

WSX-001 – Performance and outcomes

Response to
Ofwat's PR24 draft
determination



Wessex Water
YTL GROUP

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Representation reference: WSX-001

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CONTENTS

1.	Executive summary	2
2.	Power of incentive rates	4
3.	Demand Performance Commitments – Overview	7
4.	Leakage	8
5.	Per Capita Consumption	9
6.	Business demand	15
7.	Customer contacts about water quality	23
8.	Unplanned outage	26
9.	Total pollution incidents	34
10.	Discharge permit compliance	42
11.	Bathing water quality	45
12.	River water quality	49
13.	Storm overflows	50
14.	External sewer flooding	57
15.	Biodiversity	61
16.	Operational greenhouse gas emissions – water and wastewater	81
17.	Revised proposals	87
	Annex 1 – Biodiversity	90

1. Executive summary

We are committed to delivering high outcomes for customers. In our PR24 business plan, we set out a stretching yet achievable set of performance commitments. Together, these commitments represent an ambitious package that will deliver significant improvements for our customers and the environment across a range of outcomes. We did not propose any bespoke performance commitments, and our business plan also used Ofwat's ODI rates.¹

Customer views were central to our proposals. We developed these over two years, during which we sought extensive customer input, through a robust framework of research and engagement. This started with our eight priorities to 2050, which we developed previously in partnership with customers and stakeholders. We shaped, checked, reshaped, and rechecked our strategy repeatedly on the back of this feedback; and used innovative techniques such as a new method of willingness to pay analysis to understand the values customers place on particular service levels. We have taken special care to listen to the views of people in vulnerable circumstances who may have specific or additional needs and the consumer advice agencies that work with them.

Wessex Water is already a leading, if not the top, performer in the industry: we are at the top of the Environment Agency (EA) rankings for the environment and consistently at the top end of Ofwat's leaderboard for customer service, and the DWI's leaderboard for drinking water quality. Our business plan commits to stretching this performance further and improving the level of outcomes we deliver for customers and the environment.

Ofwat's draft determination includes performance levels which are, in many cases, considerably different to our own proposals. We understand Ofwat's aim to increase performance in the sector, but consider this ambition needs to be set at the appropriate level considering what is an achievable level (i.e. P50) within a given cost allowance; and with cross-checks against current performance on costs and outcomes.

We have carefully considered Ofwat's draft determination, and the performance levels we can deliver under our view of the appropriate cost allowances. On that basis, we have revised our plan such that:

- We include **Ofwat's targets** in a number of areas including: water supply interruptions; compliance risk index; mains repairs; internal sewer flooding; sewer collapses; and serious pollutions.
- We are proposing **additional stretch** compared to our business plan, on key outcomes including: leakage; per capita consumption; and storm overflows.
- We are **maintaining our business plan** proposals where we consider these represent stretching but achievable targets, and where we would need significant additional investment to meet Ofwat's targets.
- We have **updated our targets** in some areas to reflect new information, or changes in requirements since business plan submission, including: bathing water quality; and total pollution incidents.
- Furthermore, we note that there are some targets which we do not believe are appropriately aligned to customer interests, for example unplanned outage; and customer contacts.

Our proposals are summarised in Table 1.1 and detailed in the remainder of this document.

¹ [PR24: Using collaborative customer research to set outcome delivery incentive rates - Ofwat](#)

We are also concerned with Ofwat’s proposed ODI rates, and in particular the scale and frequency of change in these. We are concerned these rates now sit above the value represented by the outcomes for customers and the environment. We believe it would be more appropriate to use our PR19 rates (which were calibrated to marginal cost and marginal benefits) in the PR24 Final Determination.

Under our revised proposals included in this response, we estimate that Ofwat’s proposals would result in us incurring net ODI penalties of around **£162 million** over 2025-30. This assumes that we are adequately funded for the investment that is needed to achieve the level of performance in our business plan. If we reflect the cuts to both base and enhancement that Ofwat proposes, this expected penalty would be significantly (around £90m) higher.

In order to address this skew, we ask Ofwat consider its approach to setting PCLs and its ODI rates. Alternatively, Ofwat could explicitly recognise the impact of performance commitments on companies’ overall balance of risk and return. This is discussed in more detail in representation WSX-R01.

Table 1.1 – Our revised performance commitment targets

Performance commitment		2025-26	2026-27	2027-28	2028-29	2029-30
Unplanned outage	Draft Determination profile	4.44%	3.86%	3.28%	2.70%	2.14%
	Our requested profile	5.02%	5.02%	5.02%	5.02%	5.02%
Leakage	Draft Determination profile	13.4%	13.6%	14.5%	15.4%	16.5%
	Our requested profile	11.3%	15.5%	17.6%	18.6%	19.8%
PCC	Draft Determination profile	-0.3%	1.0%	2.8%	4.5%	6.2%
	Our requested profile	0.7%	-0.2%	0.9%	2.1%	3.3%
Business demand	Draft Determination profile	4.8%	5.9%	7.6%	9.3%	10.9%
	Our requested profile	2.8%	3.3%	4.3%	5.9%	7.4%
Customer contacts about water quality	Draft Determination profile	0.92	0.90	0.89	0.87	0.86
	Our requested profile	1.00	0.98	0.96	0.94	0.92
Total pollution incidents	Draft Determination profile	18.33	17.16	15.99	14.82	13.65
	Our requested profile	31.19	26.79	22.51	17.95	13.68
Discharge permit compliance	Draft Determination profile	100%	100%	100%	100%	100%
	Our requested profile	99.03%	99.03%	99.02%	99.02%	99.02%
Bathing water quality	Draft Determination profile	87.9%	87.9%	87.9%	87.9%	87.9%
	Our requested profile	80.6%	80.6%	80.6%	80.6%	80.6%
River water quality	Draft Determination profile	0.5760	0.5782	0.5822	0.6142	0.6371
	Our requested profile	0.5635	0.5635	0.5703	0.6007	0.6144
Storm overflows	Draft Determination profile	20.00	19.27	18.54	17.81	17.10
	Our requested profile	23.50	23.50	22.76	22.00	20.00
External sewer flooding	Draft Determination profile	15.16	14.64	14.12	13.60	13.07
	Our requested profile	16.14	15.35	14.58	13.81	13.07
Biodiversity	Draft Determination profile	0.00	0.00	0.00	0.08	0.73
	Our requested profile	0.00	0.00	0.00	0.00	0.17
Operational GHG - water	Draft Determination profile	30617.80	30395.25	30135.76	29965.41	29071.53
	Our requested profile	31109.48	30775.79	30606.60	30413.10	30280.78
Operational GHG – wastewater	Draft Determination profile	116498.73	114911.07	112454.10	108763.60	98161.55
	Our requested profile	119530.99	118290.23	115893.07	112669.86	107158.74

2. Power of incentive rates

2.1. Summary

To incentivise the right (or efficient) level of performance, ODI rates must reflect the value of the relevant outcome to customers and the environment. There is considerable uncertainty in deriving this value. This uncertainty is demonstrated by Ofwat, and the frequency of changes in its own approach (i.e. between its PR19 Final Determination, PR24 Final Methodology, August 2023 update on outcomes, and PR24 Draft Determination).²

Furthermore, the latest changes in Ofwat's approach (at DD) have significantly increased the level of ODI rates for PR24. We are concerned these rates now sit above the marginal benefit delivered for customers and the environment. In the absence of robust cross checks on the power of the incentives, we ask Ofwat to use our PR19 rates (which were calibrated to marginal cost and marginal benefits) in its Final Determination.

2.2. Rationale

In August 2023, Ofwat published indicative ODI rates based on an updated methodology for PR24.³ The methodology used to derive these rates was different to that indicated in its PR24 Final Methodology (which was again different to the approach at PR19).⁴ We understand the change was due to difficulties in applying its intended methodology; and we acknowledge Ofwat acted quickly and flexibly in the circumstances to ensure rates were published ahead of Business Plan submission.

In its Draft Determination, Ofwat has again updated its approach ODI rates. Specifically, the rates included in the DD are based on a similar methodology to that used in August 2023, but with the following changes.⁵

- The prioritisation of some ODIs has been updated (e.g. total pollutions, storm overflows and leakage).
- Uplifts have been applied to mains repair and water supply interruptions to ensure that the incentives are more powerful than in PR19.
- Adjustments previously made on some ODIs have been removed (e.g. asset health and water demand PCs).
- Ofwat has grouped companies, and applied its methodology at a group and not industry level.
- The RCV used to calculate ODIs rates was updated to reflect 2025-30 average values (in place of 2022-23 values used previously).

