frontier shift and real price effects can be found in the commentary for SUP11 in WSX-D10, and commentary on the individual lines for this table is reflected in the aforementioned equivalent table commentary.

13. ADD14 – Bioresources - Industrial Emissions Directive scheme costs and cost drivers

13.1. Data table changes

Since the Business Plan was submitted, the Environment Agency (EA) has provided further clarification on its approach to IED compliance and its expectations for achieving compliance. We have therefore reviewed and updated our IED investment programme to ensure that all our sites will be able to achieve compliance with their IED permits.

As part of asset rationalisation to maintain the efficiency of Bioresources in AMP8, we will be shutting down the anaerobic digestion (AD) at Taunton. We will surrender Taunton's IED permit after the AD plant is decommissioned in 2025-26. Therefore, Taunton will not be an IED site in AMP8.

Please refer to Supporting Document **WSX-C18 – Bioresources and the Industrial Emissions Directive (IED)** for further information on our IED investment programme.

The table below summarises the changes in the ADD14 data table compared to the IED data table that was submitted as part of the IED data request in November 2023.

Area	Changes
Taunton	As Taunton will not be an IED site in AMP8, we have removed Taunton's IED scope from the table. However, we have included the cost associated with the decommissioning of Taunton's AD plant in the table as it is an enhancement expenditure incurred as a result of IED compliance. The decommissioning cost has been allocated to the remaining 4 IED sites and reported under the category of 'Other'.
Cost driver 9 – Average sampling frequency per month	We have updated the data of this cost driver for all sites to reflect 'frequency' as the time required per month for sampling. We have previously interpreted 'frequency' as the number of sampling events required per month. This reporting change has no impact on the costs for liquor sampling.
Cost driver 11 – Average number of determinands per sample point	Since the Business Plan submission, the EA has provided further clarifications on their expectations for compliance in the area of liquor sampling and monitoring. We have revised the scope of liquor sampling requirements for all sites to align with the EA's approach to compliance. As a result, we have reduced the number of determinands for all sites and the costs for liquor sampling.
Cost driver 12 – Number of monitors	Since the Business Plan submission, the EA has provided further clarifications on their expectations for compliance in the area of liquor sampling and monitoring. We have revised the scope of liquor monitoring requirements for all sites to align with the EA's

	approach to compliance. As a result, we have reduced the number of monitors for all sites and the costs for control and monitoring.
Base capital and operating expenditure	We have updated and reprofiled all base expenditure as a result of the EA's updated approach to IED compliance and the removal of Taunton from our IED investment programme.
Enhancement capital and operating expenditure	We have updated and reprofiled all enhancement expenditure as a result of the EA's updated approach to IED compliance and the removal of Taunton from our IED investment programme.

13.2. Historic IED compliance costs in the APR

We have spent £0.715m in IED opex costs from 2020/21 to 2023/24, which consist of permit application fees (including consultancy work on the surveys and assessments required for the permit application) and additional resources for additional operational activities required for IED compliance. We have reported this cost in 4M.58 of the APR. We did not report any cost in 4K.13 of the APR.

We forecast that we will spend £0.247m in IED opex cost in 2024/25. We have reported this cost as well as the historic IED compliance costs for years 2022/23 and 2023/24 in CWW3.188 in our PR24 data tables.

The table below summarises the historic IED compliance costs reported in the APR, and the same costs reported in PR24.

APR / PR24 BP reference	Line description	2020/21	2021/22	2022/23	2023/24	2024/25
4M.58	Sludge enhancement (quality) opex	£0.000m	£0.225m	£0.245m	£0.245m	-
4K.13	Location specific costs & obligations - Costs associated with Industrial emissions directive	£0.000m	£0.000m	£0.000m	£0.000m	-
CWW3.188	Sludge enhancement (quality); enhancement wastewater/bioresources opex	-	-	£0.245m	£0.245m	£0.247m

Please note the following:

- In our submission for the IED data request in Nov 2023, there was an error in the historic IED compliance costs reported, and the APR line in which these costs were reported.
- We have only reported the IED compliance costs for years 2022/23, 2023/24 and 2024/25 in Table ADD14 to ensure that the total IED enhancement cost reported in ADD14 aligns with the IED enhancement cost reported in CWW3.187-188.

Please also note that there is £3.532m of IED transitional expenditure that we have reported in 2025/26 in CWW3.187-188 and the relevant lines in ADD14. The reason for this is that there is no bioresources category in CWW12 to allow transitional expenditure for bioresources to be reported in 2023/24 and 2024/25. Please refer to the commentary document for CWW3.187-188 (**WSX-D04 – Commentary on data table changes – Costs wholesale wastewater**)

13.3. Assessment of IED base and enhancement expenditure

13.3.1. Secondary containment

The table below summarises the scope of investment in the category of 'Secondary Containment' for each IED site, and the allocation of costs between base and enhancement.

Site	Scope of investment	Rationale for expenditure delineation
Avonmouth	Provision of secondary containment with the following dimensions: • Volume of bund = 16,300m^3 • Impermeable surface area upgraded = 21,400m^2 • Containment bund wall length = 1,330m • Containment bund wall average height = 0.8m	100% enhancement expenditure as the new secondary containment assets are to provide an enhanced level of spill containment for the site.
Berry Hill	Provision of secondary containment with the following dimensions: • Volume of bund = 27,700m^3 • Impermeable surface area upgraded = 31,200m^2 • Containment bund wall length = 800m • Containment bund wall average height = 0.9m	100% enhancement expenditure as the new secondary containment assets are to provide an enhanced level of spill containment for the site.
Poole	Provision of secondary containment with the following dimensions: • Volume of bund = 11,400m^3 • Impermeable surface area upgraded = 14,800m^2 • Containment bund wall length = 1,090m	100% enhancement expenditure as the new secondary containment assets are to provide an enhanced level of spill containment for the site.