The results of these various changes are indicated for Wessex Water in the table overleaf.⁶

² [Creating tomorrow, together: our final methodology for PR24 - Ofwat; PR24-draft-determinations-Delivering-outcomes-for-customers-and-the-environment.pdf \(ofwat.gov.uk\)](#); and [PR24: Using collaborative customer research to set outcome delivery incentive rates - Ofwat](#)

³ [PR24: Using collaborative customer research to set outcome delivery incentive rates - Ofwat](#)

⁴ [Creating tomorrow, together: our final methodology for PR24 - Ofwat](#)

⁵ [PR24-draft-determinations-Delivering-outcomes-for-customers-and-the-environment.pdf \(ofwat.gov.uk\)](#)

⁶ Whilst the PR24 rates are symmetrical, PR19 rates were not – underperformance rates have been used for the purpose of comparison.

Table 2.1 - Comparison of ODI rates for Wessex (PR19 to PR24)

	PR19, £m (Ofwat, FD)	PR24 BP, £m (Ofwat August, 2023)	PR24 Ofwat DD, £m	Change, PR19 to PR24 DD	Change, Ofwat BP to PR24 DD
Per capita consumption (PCC)	-0.130	-0.483	-0.252	94%	-48%
Water supply interruptions	-0.140	-0.392	-0.274	96%	-30%
Mains repairs	-0.046	-0.105	-0.092	99%	-13%
External sewer flooding	-0.800	-2.513	-3.008	276%	20%
Compliance risk index (CRI)	-0.580	-0.343	-0.440	-24%	28%
Internal sewer flooding	-5.690	-5.614	-8.099	42%	44%
Total pollution incidents	-0.270	-0.791	-1.279	374%	62%
Discharge permit compliance (DPC)	-0.530	-2.359	-4.820	810%	104%
Leakage	-0.330	-0.364	-0.909	175%	150%
Unplanned outage	-0.243	-0.700	-1.816	647%	159%
Customer contacts about water quality	-0.603	-3.458	-9.058	1402%	162%
Sewer collapse	-0.125	-0.756	-2.970	2276%	293%

As shown in the table, the results of Ofwat’s changes have a significant impact on Wessex Water’s ODI rates (as they do for the industry as a whole). Ofwat’s DD states: *“For most companies, the rate proposed for PR24 is significantly stronger than at PR19. This reflects our overarching aim to set powerful incentives on performance.”*⁷

However, we are concerned that there is no apparent cross check that these powerful rates represent the value of these outcomes to customers and the environment.

Our concern is that there is a significant tension between: the view that at different points in time, these rates were seen to be representative of the appropriate value for customers and the environment; and the change between them. As a result, we are concerned that the rates cannot reflect the true underlying value which customers and environment place on the PCs.

In particular, given the scale of increase across the industry it is highly likely these rates now provide incentives for companies to deliver an inefficient level of performance. That is, ODIs rates may have been set above the marginal benefit customers place on the relevant PC, and companies will be incentivised to deliver performance beyond that which is valued by the customer.

Such an outcome may be driven somewhat by issues with Ofwat’s top-down methodology. For example, we note the following.

- Ofwat’s methodology is not based on estimates of marginal benefits of costs.
- Ofwat’s approach is no longer achieving what it set out to achieve. The grouping applied to calculate the DD rates results in “per output” or “per incident” rates which are not consistent for all customers across England and Wales.

⁷ [PR24-draft-determinations-Delivering-outcomes-for-customers-and-the-environment.pdf \(ofwat.gov.uk\)](#), section 8.8.3.

- For each PC, the equity at risk is only calibrated for a single company in the industry (i.e. the median company in its calculations), for all others the actual equity at risk, by definition, is above or below the intended level set by Ofwat. For example, on bathing water quality, Ofwat defines the equity at risk as 0.4% – however Ofwat's ODI model indicates that Wessex Water's actual equity at risk is 1.5 times higher at 0.6%.
- Furthermore, there is not a full assessment as to whether or not the performance ranges in its calculations are appropriate on a forward-looking basis, which means the actual equity at risk is likely higher still (i.e. if actual performance is outside of the P10/P90 assume in the DD). This issue is exacerbated by the asymmetry of the DD, as we set out in WSX-R02.

2.3. Change requested

At PR19, our rates were set using estimates of marginal costs and marginal benefits, we suggest these rates are more appropriately calibrated to the interests of customers and the environment. In some instances, this may require further consideration (e.g. in relation to new PCLs), and we suggest Ofwat works with the industry constructively to derive appropriate rates in these cases.

Furthermore, as set out in WSX-R02, the overall package represented in the draft determination is not balanced. In particular, the P50 is misaligned such that it represents underperformance; and there is a skew in the range of expected returns such that underperformance is much more likely than outperformance. We propose two mechanisms aimed at addressing this, at least to some extent:

- Deadbands on PCs where performance is driven by factors outside of management control, to better align the P50. These (could) include:
 - Bathing waters
 - Storm overflows
 - Pollutions
 - Leakage
 - PCC
- Collars on all outcomes, equivalent to those introduced for new outcomes in the draft determination. This would address some of the issues relating to the overall negative skew in the package.

3. Demand Performance Commitments – Overview

In the quality and ambition assessment, Ofwat stated that Wessex Water should propose improved levels of stretch from enhancement expenditure in relation to meeting government targets for water companies, in particular around leakage and per capita consumption.

As set out in our business plan and water resources management plan, our decision-making approach has aligned with an outcomes-led approach for delivery in 2050, as well as meeting national policy expectations on environmental enhancement, as set out in the 25-year improvement plan. The overall outcome that meeting demand side performance commitments of leakage, per capita consumption and business demand contributes to is therefore the reduction of the amount of abstraction from the environment, and in particular, sensitive environments. This is in part captured in how these three performance commitments relate to the overall statutory distribution input (DI) reduction target in 2037-38.

We have therefore considered our demand management strategy and demand-related performance commitments in-the-round in how best to respond to Ofwat's challenge and deliver against the statutory DI target and therefore reduce the amount of abstraction from sensitive environments.

We have proposed a more stretching leakage reduction target, achieving a 19.8% reduction by 2029-30, increasing from 16.6% in the original business plan submission. Whilst it has been difficult to establish the framework Ofwat used in its QAA, we have ensured our proposal is at least as stretching as other companies who were awarded standard in the QAA.

Based on a comparison of draft determination figures cross-company, our per capita consumption in 2029-30 will rank 11th of 17 companies. Our holistic demand management strategy, and the proposed changes to this as set out below, will place us on a trajectory to achieve a 21.1% reduction in distribution input by 2037-38.

Our proposed approach in the business plan regarding demand reductions, when combined with other supply-side options, meets the Water Resources Management Plan (WRMP) requirements to deliver a secure supply of water to customers, meet the national statutory long-term targets for demand (distribution input) reduction, and in achieving this, importantly meets the requirement to reduce abstraction from sensitive environments.

Our response to the draft determination fully aligns with the investment options set out in our latest Water Resources Management Plan. Following the publication of the business plan, we received a letter from Defra in December 2023, asking for further information in support of our plan. We provided this information in Spring 2024 as part of an updated statement of response. The revised plan included alignment of the demand management strategy – smart metering, leakage, and water efficiency activity – with the business plan. We also made changes to the scheduling of some selected supply side activities to de-risk delivery of licence reductions in the Hampshire Avon catchment. We expect to receive permission to publish the plan as a final plan.

In addition to the improved ambition and stretch explained above, the next three sections of this document explain, respectively, our response for leakage, per capita consumption and business demand, and our proposed improvements to the draft determination to set fair and stretching demand-side performance commitments.

4. Leakage

4.1. Summary

Ofwat has set company-specific leakage PCLs for leakage based on “*the level of performance we expect companies to deliver by 2029-30 according to company business plan submissions... This reflects that we have previously challenged companies to deliver ambitious reductions in leakage for the 2025-30 period through the water resources management planning process.*” In Ofwat’s PCL model for leakage, our business plan submission profile was accepted. This profile aligned with the most recent version of our WRMP.

The PCL profile for leakage proposed in our original business plan submission was optimised alongside other demand management activities as part of our WRMP. This addressed our forecast supply demand balance deficit and achieved our statutory DI reduction target in the best interest of customers and the environment. We have been consistently clear on our commitment to meet the long-term regulatory target of 50% leakage reduction by 2050 as set out in our WRMP, but valued the flexibility of how we balance and optimise demand reduction activities to achieve the 2037-38 DI target without being bound to non-statutory interim leakage targets.

Ofwat accepted our proposed leakage PCL, however in the requirements to address our inadequate QAA assessment, Ofwat suggest “*The company should propose improved levels of stretch from enhancement expenditure in relation to meeting government targets for water companies, in particular around leakage and per capita consumption*”. We have therefore proposed a more stretching target as set out in Table 4.1 below.

In setting our revised leakage reduction profile, we have reviewed the leakage reduction ambition of other companies awarded at least standard in Ofwat’s QAA. Whilst it has been difficult to establish the framework Ofwat used in its QAA, we have ensured that our proposal is at least as stretching as other companies awarded standard. See Appendix 1 in *WSX-M05 - Quality and ambition assessment* for further details on this review. We have developed our new leakage reduction profile based on this review and will endeavour to deliver it within costs set out in our original business plan. We will however require the full allocation of costs proposed to achieve this new stretching target and wouldn’t be able to deliver this for Ofwat’s unit cost allocation as set out in *WSX-C07- Enhancement costs - leakage and smart metering*. We also note that as a result of Ofwat’s requirement, our leakage reduction profile will no longer be consistent with our WRMP, but as we are proposing additional ambition and stretch, we expect Ofwat to accept this discrepancy.

Table 4.1 - Summary of changes requested: Leakage

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.9 Leakage	Draft Determination profile (same as original BP proposal)	12.8%	13.4%	13.6%	14.5%	16.5%
	Our requested profile (additional stretch)	11.3%	15.5%	17.6%	18.6%	19.8%

5. Per Capita Consumption

5.1. Summary

We acknowledge and agree with Ofwat's draft determination document that water companies have a significant role in water efficiency. There are several issues which are summarised here and expanded upon in the sections below as to why we think the PCL setting could be improved. We have proposed an alternative performance commitment level, incorporating the latest out-turn data and cross-company research on the impacts of a range of external factors on domestic consumption.

We therefore welcome the steps Ofwat has taken to account for the lasting impact of additional working from home on PCC as a result of the Covid-19 pandemic, as assessed in the Europe Economics report, as these were outside of company control to influence. The setting of the baseline performance commitment level does not account for our most up to date forecast of consumption that was produced as part of our WRMP. This forecast went through consultation and did not receive any representations questioning the validity of the forecast. The forecast has not been used to set the baseline condition for both the 2024-25 period and through AMP8 – e.g. prior to intervention through enhancement expenditure – which means any additional increases in consumption beyond the 2024-25 position, as forecasted, would be expected to be met by the company. However, the draft determination clearly states that no reductions are expected to be funded outside of enhancement.

Finally, the validated enhancement costs applied to calculate the validated enhancement stretch have applied all water efficiency savings from table CW8 to calculate the performance level in 2029-30 from the baseline, which incorrectly includes the savings associated with non-household enhancement activity to reduce business demand.

5.2. Change requested

We request that Ofwat sets our target for this performance commitment using our revised forecast outlined below, that uses the most up-to-date outturn data, our WRMP forecast as well as incorporating latest cross-company analysis on the impacts of shock events when setting the baseline position for forecasting from beyond 2024-25. The forecast also includes our revised smart metering and water efficiency benefits appropriately split out between household and non-household benefit.

As noted by Ofwat in the *PR24 draft determinations: Wessex Water – Outcomes appendix*, an assumption was made in setting demand reduction PCLs in the draft determinations resulting in our non-household water efficiency activities in CW8 also being assigned to household demand reduction. These non-household benefits have therefore been used within Ofwat's modelling to determine an additional level of stretch to set the PCC PCL. We acknowledge Ofwat's commitment to calculating a more accurate validation of enhancement benefits and have therefore updated the information associated with water efficiency activities in CW8 to clearly assign reductions between household and non-household consumption. We have additionally separated the Government Labelling benefit from the total household benefit to further support Ofwat's validation of demand reduction benefits.

On this basis, we can't support the current draft determination PCL profile and request that Ofwat review our targets for this performance commitment, acknowledging our revised forecast which achieves a 3.3% reduction in 2029-30. This revised profile appropriately applies the metering and water efficiency benefits outlined in our updated CW8 and CW7 data tables; it also incorporates an uplift in the baseline forecast to account for long-term impacts of the Covid-19 pandemic, and a forecasted rebound in demand associated with recovery from the cost-of-living crisis in recent years.

Table 5.1 – Summary of changes requested: PCC

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.10	Draft Determination profile	-0.3%	1.0%	2.8%	4.5%	6.2%
	Our requested profile	0.7%	-0.2%	0.9%	2.1%	3.3%

5.3. Rationale

5.3.1. Setting the baseline position in 2024-25

We acknowledge and agree with Ofwat’s draft determination document that water companies have a significant role in water efficiency, and that a performance commitment for per capita consumption is not fully in the company’s control for it to be worth incentivising. We therefore welcome the steps Ofwat has taken to account for the lasting impact of additional working from home on PCC as a result of the Covid-19 pandemic, as assessed in the Europe Economics report.

The approach Ofwat has taken to set the baseline position in 2024-25 is to inflate AMP7 performance commitment level based on a covid uplift from European Economics, and then these adjustments are used to set the 2024-25 performance commitment level. The change is justified by Ofwat on the basis that the change in behaviour was unforeseen when PR19 PCLs were set.

Artesia consulting also undertook cross-company analysis of per capita consumption in response to shock event effects of Covid-19, the ongoing working from home and persisting covid effects thereafter, as well as impact of temporary use bans and drought awareness in 2022, and the cost-of-living crisis linked to a significant increase in inflation post-Covid⁸.

Wessex Water’s unmeasured household monitor data was used specifically in this study, alongside data from Thames Water and Yorkshire Water. Wessex Water’s outturn per capita consumption in 2022-23 was 138.8 l/p/d falling to 132.9 l/p/d in 2023-24. Whilst this drop can be explained partially by the change in weather from a dry hot summer at the start of 2022-23 to an overall wet year in 2023-24, the early summer of 2023 still experienced a hot, dry period; we observed a fall in per-capita consumption in our household monitor following the summer of 2022 which was contemporaneous with the mini budget in 2022 and the peak in inflation in October 2022. The trend during this period, as well as earlier during the covid pandemic, is also observed in Thames Water’s monitor data and Yorkshire Water data, which further supports the conclusion that a driver of consumption changes is operating at the national level.

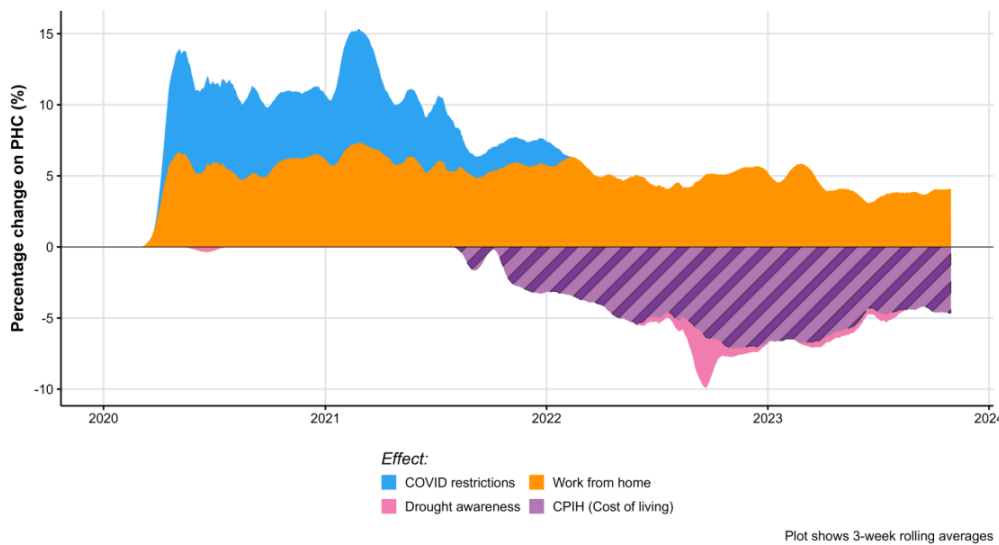
The modelling work undertaken by Artesia on our individual household monitor attributes this change from the end of 2022 – around 3-5% of customer demand – to the cost-of-living crisis. The trend is also observed in our billed measured data, with a decline in consumption during the end of 2022 and into 2023. The reduction in consumption is an indirect effect of higher bills overall for customers and in turn their water use, but mainly the more direct impact of significantly higher energy prices on household activities that use both energy and water – e.g. washing machine, dishwasher and showering/personal hygiene, which explains also why unmeasured customers – whose water bills are not linked to water use – have also reduced consumption.

⁸ [Rising cost of living in the UK - House of Commons Library \(parliament.uk\)](https://www.parliament.uk/library/research-briefings/2022/07/2022-07-20-rising-cost-of-living-in-the-uk/)

Figure 5.2 - Normalised demand between 2020-2023 for Thames Water, Wessex Water, and Yorkshire Water. Artesia, May 2024.



Figure 5.3 - Explanatory variables' impact on Wessex Water's unmeasured per household consumption (PHC), Artesia and Frontier Economics May 2024.



Similar to Ofwat’s argument regarding Covid-19 impacts, and that a change in PCL is justified on the basis that the behaviour was unforeseen when the PR19 PCL levels were set, the significant rise in inflation and the resultant cost-of-living crisis that has emerged post-covid on household consumption was also unforeseen when the PR19 PCLs were set, and therefore should also be accounted for when setting the baseline PCL. The Artesia report explores the long-term persistence of these shock events and does not expect the cost of living impact on consumption to persist as real incomes are expected to increase over time and the energy price spike dissipates⁹.