	• Containment bund wall average height = 0.5m	
Trowbridge	• Volume of bund = 8,000m^3 • Impermeable surface area upgraded = 8,800m^2 • Containment bund wall length = 960m • Containment bund wall average height = 0.9m	100% enhancement expenditure as the new secondary containment assets are to provide an enhanced level of spill containment for the site.

13.3.2. Tank covering and abatement of fugitive emissions

The table below summarises the scope of investment in the category of 'Tank covering and abatement of fugitive emissions' for each IED site, and the allocation of costs between base and enhancement.

Site	Scope of investment	Rationale for expenditure delineation
Avonmouth	Provision of tank covers for all existing open sludge tanks. • No. of tanks covered = 6 • Surface area of tank covers = 1,274m^2	100% enhancement expenditure as the new tank covers are to provide an enhanced level of fugitive emissions control for the site.
Berry Hill	Provision of tank covers for all existing open sludge tanks. • No. of tanks covered = 17 • Surface area of tank covers = 2,964m^2	100% enhancement expenditure as the new tank covers are to provide an enhanced level of fugitive emissions control for the site.
Poole	Provision of tank covers for all existing open sludge tanks. • No. of tanks covered = 2 • Surface area of tank covers = 330m^2	100% enhancement expenditure as the new tank covers are to provide an enhanced level of fugitive emissions control for the site.
Trowbridge	Provision of tank covers for all existing open sludge tanks. • No. of tanks covered = 2 • Surface area of tank covers = 165m^2	100% enhancement expenditure as the new tank covers are to provide an enhanced level of fugitive emissions control for the site.

13.3.3. Cake pad / cake storage covering

We do not have any cake pads or open cake storage facilities that require covering under IED.

13.3.4. Control and monitoring

The table below summarises the scope of investment in the category of 'Control and monitoring' for each IED site, and the allocation of costs between base and enhancement.

Site	Scope of investment	Rationale for expenditure delineation

Avonmouth	• Below ground asset monitoring –
	  ○ 5x flowmeters
	  ○ 5x pressure monitors
	• Liquor monitoring –
	  ○ 3x MCERTS flowmeters
	  ○ 3x composite samplers
	  ○ 3x temperature sensors
	  ○ 3x conductivity monitors
	  ○ 3x BOD monitors
	• Digester monitoring –
	  ○ 8x pH monitors
	  ○ 8x liquid foam level monitors
	• Emissions monitoring –
	  ○ 2x H2S analysers
	  ○ 2x methane analysers
	  ○ 2x ammonia analysers
	
	Total number of monitors = 47
		100% enhancement expenditure as these are new equipment that will provide an enhanced level of control and monitoring of the anaerobic digestion process for the site.

Berry Hill	• Below ground asset monitoring –
	  ○ 5x flowmeters
	  ○ 5x pressure monitors
	• Liquor monitoring –
	  ○ 2x MCERTS flowmeters
	  ○ 2x composite samplers
	  ○ 2x temperature sensors
	  ○ 2x conductivity monitors
	  ○ 2x BOD monitors
	• Digester monitoring –
	  ○ 4x pH monitors
	  ○ 4x liquid foam level monitors
	• Emissions monitoring –
	  ○ 2x H2S analysers
	  ○ 2x methane analysers
	  ○ 2x ammonia analysers
	
	Total number of monitors = 34
		100% enhancement expenditure as these are new equipment that will provide an enhanced level of control and monitoring of the anaerobic digestion process for the site.

Poole	• Below ground asset monitoring –
	  ○ 3x flowmeters
	  ○ 3x pressure monitors
	• Liquor monitoring –
	  ○ 2x MCERTS flowmeters
	  ○ 2x composite samplers
	  ○ 2x temperature sensors
	  ○ 2x conductivity monitors
		100% enhancement expenditure as these are new equipment that will provide an enhanced level of control and monitoring of the anaerobic digestion process for the site.

	○ 2x BOD monitors • Digester monitoring – ○ 3x pH monitors ○ 3x liquid foam level monitors • Emissions monitoring – ○ 2x H2S analysers ○ 2x methane analysers ○ 2x ammonia analysers Total number of monitors = 28	
Trowbridge	• Below ground asset monitoring – ○ 5x flowmeters ○ 5x pressure monitors • Liquor monitoring – ○ 2x MCERTS flowmeters ○ 2x composite samplers ○ 2x temperature sensors ○ 2x conductivity monitors ○ 2x BOD monitors • Digester monitoring – ○ 2x pH monitors ○ 2x liquid foam level monitors • Emissions monitoring – ○ 2x H2S analysers ○ 2x methane analysers ○ 2x ammonia analysers Total number of monitors = 30	100% enhancement expenditure as these are new equipment that will provide an enhanced level of control and monitoring of the anaerobic digestion process for the site.

13.3.5. Liquor sampling

The table below summarises the scope of investment in the category of 'Liquor Sampling' for each IED site, and the allocation of costs between base and enhancement.

Site	Scope of investment	Rationale for expenditure delineation
All sites	Additional liquor sampling to be undertaken according to the requirements below: • Average sampling frequency/month = 2 days/month • No. of sample points = 3 for Avonmouth; 2 for other sites • Average number of determinands per sample point = 27	100% enhancement expenditure as the additional liquor sampling is to provide an enhanced level of liquor monitoring for the site.