In addition to the above, as part of our latest Water Resources Management Plan, we have developed a new demand forecast and household consumption forecast that uses the most up to date micro-component analysis of

⁹ [Domestic energy prices - House of Commons Library \(parliament.uk\)](https://www.parliament.uk/library/research-briefings/2022/07/2022-07-28-domestic-energy-prices)

household consumption as well as more recent properties and population forecasts compared to those that were used to set the AMP7 performance commitment levels. No stakeholders or regulators, including Ofwat, raised concerns with the credibility of the forecast during initial consultation on the draft WRMP, or via Defra's response to our statement of response on the plan. The model has therefore already been deemed credible in previous consultation on the plan and is therefore the credible approach for setting the baseline position.

5.3.2. Approach that should be taken to set the base year position in 2024-25

As explained above, there have been significant changes in per-capita consumption during AMP7, as a result of the covid impact and more recently the cost-of-living crisis. As per the methodology applied to develop the water resources management plan, we have taken the latest out-turn information and used this, alongside the evidence from the Artesia shock event report, to re-base our water resources management plan to the 2023-24 reporting year, and forecast from this to derive the base year position for 2024-25. It is this figure that should be used to set the base position for the AMP8 performance commitment level. The steps that we have taken to do this are as follows:

- Re-based our WRMP demand forecast model to the latest out-turn data for 2023-24, as derived from our population and properties data reporting in the annual performance review, and our water balance data derived as part of the leakage reporting methodology. To re-base demand, normalisation to account for the impact of the weather was applied to convert the base year of the forecast into a normal year demand. To do this, the methodology as described in the WRMP24 demand forecast methodology was applied. In brief, a top-down and bottom-up adjustment is made to all weather-dependent water balance components based on individual weather demand models for each bottom-up component, and an overall normalised distribution input model (top-down) and reconciled. 2023-24 weather was similar to 2019-20 base year from the demand forecast model, and generally wetter and colder than average conditions. Whilst the weather was significantly wetter from the autumn of 2023 and into the spring of 2024, there was still a reasonable peak in summer demand in the early summer of 2023 associated with a period of hot and dry weather. The resultant effect of the normalisation changes the out-turn per capita consumption from 132.9 l/p/d to 134.0 l/p/d.
- The re-based model then applies the same micro-component model and population and property growth factors that were developed and applied in WRMP24 to forecast forwards from the 2023-24 position to derive the baseline position in 2024-25, as well as the forecast baseline position – without the impact of enhancement expenditure, through AMP8 to 2029-30.
- Based on the Artesia report and the impact of the cost-of-living crisis, and as explained above that this impact will not be long-lived, we have then applied a 4% uplift to the forecast position of PCC by 2024-25 (see Figure 2 above – 4% is taken as the approximate average of the impact shown).
- The above changes then result in a baseline per capita consumption of 139.2 l/p/d.
- Please note – as the model has been re-based to a post-covid year, the long term covid impact uplift factor we applied to our WRMP24 forecast, which used a pre-covid 2019-20 base year, has been removed.

Performance from base, as detailed in OUT2, has therefore also been updated to reflect the revised baseline position. Due to the use of the three-year average, a decrease in performance is observed between 2025-26 and 2026-27 as the improved 2023-24 outturn position is included in the 2025-26 three-year average. The performance from base from 2026-27 onwards into AMP8 is then reflective of holding the updated 2024-25 forecast throughout.

5.3.3. Setting performance 2025-30

To set the annual per capita consumption target for 2025-30 on which to base the PCL, Ofwat have taken the minimum of four separate figures:

- Companies' proposed PCL from the business plan in 2029-30
- The revised draft WRMP figure

- The validated enhancement minimum stretch, derived by comparing the baseline position PCC in 2024-25 multiplied by the 2030 population to derive a consumption in 2030. They have then removed our validated enhancement benefits of interventions on PCC – smart metering and water efficiency
- Linear delivery of PR19 PCL

The resultant annual per capita consumption target for 2025-30 for Wessex Water was set to 126.9 l/p/d based on the validated enhancement stretch scenario. We have identified some concerns with this approach as follows:

- The NYAA figure of 131.2 l/p/d, which has been used to determine WRMP NYAA performance was miss-stated in the WRMP, NYAA Table 2a. The DYAA figures and main planning tables are correct. These figures will be updated in our final plan publication.
- The validated enhancement savings for per capita consumption are incorrect, as they include the savings associated with non-household water efficiency activity. In table CW8 all water efficiency activity for both households and non-households was included as a single line. In their analysis, Ofwat applied all of these savings to households – and therefore the per capita consumption performance commitment. We have updated table CW8 to split out these savings. These revised savings should then be applied when evaluating the performance commitment level.
- The use of the industry median in the validation of metering wastage reduction benefits does not allow for the correct consideration of our metering strategy which is to compulsorily install smart meters but not switch customers onto a measured charge until they opt to. This strategy naturally results in a lower saving per install than if all installed meters were to be switched onto a measured charge straight away. Our calculated benefit per meter install accounts for the immediate plumbing loss reduction benefit and the delayed consumption reduction benefit for this group of customers, please note that these savings have been refined in our updated CW7 table.
- As expanded upon above we have updated the baseline 2024-25 assessment based on the most recent outturn information available, and our WRMP24 demand forecast, which, as per our approach taken below should be that applied to set the performance commitment level.
- Ofwat acknowledges that per capita consumption is not fully within the companies' control to deliver, which the evidence of the impact of covid on PCC and the sensitivity of consumption to the cost-of-living crisis shows. Our baseline WRMP24 demand forecast predicts per capita consumption without any enhancement intervention – e.g. the aspects of per capita consumption that are not in our control to influence. The forecast approach was not challenged during the consultation of the WRMP, which included consultation with Ofwat. The forecast shows a slight increase in consumption over the AMP period. By setting an enhancement reduction from a 2024-25 baseline, the approach fails to account for the natural forecast change in per capita consumption, and therefore implicitly expects companies to deliver the reduction associated with this forecast increase from base expenditure. This is counter to the statement in the draft determination from Ofwat that they do not expect companies to deliver PCC reductions from base expenditure.

5.3.4. Approach that should be taken to set the performance commitment level in 2025-2030

As explained above in the approach for setting the 2024-25 baseline position, we have updated our WRMP forecast based on the latest out-turn data, and re-based those models to these data to produce both the baseline position and the baseline forecast to 2025-2030. The forecast uses the WRMP demand forecast which was accepted at throughout our planning process, as well as updated from latest outturn and population and properties data, which given the dependence of the PC on population, provides a more accurate forecast. From this we have taken off the correct enhancement benefits as per our smart metering and household water efficiency programme to derive a profile for our per capita consumption PCL. As mentioned above, we do not believe that the use of an industry median in the validation of smart metering benefits correctly reflects the nature of our metering strategy. Not all customers will opt to switch to a measured charge at the same point of meter installation resulting in a delay to achieving the full assumed consumption reduction benefit, therefore our calculated benefits per install for the 'none to AMI' category are lower than the industry median.

5.4. Other relevant evidence

5.4.1. Evidence provided previously

WSX49 – Costs wholesale water tables commentary. Section 10 (CW7 Demand management – metering activities) and Section 12 (CW8)

WSX47 – Outcomes tables commentary. Section 1.10 (Per capita consumption)

Revised draft WRMP24: WRMP24 Main Technical Plan, WRMP24 Demand Forecast, WRMP24 Demand Management Strategy.

5.5. Why the change is in customers' interests

The proposed PCL profile in the draft determination does not correctly reflect our household water efficiency benefits and it would therefore not be in the best interest of our customers to accept this as a more stretching profile. Our revised profile, achieving a 3.3% reduction in PCC by 2030, better reflects the most up to date reported data and our revised smart metering benefits. We welcome Ofwat to assess our revised calculated metering benefits, but also to acknowledge our concerns with the use of an industry median not being reflective of our strategy which we believe is in the best interest of our customers, providing them with the freedom to choose when they switch to a measured charge once evidenced with comparative billing, but receiving the benefits associated with detecting and acting on continuous flows.

We note that we have accepted Ofwat's proposed enhancement cost allowance for water efficiency activities, and we have amended our costs for this programme of work in lines CW3.47-CW3.49 to reflect this allowance. For smart metering, we accept the stretch on cost efficiency resulting from Ofwat's enhancement allocation. However, we have some concerns regarding the re-allocation of a portion of smart meter infrastructure costs to base, and implications of the industry wide cost adjustment claim on costs available for like for like meter replacements, please see WSX-C07 and WSX-C20 for further details.