13.3.6. Permit application

The table below summarises the scope of investment in the category of 'Permit Application' for each IED site, and the allocation of costs between base and enhancement.

Site	Scope of investment	Rationale for expenditure delineation
All sites	• Permit application fees • Permit upkeep costs • Permit variation costs	100% enhancement expenditure as the permit application costs are due to a new regulatory obligation.

13.3.7. Other

The table below summarises the scope of investment in the category of 'Other' for each IED site, and the allocation of costs between base and enhancement.

Site	Scope of investment	Rationale for expenditure delineation
All sites	• Additional resources to undertake the additional operational and maintenance activities required under IED • Additional sampling and surveys required under IED (sludge, residual biomethane potential (RBP), odour, bioaerosols and leak detection) • Upgrades to gas handling and abatement systems to meet BAT (odour control units, siloxane removal plants and biogas flares) • Decommissioning of AD plants for rationalisation (i.e. Taunton)	100% enhancement expenditure as the additional resources, asset upgrades and rationalisation costs are driven by a new obligation.
All sites	Refurbishment or replacement of existing assets on a like-for-like basis to meet BAT (e.g. sludge holding tanks, below-ground pipework, and digesters)	100% base expenditure

13.3.8. Additional resources

We forecast that we would require additional operational and maintenance resources to accommodate the additional site activities under IED. Our forecast of additional resources is based on the requirements below:

Resources	Additional responsibilities required
1x plant operator per site	• Additional plant monitoring • Daily inspections for leaks, emissions, odour, etc

	• Additional sludge and liquor sampling
1x scientist per site	• Additional AD process monitoring • Sludge acceptance checks • Digester mixing assessments • Assessment of efficiency of waste and raw materials management on site • Groundwater and soil analysis
1x maintenance engineer per site	• Additional maintenance activities required to maintain asset condition as per BAT • Routine servicing and calibration of additional online monitors
3x management system resources	• Upkeep of the environmental management system (EMS) required under IED • Management of technical competency of staff involved in the operation of permitted sites
3x specialist engineers	• Design of containment solutions • Develop commissioning plans for new plant equipment, and decommissioning plans for taking plant offline • Management of process safety on sites

13.3.9. Maintenance

There are a number of bioresources assets on our sites that do not meet BAT due to their design or condition. Assets that are in good condition but not compliant by design will need to be replaced with units that are compliant. For example, the existing candle flares are not BAT compliant and cannot be retrofitted with enhancements to be compliant; they will need to be replaced with flares that are compliant. We have then allocated the entire cost of replacement and upgrade as enhancement costs.

Assets that are in poor condition and therefore not compliant, will need to be repaired or replaced. As the assets are replaced on a like-for-like basis, we have allocated these costs as base costs. In most cases, the need to repair or replace these assets would be brought forward (i.e., accelerated maintenance) due to the need to maintain asset condition to BAT standards, which removes the flexibility of risk management that would be part of our maintenance strategy for bioresources prior to IED implementation. We have submitted a base cost adjustment claim for IED to argue that the step change in maintenance requirements due to IED need to be modelled in the base cost (as this was not the case in PR19).

We have allocated the costs of all maintenance schemes in the 'Other' section. The table below provides additional description of the required maintenance and the assessment of whether it is base or enhancement.

Scheme	Site	Description	Base / enhancement
Biogas flare - replace with BAT compliant unit	Avonmouth	Existing candle flare is in good condition but not BAT compliant. It will need to be replaced with a different type of flare that is compliant.	Enhancement

Biogas flare - replace with BAT compliant unit	Berry Hill	Existing candle flare is in good condition but not BAT compliant. It will need to be replaced with a different type of flare that is compliant.	Enhancement
Biogas flare - replace with BAT compliant unit	Trowbridge	Existing candle flare is in good condition but not BAT compliant. It will need to be replaced with a different type of flare that is compliant.	Enhancement
Liquor returns main - BAT compliance	Berry Hill	Existing liquor returns main from Berry Hill to the receiving water recycling centre (Holdenhurst) is in good condition but not BAT compliant. The existing main cannot be upgraded to achieve compliance; it will need to be replaced with a new main that is compliant.	Enhancement
MAD digesters x8 - maintenance for fugitive emissions control	Avonmouth	Repairs to roofs of 8x MAD digesters to prevent fugitive emissions.	Base
APD vessels x6 - maintenance for fugitive emissions control	Avonmouth	Repairs to roofs of 6x APD vessels to prevent fugitive emissions.	Base
Internal sludge pumping station - refurbish/replace for BAT compliance	Avonmouth	Major refurbishment or replacement of the internal sludge pumping station required to improve its structural condition to meet BAT.	Base
Imported sludge tank - replace for BAT compliance	Avonmouth	Repairs to tank required to improve its condition to meet BAT.	Base
Thickened sludge tank (Bellmer GBT) - maintenance for BAT compliance	Avonmouth	Repairs to tank required to improve its condition to meet BAT.	Base
Digester feed tank - maintenance for BAT compliance	Poole	Repairs to tank required to improve its condition to meet BAT.	Base
Drum thickener feed tank - maintenance for BAT compliance	Poole	Repairs to tank required to improve its condition to meet BAT.	Base
Demon liquor treatment plant OCU - maintenance for BAT compliance	Poole	Repairs to the odour control unit required to improve its performance to meet BAT.	Base
Screened sludge tank - replace for BAT compliance	Trowbridge	Tank in poor condition and needs to be replaced to meet BAT.	Base
Pre-thickened sludge tank - replace for BAT compliance	Trowbridge	Tank in poor condition and needs to be replaced to meet BAT.	Base
Thickened sludge tank - replace for BAT compliance	Trowbridge	Tank in poor condition and needs to be replaced to meet BAT.	Base
Digested sludge holding tanks x2 - replace for BAT compliance	Trowbridge	2x tanks in poor condition and need to be replaced to meet BAT.	Base