The total supply-demand balance benefit (excluding leakage benefit), from the metering categories outlined in CW7, has increased from 3.96 MI/d to 4.78 MI/d over AMP8: a result of our revised demand forecast and benefits calculation, please see WSX-D03 – Commentary on data table changes – Costs wholesale water for additional information. Overall, the increase in benefits and decrease in costs reflects a greater stretch in ambition from our original business plan submission, whilst still achieving government demand reduction targets and ultimately the outcome that matters to our customers, reducing the amount of water taken from the environment.

6. Business demand

6.1. Summary

In terms of the overall performance commitment as a performance measure, we welcome the principles behind the positive steps that Ofwat have taken to include an end of period adjustment to account for the circumstances that are beyond company control to deliver when considering outperformance or underperformance payments – that is in relation to economic growth beyond that forecast in setting the Performance Commitment Level (PCL). However, there are several issues which are summarised here and expanded upon in the sections below, as to why we have proposed an alternative that builds on the changes that Ofwat have made in the draft determination.

We are committed to supporting economic growth in the region, in relation to the new government's growth ambition. However, including a materiality threshold in the end-of-period PCL adjustment mechanism does not sufficiently protect customers and water companies from under or over-performance payments, and potentially incentivises the wrong behaviour. This is because it could result in a company refusing new business demand if this additional demand does not reach the 3% threshold, but the company could still face underperformance penalties. These penalties would be material.

Several issues have also been identified with the approach for setting the baseline and performance commitment level. First, the methodology relies on the quality of a historic trend-based model for informing both the baseline 2024-25 position and performance to 2029-30. Historic trend-based models are inappropriate forecasters where there are significant changes in drivers of demand between the historic period and future period, as has occurred post-covid and with demand from new and emerging sectors.

Second, elements of the methodology are not consistent with each other; as stated, Ofwat does not expect companies to achieve business demand reductions through base expenditure, but in the approach used to set the baseline position for 2024-25, by not accounting for the WRMP forecast, Ofwat expects base expenditure in AMP7 to deliver demand reduction to achieve the baseline position.

Third, the setting of the performance level did not include the benefits of water efficiency activity, which were assigned to household/per capita consumption performance level calculations and also use incorrect information from the WRMP in setting future ambition targets. We have incorporated new information on emerging demands in our area from nationally significant infrastructure and have updated our business demand forecast based on the latest out-turn data for 2023-24.

6.2. Change requested

We are requesting that Ofwat sets the target for this performance commitment at the stretching but achievable values that we have produced, Table 6.1, as expanded upon below, which uses: a re-based 2024-25 position based on the latest 2023-24 outturn data, which has been appropriately normalised for a base year due to the impacts of the weather; and a forecast performance commitment level, based on an adjusted WRMP forecast to the latest out-turn position, and then adjusted for new emerging demand in the supply area since the development of the business plan and WRMP; The savings from this baseline forecast, consistent with the water efficiency and smart metering savings included in our existing plans.

Table 6.1 – Summary of changes requested: Business Demand

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.11	Draft Determination profile	4.8%	5.9%	7.6%	9.3%	10.9%
	Our requested profile	2.8%	3.3%	4.3%	5.9%	7.4%

We also request that Ofwat removes the materiality threshold from the end of period adjustment mechanism to remove the perverse incentive where a company could be in a position of being penalised for supporting economic growth and accept evidence of increased new demand from economic growth below this threshold.

6.3. Rationale

6.3.1. Overall Performance Commitment and adjustment mechanism

As stated above in our overall response to the demand side performance commitments, performance commitments should be outcome based, and therefore the overall measure of performance should be an outcome-based performance commitment in relation to water abstracted from sensitive environments. This would allow companies to meet growing demand with new sources or demand offsetting, whilst also supporting economic growth.

We welcome the principle of changes to the business plan performance commitment that attempts to account for the circumstances that are beyond company control to deliver when considering outperformance or underperformance payments – that is in relation to economic growth beyond that forecast in setting the Performance Commitment Level (PCL).

We are committed to supporting economic growth in the region, in particular in relation to the new government's growth ambition. However, the end-of-period PCL adjustment mechanism (if the net difference between outturn and the PCL across the 2025-30 period is at or larger than $\pm 3\%$), does not sufficiently protect customers and water companies from under or over-performance payments, and potentially incentivises the wrong behaviour. This is because the actual scale of future new demand resulting from economic growth is unknown by definition (and not included in the PCL). The threshold therefore of $\pm 3\%$ is an arbitrary figure for setting a materiality threshold; failing the PCL because of economic growth leading to, say, a 2.5% net difference in business demand would be material if it meant failing the performance commitment and incurring associated penalties.

This threshold could mean a company would fail to meet the performance commitment by providing additional supply to support economic growth, whilst still delivering all its committed and funded enhancement activity and forecast reductions in demand. This threshold could then lead to perverse company behaviour, where a company could refuse to meet new business demand – which may be both locally and nationally significant for the economy, if that additional demand does not amount to the overall business demand not meeting the materiality threshold. This is despite that company being able to provide evidence of both the new demand, as well as the engagement undertaken with that company to ensure the new demand is as water efficient as possible, as requested by Ofwat.

As expanded upon below in the context of setting our PC target profile to 2025-30, since the submission of our business plan we have been approached for a new supply of water to support nationally significant business demand investment. We have adjusted our baseline PC profile based on the initial expected new demand; however, as with the potential development of other businesses, and the speed with which this water may be required relative to business planning and water resources planning timescales, there is material uncertainty to the volume that may need to be provided, which could lead to being above or below the 3% threshold considered for materiality

The level of evidence required for material differences in consumption to justify an adjustment to the PCL¹⁰ should and can equally be applied without a materiality threshold to justify any increase in economic growth from new premises not accounted for in the forecasts use to set the PCL. We are therefore asking for Ofwat to remove the $\pm 3\%$ materiality threshold and consider the same detailed level of evidence requested when considering an end of period adjustment.

¹⁰ Page 91 [PR24-draft-determinations-Delivering-outcomes-for-customers-and-the-environment.pdf \(ofwat.gov.uk\)](#)

Broadly, there is a more fundamental problem with constraining the potential adjustment made in the context of meeting long-term statutory targets (where the long-term statutory target is the 20% distribution input reduction in 2037-38 at a national level) and being able to supply water for emerging demands such as data centres, battery factories, energy (e.g. hydrogen). Meeting these emerging demands and the statutory DI target means reducing demand by 20%, and in addition reducing demand further by the amount that these emerging demands will need. This will not be possible if the emerging demand is too great in any given region relative to the plausible reductions in other components of DI that can be realistically and affordably achieved by customers. A national approach is required to meet the needs of a growing economy, with performance commitments levels set on this basis.

6.3.2. Setting the baseline position in 2024-25

The baseline starting position for 2024-25 should be based on the Water Resources Management Plan (WRMP) forecasts, and not on a forecast approach that uses historical growth trends. Ofwat state that where forecast growth - as per the WRMP - exceeds historical rates, they intervene to set companies a credible baseline position. This approach has been applied to Wessex Water's baseline starting position using a median historic growth rate – Ofwat has therefore determined that the WRMP forecast is not credible.

The business demand forecast used to set the baseline starting position, as documented in our WRMP¹¹, used econometric sector-based models produced by the consultants Experian and Servelec. The approach was consulted on during our draft WRMP. No stakeholders or regulators, including Ofwat, raised concerns with the credibility of the forecast during initial consultation, or via Defra's response to our statement of response on the plan. The model has therefore already been deemed credible in previous consultation on the plan and is therefore the credible approach for setting the baseline position.

Historic trend model limitations

Analysis of historic growth trends is a useful benchmark approach for forecasting but relies on a strong assumption that the underlying factors that have historically driven changes in the output variable of consideration – e.g. in this case business demand – will exert the same influence on the variable of interest going forwards. In the case of business demand this is not the case for several reasons.

First, historical data used in the model is from 2012-13 to 2018-19 that have occurred pre-covid. The pandemic and subsequent changes, for example working habits of employees, has influenced which business demand such that the way businesses operate now does not fully reflect historical conditions.

Second, there are changes occurring in the nature of business demand, and the types and mix of businesses that are requesting new connections. These include emerging industries such industries requiring water for cooling purposes, including data centres and battery factories, as well as for energy generation (e.g. hydrogen production), as well as certain business types closing. Historic trends alone are inappropriate for predicting these emerging demands as they are not represented as driving factors of the historical trends.

The issues raised here for relying on historical trends alone can be illustrated in two figures from our WRMP²⁴ demand forecast. Figure shows historical measured non-household data for the Wessex Water supply area. Between 2003-04 and 2010-2011 there is a significant and relatively linear reduction in demand which was contributed to by the closure/reduction in demand of some larger industrial users; beyond 2011-12 this trend does not continue. A trend model alone based on the pre 2011-12 data would therefore be a poor predictor of demand beyond this point.

¹¹ WRMP²⁴ Demand Forecast technical appendix, Section 6: [Water Resources Management Plan | Wessex Water](#)

Figure 6.2 - Overall Low, Central, and High measured non-household demand forecasts, as per WRMP24.

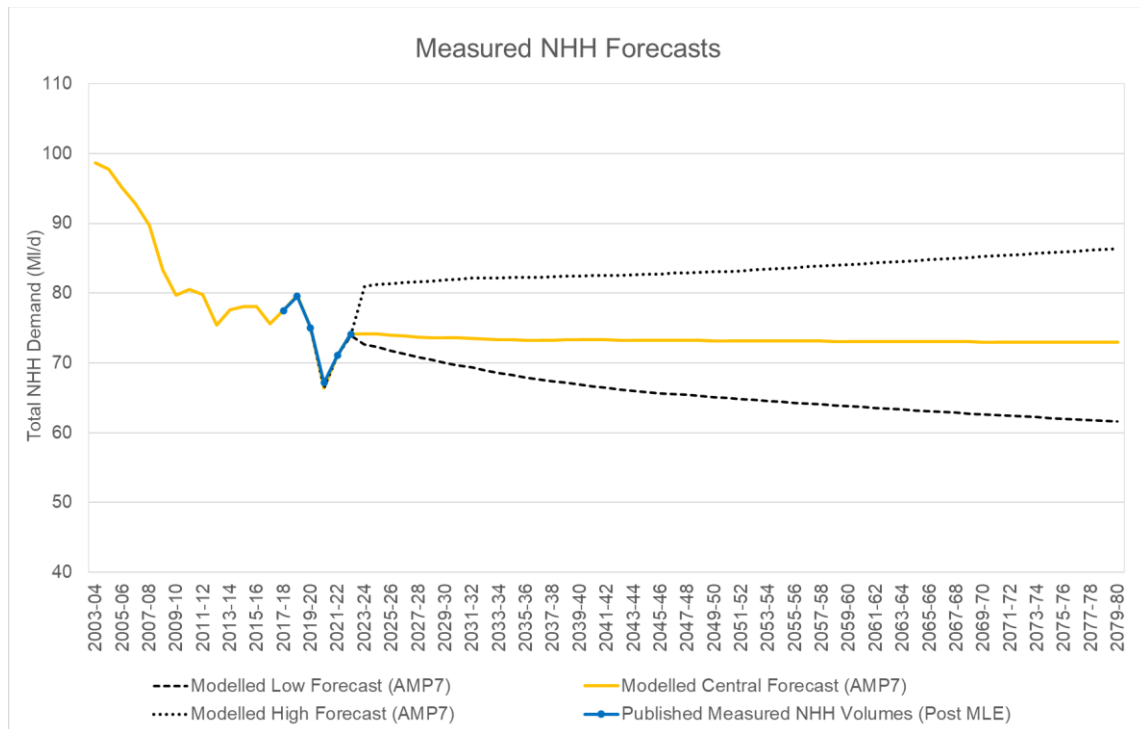
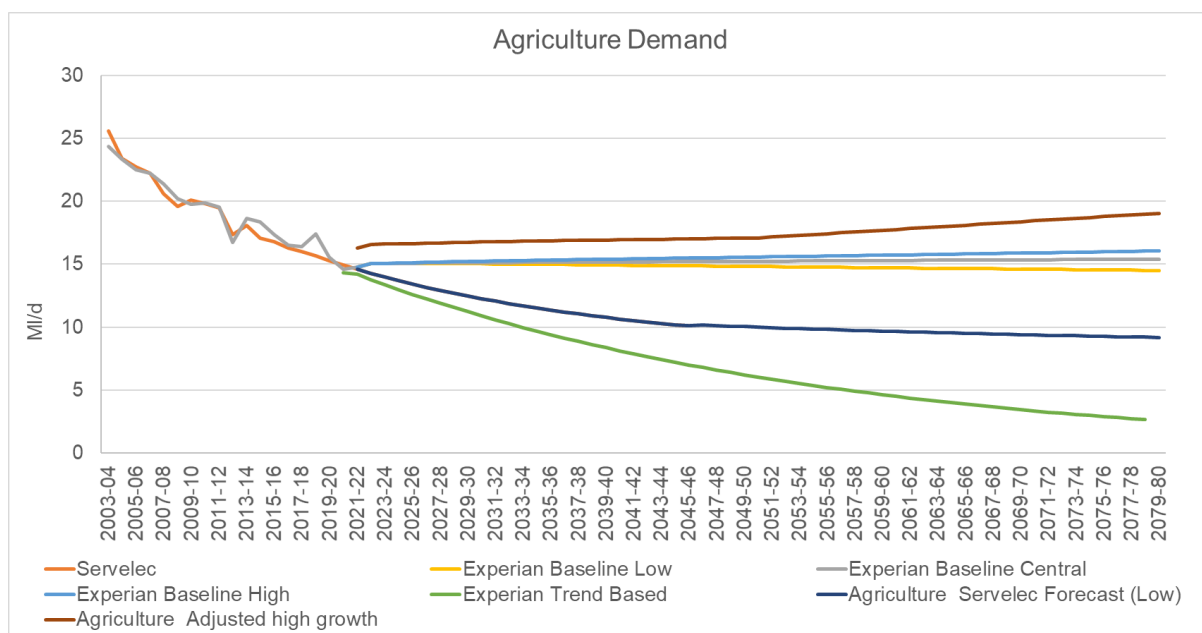


Figure 6.3 shows the trend in agricultural demand in the region, which in part explains the reduction shown in total measured business demand above. The two trend-based models alone predict a very significant continued reduction in agricultural demand, which would imply that either the agricultural sector has collapsed in the region with significant farm closures, which is very unlikely, or that demand has reduced beyond a plausible minimum that those businesses would need to support livestock and crop production. A trend-based model is therefore inappropriate by itself.

Figure 6.3 - Agricultural Demand Forecasts, as per WRMP24

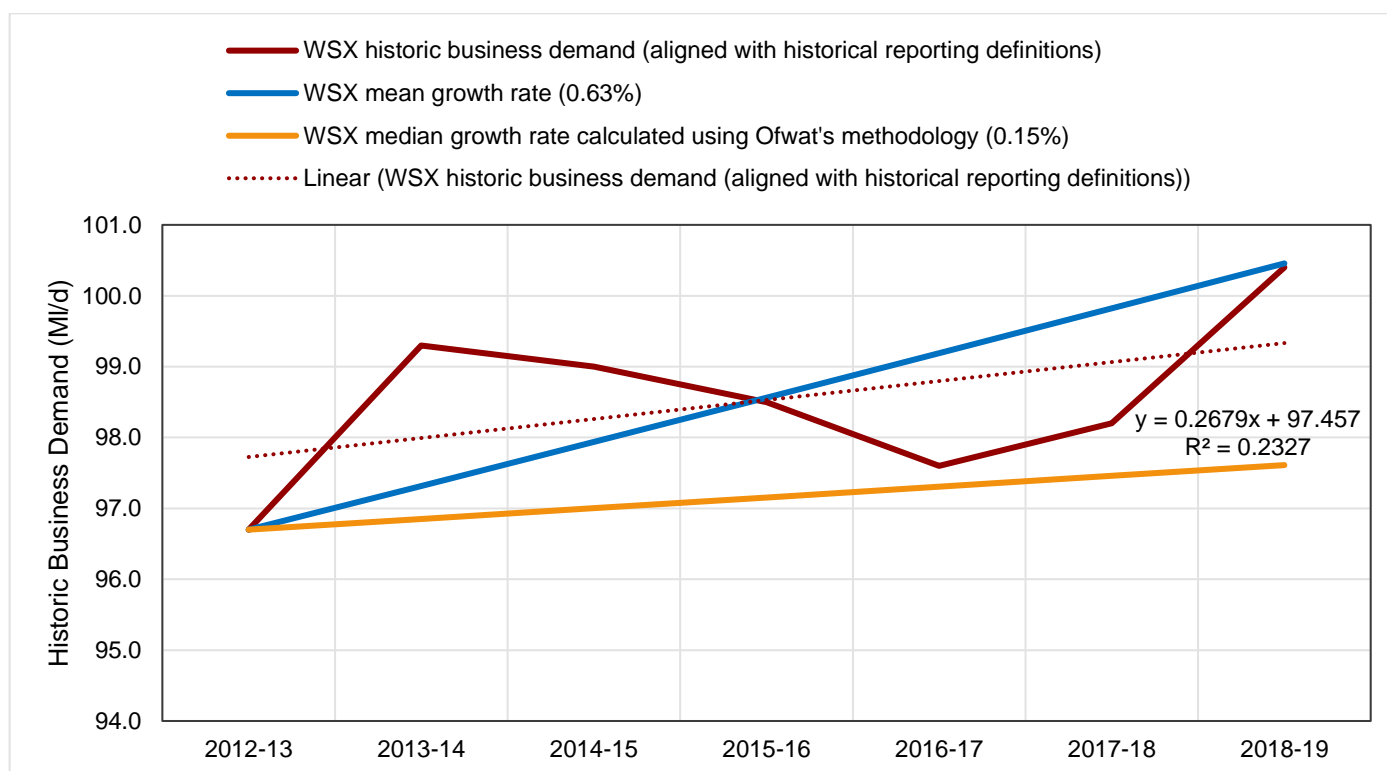


Third, the chosen approach by Ofwat to capture the historical trend has been to take the median of the year-to-year percent changes in the historical time-period and apply this percentage growth factor from the 2022-23 outturn data

to derive an outturn figure for 2024-25. If the same median percentage is chosen and applied using the same formula to inflate the calibration data used to derive the growth factor from 2012-13 to 2018-19, then the model significantly under-predicts the observed data and the linear trend model, which in itself only has an R^2 of 0.23, please see Figure 6.4. This is in part because the first year of the data used to derive these inflation factors – 2012-13 – was a record wet year, and the final year – 2018-19 – was a very warm and hot year. Inflating from a single year position without normalising for the weather is therefore inappropriate. Therefore, notwithstanding the issues raised above, regarding the issues with forecasting based on historic trend-based models alone, the specific trend-based model alone cannot adequately reproduce the historic data on which it is based when applied in the same manner in which it is used to inflate the 2022-23 outturn data to 2024-25, and therefore should not be applied.