Return liquor balancing tanks x2 - replace for BAT compliance	Trowbridge	2x tanks in poor condition and need to be replaced to meet BAT.	Base
Return liquor gravity pipelines - replace for BAT compliance	Trowbridge	Existing pipelines are difficult to maintain to prevent scaling. They need to be replaced with above-ground pipelines that can be maintained to meet BAT.	Base
Site drainage - maintenance for BAT compliance	Trowbridge	Repairs to site drainage required to meet BAT.	Base
Site drainage - maintenance for BAT compliance	Berry Hill	Repairs to site drainage required to meet BAT.	Base
Grit & screening area drainage - maintenance for BAT compliance	Berry Hill	Repairs to drainage in this area required to meet BAT.	Base
Sludge pipelines - refurb for BAT compliance	Berry Hill	Sludge pipelines need to be refurbished to meet BAT.	Base
Drainage system - maintenance for BAT compliance	Poole	Repairs to site drainage required to meet BAT.	Base
Liquor return pipeline rising main - replace for BAT compliance	Trowbridge	Existing pipelines are difficult to maintain to prevent scaling. They need to be replaced with above-ground pipelines that can be maintained to meet BAT.	Base

14. ADD15 – PR24 Water Industry National Environment Programme (WINEP) Cost Estimates

We complete this table to align with the latest version of the WINEP, being the 5th July 2024 formal snapshot, with subsequent changes as agreed with the Environment Agency and captured in the formal change log as per 15th August 2024. This aligns with Ofwat's direction to water companies in the Environment Agency's fortnightly WINEP meetings for the business plan to reflect the latest view of the WINEP.

Since the snapshot, we note that there have been a number of changes to the WINEP that affect the population of this data table, including but not limited to the resolution of some holding lines and driver code (primary, secondary & tertiary) changes.

For the population of the table we understand the "number of WINEP actions" to be "number of individual WINEP components". This is of particular note where we have some WINEP actions with multiple components, including one particular action with two different primary drivers, as shown in the table below. Many of our storm overflow improvements are identified under a single WINEP action ID, but with differing component IDs. We are aware that different groupings of actions/components might be undertaken by other companies.

WINEP Action ID	Action Component	Driver Code (Primary)	Action Name
08WW100016	a	HD_INV	Poole Harbour surface water sewers nutrient investigation
08WW100016	b	HD_INV	Coastal nutrient and chemical investigation - Poole Harbour chemicals monitoring
08WW100016	c	HD_INV	Coastal nutrient and chemical investigation - Christchurch Harbour nutrient modelling
08WW100016	d	HD_INV	Coastal nutrient and chemical investigation - The Fleet nutrient modelling
08WW100016	e	WFD_INV_CHEM	Coastal chemical investigation - Severn Estuary chemical monitoring
08WW100016	F	HD_INV	Coastal nutrient and chemical investigation - Poole Harbour nutrient modelling

Totex costs are allocated to the primary driver, as per Ofwat's guidance, with no purpose splits to a less stringent requirement (either as a secondary driver or as a separate action line, even if this target/limit is 'more' statutory than the more stringent one). We note that some schemes have as many as five different WINEP drivers, with the quaternary and quintenary drivers captured in the 'comments' columns of the WINEP spreadsheet itself rather than the 5th July 2024 snapshot version. Within the table we provide commentary against each driver line where there are other related drivers, where schemes/costs might otherwise be assigned.

Included are any transition costs in 2023-24 and 2024-25, but not included are any costs beyond 2029-30 to complete any PR24 WINEP schemes. This specifically relates to some nutrient (phosphorus and nitrogen) removal programmes, of which details beyond 2029-30 are in CWW19.

The WINEP retains some holding lines for AMP8 delivery, in particular those related to the newly designated bathing waters. Details of our proposals related to these actions can be found in WSX-C09 (for investigations and continuous discharges) and WSX-C11 (for storm overflows).

15. ADD16 – PR24 National Environment Programme (NEP) Cost Estimates

Table not relevant to Wessex Water.

16. ADD17 – Sanitary determinands scheme data

We complete this table to align with the latest version of the WINEP, being the 5th July 2024 formal snapshot, with subsequent changes as agreed with the Environment Agency and captured in the formal change log as per 15th August 2024. This aligns with Ofwat's direction to water companies in the Environment Agency's fortnightly WINEP meetings for the business plan to reflect the latest view of the WINEP.

Since our original PR24 business plan one sanitary scheme has been removed as it is no longer in the WINEP – Cannington WRC which is reflected in ADD17. This was highlighted in our response to OFW-OBQ-WSX-103 and therefore did not impact the draft determination.

16.1. Capital expenditure.

Since our PR24 business plan submission we have further reviewed WRC needs and where updated information is available, we have revised our figures and ADD17 reflects the current position.

16.2. Operating expenditure.

Costs have been provided to 3 decimal places. For operating costs after March 2030 we have stated the first full year opex effect with the 2029/30 RPE adjustment.