The reason that the model does not reproduce the data on which it is based, is that it uses the median of annual changes rather than the mean. The median is not appropriate in this instance because it does not account for all of the inter-annual variability caused by the weather. To account for this, it would need to account for all years like the mean does. Unfortunately, using the mean in this instance in place of the median would be likely to overestimate future business demand as the data only spans a few years going from the wet year of 2012-13 to the dry year of 2018-19.

Figure 6.4 - Comparison of actual historic business demand growth, and its linear trend, against the growth trend calculated using Ofwat's median year-to-year percentage change in growth.



Performance from base expenditure

Ofwat state that they do not expect companies to deliver business demand reductions from base expenditure, and then go on to state that they expect their proposed 2024-25 position to be maintained from base expenditure. Setting the proposed baseline using the historic trend-based model is incorrect for the reasons stated above, and as outlined below is inconsistent with latest out-turn data and the WRMP forecast position to 2024-25, leading to a lower baseline position that forecast using more robust models. Wessex Water was not funded during the AMP7 period through enhancement to deliver water efficiency savings for non-household customers. Therefore, the expectation is that the 2024-25 position is achieved through demand reductions in AMP7 from base expenditure.

This is inconsistent with Ofwat’s statement that they do not expect companies to deliver business demand reductions from base expenditure.

Approach that should be taken to set the base year position in 2024-25

This section explains the approach that should be taken to set the base year position, which given the limitations of the explained above, is the more robust approach that is consistent with the approach taken to undertake our WRMP24 forecasts.

Ofwat acknowledge that following the submission of 2023-24 business demand outturn levels, they will review company forecasts and adjust proposals for final determinations if required. Based on using the most up-to-date outturn data, we have undertaken the following:

- taken the 2023-24 outturn data for business demand which is 79.4MI/d.
- as with the standard approach to re-basing demand forecasts in water resources planning, the outturn figure has been re-based to normalise for the impact of the weather to give a normal year. The approach taken is the same as that which is documented in the WRMP demand forecast. In brief, a top-down and bottom-up adjustment is made to all weather-dependent water balance components based on individual weather demand models for each bottom-up component, and an overall normalised distribution input model (top-down) and reconciled. 2023-24 weather was similar to 2019-20 base year from the demand forecast model and generally wetter and colder than average conditions. This results in a normalised 2023-24 NHH consumption figure of 80.2 MI/d.
- The econometric model forecast is then reconciled to match the revised baseline forecast position from 2023-24 to derive the baseline forecast for 2024-25, and over the AMP8 period to 2029-30 without any enhancement activity intervention.
- The resultant model forecasts a base position in 2024-25 of 79.1 MI/d.

The resultant baseline position uses the most recent out-turn data, and the most robust forecasting approach to set the baseline position for 2024-25, and should be applied to set the initial performance commitment level. The figure will be different to the latest version of the WRMP as it uses more recent outturn data for 2022-23 and 2023-24. We are currently waiting on Defra for permission to publish this plan as a final plan, and will make appropriate updates to this plan prior to publication.

6.3.3. Setting performance 2025-2030

To set the performance level by 2025-2030, Ofwat have compared several calculated numbers, and effectively through a series of interventions set company stretch by taking the minimum of each of the following figures:

1. The calculated NYAA 2029-30 baseline business demand figure of 77.2MI/d minus the validated business demand enhancement reductions of 0.3MI/d, resulting in a 2029-30 figure of 76.9MI/d. The 77.2MI/d calculated baseline business demand in 2029-30 is derived by taking the business demand dry year annual average figure (DYAA) and normalising to a normal year figure (NYAA) using the WRMP ratio between NYAA and DYAA. The validated enhancement savings of 0.3 MI/d comes from Ofwat’s validation of benefits from water efficiency and smart metering activity – including plumbing loss savings – as validated against other companies’ forecasts.
2. Business plan submission figure of 72.5MI/d
3. WRMP24 NYAA 2029-30 figure of 71.4MI/d

The outcome of taking the minimum from each of these figures is that the figure of 71.4MI/d has been used by Ofwat to set the 2029-30 business demand, and a linear profile applied from the base position in 2024-25, to then derive the three-year average level.

The concerns we have with this calculation are as follows:

- The validated enhancement savings in step one did not include the benefits of water efficiency activity. As noted by Ofwat in the PR24 draft determinations: Wessex Water – Outcomes appendix, an assumption was made in setting demand reduction PCLs in the draft determinations resulting in our non-household water efficiency activities in CW8 also being assigned to household demand reduction. Therefore, an assumption of 0 MI/d of NHH water efficiency benefit has been applied in Ofwat’s Business Demand validation of benefits model. We have updated the information associated with water efficiency activities in CW8 to clearly assign reductions between household and non-household consumption, and ask Ofwat to recognise this, alongside our revised smart meter wastage reduction benefits outlined in CW7, in their recalculation of a more accurate validation of enhancement benefits. This will result in a revision to the 0.3 MI/d validated enhancement saving that has been taken off the calculated 2029-30 NYAA baseline, as above.
- The NYAA figure of 71.4 MI/d, which has been used to determine WRMP NYAA performance, as well as determining the ratio of NYAA to DYAA demand in step one above was miss-stated in the WRMP, NYAA Table 2a. The DYAA figures and main planning tables are correct. These figures will be updated in our final plan publication.
- The approach to setting the in AMP8 level uses an incorrect baseline starting point from 2024-25, as explained above.

Recommended approach that should be taken to set the performance commitment level in 2025-2030

As explained above in the approach for setting the 2024-25 baseline position, we have updated our WRMP forecast based on the latest out-turn data, and re-based those models to these data to produce both the baseline position and the baseline forecast to 2025-2030. From this we have taken off the correct enhancement benefits as per our smart metering and non-household water efficiency programme to derive a profile for our business demand performance commitment.

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Given the emergence of this new demand within the AMP period as plans are developing, and the potential speed with which these emerging demands require water within the 2-3 year window of plan development and sign off within any given AMP period, it is therefore appropriate to use our revised forecast provided, including accounting for 2023-24 outturn data, and not that which was used to develop the draft and revised draft WRMP.

6.4. Other relevant evidence

6.4.1. Evidence provided previously

WSX49 – Costs wholesale water tables commentary. Section 10 (CW7 Demand management – metering activities) and Section 12 (CW8)

WSX47 – Outcomes tables commentary. Section 1.11 (Business Demand)

Revised draft WRMP24: WRMP24 Main Technical Plan, WRMP24 Demand Forecast, WRMP24 Demand Management Strategy.

6.5. Why the change is in customers’ interests

The setting of a materiality threshold to the end of period adjustment is not in the customers interests, as it could potentially set a perverse incentive for a water company to not meet future customer demand from businesses if this

increase in demand failed to reach the materiality threshold but would still result in the company failing to achieve the performance commitment level.

Ofwat states that they do not expect us to achieve reductions in business demand from base expenditure. This is, however, inconsistent with the approach taken to both set the baseline position from 2024-25 and the performance commitment level to 2025-2030. This would set a more stretching target that is not consistent with the most up to date data, as provided in the proposed approach, and create additional costs in achieving this target that are not best value for customers. This is particularly the case when considering the mix of demand side activities that are required to achieve the overall statutory targets – it is not best value for customers to adjust these in isolation.

7. Customer contacts about water quality

7.1. Summary

We have proposed a stretching but achievable PCL for customer contacts about water quality. This performance is achieved through our proposed step-up in our base expenditure which includes more water quality driven mains replacement and additional trunk main replacement, all of which is needed to meet our DWI REG28 discoloration notice WSX-2021-00002. To achieve Ofwat's proposed PCL would require an estimated additional £50m over our original business plan submission.