16.3. Population equivalent served.

Population equivalent served reflects the data also included in CWW20 and has been updated using APR24 data. For period after 29-30 population equivalent for 2035 has been provided.

16.4. Cost driver 1 - Scheme design population equivalent served.

Population equivalent served reflects the data also included in CWW20. Design population is to year 2050.

16.5. Cost driver 2 to 7 - Scheme design population equivalent served.

16.5.1. Current Permit limits

Current permit limits are based on permit requirements as of March 2025 and pre-enhancement.

16.5.2. Future Permit limits

Future permit limits are based on WINEP changes for this driver as of March 2030. Four WRCs are anticipated to have tighter permits by 2030 due to DWF changes. Capital expenditure has been purpose split to ensure the further changes are included in growth, not sanitary driver, as per ADD19 commentary.

16.6. Cost driver 8 – Permit change only.

All WRCs will require upgrades to achieve new sanitary determinands.

16.7. Cost driver 9 – Catchment based solution.

No Catchment based solutions are being proposed.

16.8. Cost driver 10 – Length of transfer pipeline.

N/A – no transfer solutions are being proposed.

16.9. Cost driver 11 – Annual average daily transferred flow.

N/A – no transfer solutions are being proposed.

16.10. Cost driver 12 – Is there a PR24 WINEP/NEP P or TN enhancement at the same site.

WRCs with synergies with phosphorus and nitrogen WINEP drivers are identified with a Y. No other WINEP or growth synergies have been included.

16.11. Cost driver 13 – Solution type.

Solution type selected from drop down menu.

16.12. Cost driver 14 – Corresponding CWW3 line.

CWW3 line stated.

16.13. Cost driver 15 – Commentary associated with cost drivers 13 & 14.

Summary of scope required for Sanitary driver only; we exclude processes solely required for other drivers.

17. ADD18 – Updated RR30 RORE Analysis for the draft determinations and company representations

We have updated this table for the notional company of our size (setting out the scale of investment programmes). We set out our approach to this in representation WSX-R02 and associated annexes.

We note that we have put in the absolute level of performance expected at the P90 and P10 levels, rather than the impact relative to the P50. This is as we think it is important to understand the total level of risk implicit in the DD, and not just the skew. The skew can be seen from the tables in WSX-R02.

18. ADD19 – Wastewater network+ - Growth at STWs scheme costs and cost drivers

18.1. Capital expenditure.

Our plan includes a number of sites where we forecast spend will continue into AMP9 and AMP10. These are identified within WSX-C10, specifically Table 2 – Scheme level Growth at STWs enhancement totex models.

For those WRCs that will commence in AMP9, additional capital expenditure may be required and identified in future price reviews. They have been identified in our current plan due to the risk that changes in rate of development may bring expenditure forward into AMP8. Note that while we have included AMP9 needs this should not be considered to reflect our full WRC growth AMP9 programme.

Since our October 23 submission we have further reviewed WRC needs and where updated information is available, we have revised our figures and ADD19 reflects the current position. Some sites no longer require investment, while other costs have changed to reflect either increases or decreases in scope. This is due to a combination of performance improvements as a result of completed AMP7 schemes, reduced flows following ongoing infiltration reduction programmes and further investigation into the base data. A number of sites have also been added, some of which were in our October 23 submission, but with no values included.

18.2. Operating expenditure.

Costs have been provided to 3 decimal places. For significantly small sites this has led to zero operating expenditure.

For operating costs after March 2030 we have stated the first full year opex effect with the 2029/30 RPE adjustment.

For sites with construction in AMP9 and/or completion will be in AMP10, operating costs have not been included and will be requested as part of future price reviews.

18.3. Population equivalent served.

Population equivalent served reflects the data also included in CWW20.

18.4. Cost driver 1- 13 Numerical permits.

Cost drivers 1-13 refer to changes to numerical permit conditions providing information on current and expected limits.

18.4.1. Current Permit limits

Current permit limits are based on permit requirements as of March 2025.

One WRC has an anomaly – Compton Bassett WRC. We have applied for an increased DWF permit at Compton Bassett WRC which should be in place by March 2025. The 'Current permit' data in ADD19 (cost drivers 1,3,5,7,9&11) reflects the figures included in the application to the EA.

The table below summarises the current and proposed permit limits for Compton Bassett WRC.

Table 1 – Compton Bassett WRC - permit limits

Permit requirement	Existing limits	Application limits
DWF m³/day (Cost driver 1& 2)	600	1,250
FPF l/s (Cost driver 3&4)	17.5	54
BOD mg/l (Cost driver 5&6)	25	15
Ammonia mg/l (Cost driver 7&8)	30	17.5
Suspended solids mg/l (Cost driver 9&10)	40	22.5
Phosphorus mg/l (Cost driver 11&12	-	0.6 Effective Mar 2030

18.4.2. Future Permit limits

Future permit limits are based on those anticipated to apply as of end of March 2030.

The majority of future permit limits detailed in ADD19 will have changed since the October 2023 submission as reviews have been undertaken in the interim and there is therefore a higher degree of certainty. However, a high level of uncertainty will still exist for those sites where process models have not yet been updated to reflect AMP8 data and the future DWF confirmed, or numerical limits for which the modelling work has not been completed to enable them to be confirmed. The table below summarises the sources of data for each WRC.

Table 2 – Data sources for future permit limits

WRC	Cost driver 2 - DWF (m^3/d)	Cost driver 4 - Expected FPF permit (l/s)	Cost Driver 6,8,10 & 12 - Expected enhanced numerical permits	Cost driver 13 - Storm tank capacity added (m^3)
ALL CANNINGS (BISHOPS CANNINGS)	AMP8 Process model	-	Sagis modelling	-
BRADFORD ON TONE	DWMP Process model	DWMP Process model	Sagis modelling	DWMP Process model
BUCKLAND NEWTON	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP8 Process model
CANNINGTON	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP8 Process model
COMPTON BASSETT	AMP7 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP7 Process model
CROMHALL	AMP8 Process model	-	Sagis modelling	-
ERLESTOKE	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP8 Process model
HATCH BEAUCHAMP	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP8 Process model
HULLAVINGTON	AMP8 Process model	AMP8 Process model	Pro rata	DWMP Process model
HURDCOTT	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP8 Process model
LEYHILL	AMP8 Process model	-	Sagis modelling	-
MARDEN	AMP8 Process model	-	Sagis modelling	-
MEARE	DWMP Process model	EA agreed methodology - I_{max}	Pro rata	-
MILBORNE PORT	AMP8 Process model	AMP8 Process model	Pro rata	AMP8 Process model
NORTH PETHERTON	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP8 Process model
OVER STRATTON	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP8 Process model
PEWSEY	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP8 Process model

RINGWOOD	PR24 Process model	EA Agreed methodology - MDPF	Sagis modelling	PR24 Process model
STOKE ST GREGORY	AMP8 Process model	AMP8 Process model	Pro rata	AMP8 Process model
TINTINHULL AND ASH	AMP8 Process model	AMP8 Process model	Pro Rata	DWMP
WEST BAGBOROUGH	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP8 Process model
WICK ST LAWRENCE	AMP8 Process model	EA agreed methodology - I_{max}	Pro rata	DWMP
WIVELISCOMBE STYLES	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	DWMP
WOOKEY	AMP8 Process model	EA agreed methodology - I_{max}	Sagis modelling	AMP8 Process model

Fourteen of the WRCs identified as requiring DWF permit changes have synergies with other drivers that impact on the future permit limits. The EA have advised that limits within the WINEP are based on current DWF and that they expect further tightening of these limits to account for changes in DWF, with the scheme still to be completed by the WINEP regulatory dates. As a result, the future limit in ADD19 may seem disproportionate to the current limit in relation to DWF change. Costs to achieve the WINEP permit are included within the requested funding detailed in CWW19 and ADD17. The extra-over costs due to further tightening as a result of increasing DWF are included in ADD19. The table below lists these WRCs together with the applicable WINEP permit limits and tighter limits where required by an increase in DWF.

Table 3 – Sites with both WINEP and growth drivers

WRC	**Phosphorus mg/l**			**Ammonia mg/l**		
	Current	WINEP	DWF	Current	WINEP	DWF
ALL CANNINGS (BISHOPS CANNINGS)	1.00	0.25	**0.23**	-	-	-
BRADFORD ON TONE	-	0.25	0.25	-	-	-
CANNINGTON	-	1.3	**1.0**	-	-	-
HURDCOTT	1.00	0.25	**0.19**	-	-	-
MARDEN	2.00	0.25	0.25	-	-	-
MILBORNE PORT	1.00	0.25	**0.18**	-	-	-
NORTH PETHERTON	-	0.25	0.25	8	5	**4**

PEWSEY	1.00	0.25	**0.24**	-	-	-
RINGWOOD	1.00	0.25	**0.2**	10	8	**6**
WOOKEY	-	1.5	**0.8**	-	-	-
LEYHILL	1.00	-	**0.76**	10	3.8	**3**
BUCKLAND NEWTON	4.00	1	**0.66**	-	-	-
TINTINHULL AND ASH	-	0.25	**0.2**	-	-	-
COMPTON BASSETT	-	1	**0.6**	-	-	-

A further nine WRCs identified as requiring capacity improvements also have synergies with a Phosphorus driver that impacts on the future permit limits. Costs to achieve the WINEP permit are included within the requested funding detailed in CWW19. The table below lists the WRCs impacted.

Table 4 – WRCs with both capacity improvements and a P-removal driver

WRC	Phosphorus mg/l	
	Current	WINEP
AMESBURY	1.00	0.25
BECKINGTON	-	1.5
DORCHESTER	0.70	0.25
MERRIOTT	1.00	0.25
OAKHILL	-	1.5
SALISBURY	1.00	0.25
WAREHAM	-	0.25
WELLINGTON	1.00	0.25
WELLS	2.00	0.25

18.5. Cost driver 14 – WINEP quality scheme at site (Y/N)

WRCs with synergies with WINEP drivers are identified with a Y.

18.6. Cost driver 15 – Type of WINEP quality scheme at site

Type of WINEP quality scheme is identified as permit change.

18.7. Cost driver 16 – Process capacity added to meet current quality permits (PE)

Process capacity added to meet current quality permits has not been reviewed for WRCs included in the October 2023 submission; forecasts can change annually, and some process models have already been completed using historical data.

WRCs added since the October 2023 submission are based on a 2050 design horizon.

Where DWF is affected process capacity is provided in Cost driver 17. The table in 19.8 below identifies all WRCs with updated population capacities.

18.8. Cost driver 17 – Process capacity added to meet expected quality permits (PE)

Process capacity added to meet expected quality permits on additional sites included since October 2023 submission are based on a 2050 design horizon.

Three WRCs are also now expecting significant development in the catchment for which population has been amended and are based on a 2050 design horizon.

Where DWF is not affected process capacity is provided under Cost driver 16.

The table below identifies WRC with updated process capacities.

Table 5 – WRCs with updated process capacities

WRC	Capacity provided
COMPTON BASSETT	PE Forecast: 2025-2050
ERLESTOKE	PE Forecast:2025-2050
HULLAVINGTON	PE Forecast:2025-2050
LEYHILL	PE Forecast:2025-2050
NORTH PETHERTON	PE Forecast:2025-2050
STOKE ST GREGORY	PE Forecast:2025-2050
TINTINHULL AND ASH	PE Forecast:2025-2050
WELLS	PE Forecast:2025-2050
WIVELISCOMBE STYLES	PE Forecast:2025-2050

18.9. Cost driver 18 – STW compliant with DWF permit in 2022 (Y/N)

WRCs with measured Q90 values exceeding permitted DWF between January and December 2022 are flagged with a Y.

18.10. Cost driver 19 – STW compliant with DWF permit under "3-in-5 rule" in 2022 (Y/N)

WRCs with measured Q90 values exceeding permitted DWF between January and December 2022 and failing at least two previous years since 2018 are flagged with a Y.

19. ADD20 – Wastewater network+ - Storm Overflow spill reduction (network and STW)

This data table lists all storm overflow improvements planned in AMP8.

Please see WSC-C11 for an explanation of changes in the listed schemes, volumes and costs in our final submission compared with the October 2023 submission.

19.1. Capex (£m)

The Capex costs are £m 2022/23 price base. These costs exclude the transition investments spent/forecast for some of the schemes.

19.2. Opex (£m)

The storm overflow improvement programme has been determined for the programme as a whole but at an individual scheme level this is less certain until the associated investigations are progressed further. To reflect this current uncertainty at a scheme level, in ADD20 we have applied the opex in the year 2029/30 and beyond only.

This results in slightly different in-AMP opex costs than included in other data tables such as CWW3, where new opex for the whole programme of storm overflow improvements has been profiled to reflect our latest view of the delivery programme.

19.3. Cost driver 1 - Total Equivalent Storage (m3)

The sum of the following 3 cost drivers.

19.4. Cost driver 2 - Equivalent Storage delivered through Grey solutions (CWW20.14) (m3)

Storage volume required to be mobilise to reduce the discharge count to the required target performance. These were generally calculated using our complex dynamic hydraulic computer models of the sewerage systems. See WSC-C11 for more details.

19.5. Cost driver 3 - Equivalent Storage delivered through green solutions (CWW20.15) (m3)

We have included our 36 Wetland solution schemes in this 'Green' cost and volume driver, although note in Ofwat's modelling they created a new category for Wetlands. As outlined in WSX-16 and in our response to OFW-OBQ-WSX-168, the sizing for our wetland schemes have been based on the exemplar Bulbury Lane and this is the same basis for which we have input the average equivalent storage volume of 1750m^3.

19.6. Cost driver 4 - Equivalent Storage delivered through other solutions (m3)

We have included our hybrid solutions volume in this cost driver 4 'storage delivered through other solutions'. The associate costs are put in the 'Separation Source' line in CWW3.

19.7. Cost driver 5 - BP Spill reduction (annual spills)

This is the estimated discharge count reduction for each overflow, reducing from the EDM data to the target discharge count (which depends on the sensitivity of the environment). E.g. for chalk streams we assume a target of 5 discharge counts/year. For non-sensitive environment we assume 10 discharges/year. For other sensitive environments we assume 8 or 9 discharges/year. This method is consistent with our October 2023 submission.

19.8. Cost driver 6 - Priority site (yes/no)

The 'High Priority' status for each individual site has been extracted from the SOAP (storm overflow action plan) which states if is in a high priority environment according to the SODRP.

Note: Many of the sites listed as NOT in High Priority environments, were prioritised based on a 'priority list' provided to us by Natural England as part of our original submission.

19.9. Cost driver 7 - New screen required as part of scheme (yes/no)

A 'Yes' is given in this if the individual overflow does not currently have a fine screen (6mm or smaller) in its permit.

19.10. Cost driver 8 - Existing permit (y/n)

All entries have existing storm overflow permits, granted by the EA.

19.11. Cost driver 9 - Existing permit ref

This is the permit number of the EA permit.

19.12. Cost driver 10 - Permitted PFF (l/s)

This is the permitted value taken from the permit. If there is no permitted value we have put ‘N/A’.

19.13. Cost driver 11 - PFF (modelled/calculated) (l/s)

This is generally the value that is predicted by our dynamic hydraulic computer models. Where we do not have the models readily available, we have put ‘N/A’.

Wessex Water consented most of our storm overflow permits on the basis that this was Pass forward flow ‘at first spill’. The EA has provided more recent guidance saying this should be PFF ‘during’ spill. Therefore, WSX permitted values need to be updated to match the definition.

We are reporting in the table the lowest PFF during spill. This is therefore different to how these were originally permitted (flow at time of first spill). See note in justification column (driver 16).

19.14. Cost driver 12 - Formula A (l/s)

Formula A is a notional calculation of flows that the EA currently consider should be the minimum pass forward flow at an overflow.

19.15. Cost driver 13 - Permitted storage requirement (m3)

This is the permitted value taken from the permit. If there is no permitted value, we have put ‘N/A’.

19.16. Cost driver 14 - Actual storage (m3)

This is the calculated value of storage, using our latest computer models to predict the volume available in storm tanks, attenuation tanks, and sewers / on-line sewer tanks, which still contains uncertainties due to the nature of the prediction and data available for validation. This often supersedes the historical permitted values which often predate the availability of computer models. We are investigating options regarding updating permit values accordingly.

19.17. Cost driver 15 - Permitted annual spill frequency (where stated)

We have no storm overflows with permitted annual spill frequencies, so we have stated ‘N/A’ for these.

19.18. Cost driver 16 – Justification

Where our latest computer models show a lower value that the permitted value we have written a short explanation in this column. We are discussing options for these with the EA regarding updating permit values accordingly.

19.19. Cost driver 17 - Permitted screening provision (6mm, 10mm, none)

This is the permitted value taken from the permit.

19.20. Cost driver 18 - Actual screening provision (6mm, 10mm, none)

This is our best available information of the size of the screening that is installed. We have put 'N/A' where this is not available or not applicable.

19.21. Cost driver 19 - Screen totex (£m)

Where a fine screen is not currently in the permit, then we have stated £150k in this entry to allow a new screening chamber and screen to be provided. This is a unit rate, as detail of the precise installation requirements are not yet confirming, pending investigations. We consider this rate to be an average cost for the range of new fine screens and therefore whilst final screen costs per site will vary, we believe the total cost requested to be sufficient for these in the round.

19.22. Cost driver 20 - SOAF Investigation current stage

These reflect our latest SOAF summary report, and used the latest stage that the investigation was reported to be in.

19.23. Cost driver 21 - Related FFT increase to reduce SO spills or allow storage discharge (l/s)

We left this blank, as there are no known FFT increases in our programme to deliver a Storm Overflow ENvAct_Improvement output.

19.24. Cost driver 22 - FFT increase location

We left this blank, as there are no known FFT increases in our programme to deliver a Storm Overflow ENvAct_Improvement output.

19.25. Cost driver 23 - FFT increase totex (£m)

We left this blank, as there are no known FFT increases in our programme to deliver a Storm Overflow ENvAct_Improvement output.

19.26. Cost driver 24 - Surface water separation (ha removed)

For grey only and wetland solutions, we have assumed zero surface water separation.

For the 8 schemes where we are proposing to undertake a grey hybrid solution, we have estimated the impervious area removed. This includes WRC and network overflows.

19.27. Cost driver 25 - Surface water separation totex (£m)

For the 8 schemes where we are proposing to undertake a grey hybrid solution, this is the entire scheme cost for the grey-hybrid solution. The proportion of surface water separation will be reviewed during delivery; the final area of surface water separation we deliver will have an inverse relationship on the associated grey storage volume required.

19.28. Cost driver 26 - Wetland area (ha)

For this area estimate, we have used $3m^2$ per population equivalent for the catchment upstream of the overflow.

19.29. Cost driver 27 - Wetland totex (£m)

This totex cost is for the 36 schemes where we are proposing wetland solutions.

19.30. Cost driver 28 - Forecast scheme completion date

We have stated March 2030 for all schemes, as the detailed delivery profile will be developed and become more certain as the associated investigations are completed.

19.31. Cost driver 29 - Combined scheme (provide name of combined scheme)

These are generally blank, as most schemes are individual. The exception is in the village of Box, where we are proposing delivery of a strategy to solve 4 storm overflows in one delivered scheme.

19.32. Cost drivers 34 to 37 - EDM

Values from the annual EDM returns to the EA.

19.33. Cost driver 38 - Model predicted spills (annual, 2025)

Average annual discharge predictions, using 10 years stochastic rainfall, from the latest stock of dynamic hydraulic computer models of our sewerage system.

19.34. Cost driver 39 - Target spills (annual spills)

Target spill or discharge count / year. The default is 10 spills/year as stated in the SODRP. We have applied this to non-sensitive environments. Sensitive environment such as chalk streams could have a tighter target, due to their dilution being less in the summer months, so we have assumed 5/year target.

For the Poole Shellfish waters new (SW_IMP) or ‘top up’ (SW_IMP and EnvAct drivers) schemes we have assumed a target 1 spill/year. For the associated original Poole Harbour schemes on the WINEP, their target will be based on the environment sensitivity (e.g. 10/yr).

19.35. Cost driver 40 and 41 - Company forecast spill position

This is the average EDM data from 2018 to 2022. It excludes the wet year of 2023.

Wadmore Lane scheme has been adjusted to a lower level, as this has been improved in an AMP7 scheme.

19.36. Cost drivers 42 to 46 – Spill reduction cumulative benefits

As mentioned, we do not have a detailed delivery programme, so are not in a position to states which scheme are being delivered in which year. Therefore, we have left cost drivers 42 to 46 blank.

19.37. Cost drivers 47 – Spill reduction cumulative benefits

We have generally calculated the benefit as being the average EDM minus the target end of AMP position.

For the Poole Shellfish waters 'top up' (SW_IMP and EnvAct drivers) schemes we have calculated the difference between the original target level and the shellfish target of 1 /year. This avoided double counting the benefits of these 'top up' lines.

20. ADD24b – Large enhancement schemes expenditure – enhanced engagement process

20.1. Poole WRC – Phosphorus & Nitrogen Removal

We include a single scheme within this table: Poole WRC – Phosphorus & Nitrogen Removal.

This is a combined phosphorus and nitrogen removal scheme (WINEP ID 08WW102107).

Costs stated against 2025-26 also include transition spend 2023-24 and 2024-25. The scheme costs are the combination of the respective phosphorus and nitrogen costs as profiled in CWW19.

More details of the scheme can be found in WSX-C09, as well as our original business plan documents WSX16 & WSX17.