Furthermore, as previously set out, we are concerned that this performance commitment creates a risk of perverse incentives for companies, which are not aligned with the interests of customers, therefore such additional investment would not be cost beneficial, and we do not propose it.

We note and welcome the PR24 Outcomes - Addressing key ODI rate concerns email from the Outcomes Working Group on 20 August 2024 noting that you are exploring how the ODI rate can be adjusted so it is more in line with other incentives and that the risk of adverse incentives is reduced.

7.2. Change requested

We suggest that Ofwat should set our PCL at the level set out in our revised proposal to Ofwat submitted in March 2024 in response to a query. This represents a stretching but achievable level, which is achieved through our proposed increase in capital maintenance.

Table 7.1 – Summary of changes requested

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.11	Draft Determination profile	0.92	0.90	0.89	0.87	0.86
	Our requested profile	1.00	0.98	0.96	0.94	0.92

Failing this, Ofwat should provide the additional investment necessary to achieve the additional stretch represented by its DD PCL.

7.3. Rationale

Our business plan proposal represents a stretching yet achievable change in this performance commitment

We have made significant progress in driving down water quality customer contacts about appearance, taste and odour over the last 10 years and are now around the industry average and consistent with many of the better performing WaSCs. We anticipate the industry average will continue to fall and we plan to continue to improve our performance over the long term from base expenditure, as detailed in our LTDS.

In preparation for our submission, we have undertaken a detailed root cause analysis to develop our discoloration strategy, which we have submitted to the DWI to meet the requirements of our REG28 undertaking and for which they have provided a letter of support (WSX14 and WSX15). As a result, we are forecasting the water quality contacts rate will fall from 1.02 in 2024-25 (2024 calendar year) to 0.92 in 2029-30 (2029 calendar year), i.e. a reduction of 0.10 over the five years. Without this investment, we estimate the contact rate would rise by 0.10 over the five years.

Our proposed trajectory for AMP8 is based on delivering improvements using the proposed £41.9 million increase in expenditure (Table 20):

- As our assets age, they are more likely to generate water quality issues, in particular discolouration. We are proposing to increase our proactive mains replacement and rehabilitation to 0.4% per annum in AMP8 which equates to 49km per year on average and continue to invest in mains replacement and rehabilitation at heightened levels in future AMP periods.
- Of this, we are planning to replace 4km per year of trunk mains specifically targeted to meet our DWI REG28 notice for reducing discoloured water Brown Black & Orange (BBO) in specific zones as detailed in WSX15 Annex A1 which reproduces our DWI PR24 submission and includes our DWI letter of support for this programme of work.
- The remaining 45km per annum of mains intervention will target smaller diameter mains across the region, though with a particular focus on those areas downstream of trunk main improvements in order to maximise their benefit to customers.
- An uplift in operational expenditure will be required to further increase flushing and other proactive interventions in order to further drive improvements to water quality for customers.

As we detailed in WSX14 and WSX15 we have undertaken a detailed root cause analysis to develop our discoloration strategy which we have submitted to the DWI to meet the requirements of our REG28 undertaking and for which they have provided a letter of support which is included in WSX15.

Table 7.2 – Proposed interventions

Intervention	Capex cost (£m)	Opex cost (£m)	TOTEX cost (£m)	Expected Improvement in performance	% Impact on performance
Trunk mains rehabilitation/replacement	20	0	20	0.10	90%
Distribution mains rehabilitation/replacement	19.4	0	19.4		
Mains flushing and other operational optimisation	0	2.5	2.5		10%

We have significantly increased operational activity aimed at reducing water quality contacts for the last 5 years, this means there is no 'low hanging fruit' remaining and further reductions will require capital investment, predominantly in mains replacement 'rehabilitation. In order to achieve our proposed PCL in our submission we estimated that we would require £20 million, the figure based on 6-8 significant trunk main replacement projects, such as replacing the 3.2 km main from Maundown South SR to the Ford Cross Connection. This is estimated to cost £2.5m-£3.5m and, provided it is accompanied by distribution main replacement or rehabilitation, would be expected to reduce water quality contacts in a downstream area containing 15 Service Reservoirs and 122 DMAs, an area which currently has a contact rate of 1.99.

Ofwat's PCL is 0.06 lower than ours by the end of AMP8. We estimate that to reach the lower target we estimate having to undertake 10-15 further significant trunk main replacement projects, with a combined capital cost of £50 million. These are likely to be significantly less cost beneficial. For example, replacement of a 15km section of main to Kingston St Mary SR which feeds a similar sized population and has a similar contact rate as the Maundown South scheme but is estimated to cost £14-20 million. This is a significantly higher cost to achieve a similar impact for the customer than the Maundown to Ford Cross main replacement.

We contend that the proposed level of trunk and distribution main replacement, combined with an increase in proactive interventions such as flushing, is the appropriate course at this time. The impact of these interventions can be assessed and incorporated into further mains replacement proposals at PR29.

We do not consider that we should be penalised for our proposed trajectory.

We have previously set out our view that variation in this performance commitment may be inversely related to companies' customer service offerings. This is because performance will be affected by customers' ability to contact companies, different approaches to call centre management and technology to filter out multiple contacts etc.

This has been acknowledged by the Chief Inspector of Drinking Water. As part of a presentation on the DWI's 2023 [2023 Chief Inspectors report for England](#),¹² he highlighted the importance of encouraging customers to report taste and odour concerns; emphasised that a high level of taste and odour contacts can be positive; and noted that customer contact rates may not be a good indicator of water quality.

The Chief Inspector also explicitly highlighted Wessex Water's approach in this area. We pride ourselves in our consistently industry leading customer service, which is fully compliant with DWI expectations, including the recent revision to IL 01/2024, and which we achieve in part through our 'warm voice' call centre. This is reflected in our consistently top-3 performance for C-Mex since its introduction. We agree with the Chief Inspector that it is important to ensure that customers feel it is easy for them to contact us with their queries and concerns, even where those water quality contacts do not relate to genuine instances of poor quality or to issues under the company's control. However, because of our ease of contact and our proactive approach of asking if they have additional concerns, our performance against this measure will suffer in relative terms.

In this context, we do not consider that we should be liable for an ODI penalty when relative variation in customer contacts may be caused by factors other than underlying water quality. We are confident that we can achieve our proposed trajectory through the proactive interventions described above, which will drive genuine improvements in water quality, and we request that Ofwat aligns its trajectory with this.

7.4. Why the change is in customers' interests

We believe our proposed performance commitment trajectory and proposed level of investment and intervention offers the best value for our customers. The replacement or rehabilitation of the mains which will have the most impact, combined with an increase in operational interventions such as flushing, will ensure that customers continue to receive wholesome water through the next investment period and beyond without excessive cost.

Meeting the PC targets proposed in the DD will require additional investment in a larger number of less beneficial mains interventions and result in a much higher cost per contact eliminated. It also risks redirecting technical resource away from other areas, particularly leakage reduction. We suggest that it is much better to learn from the improvements realised by the originally proposed investment and then incorporate any lessons learnt when formulating our proposal for PR29.

Considering this, we request that Ofwat:

1. Accepts our proposed PC targets and allows the funding requested to deliver the interventions required, as this aligns with the most cost/beneficial solutions and allows continued assessment of these works in the planning for the PR29 programme.
2. Allow the additional £50m funding required if the DD PC targets are maintained.

¹² Watch from 50:42 to 51:08 for the relevant excerpt.

8. Unplanned outage

8.1. Summary

8.1.1. Introduction

The purpose of the unplanned outage performance commitment is to incentivise the company to appropriately maintain and improve the asset health of our above ground supply production assets.

The PR19 methodology for unplanned outage excluded outages as a result of raw water quality. We think this was appropriate as the purpose of the measure was to quantify the asset health of our supply production assets. The PR24 definition removes the exclusion for raw water quality outages. Including this category in the metric for this PC does not reflect asset health in our view. We have said previously that raw water quality events should continue as an exclusion for the PR24 performance commitment definition. If raw water quality is not excluded, we would expect the performance commitment level to be based on back calculated data that includes the impact of raw water quality events.

The purpose of ODIs is to align the interests of companies and their investors with the interests of customers and the environment by directly linking performance with expected financial returns. In addition, the interests of companies, customers and the environment should be achieved in the context of best value for all parties. In the case of unplanned outage, there is minimal to no environmental impact and customers interest predominantly relate to water supply interruptions. To ensure all parties' interests are met, we have reviewed the best value options and chosen to invest in our network to ensure customers are not impacted by unplanned outages at water treatment centres. As such, we ask Ofwat to consider whether an ODI is appropriate for this performance commitment. This supports the approach we have been proposing for the past two years to focus on outcomes and the customer and environmental service impacts of our activities as any impact to customers is captured elsewhere and should not be penalised for applying best value principles.

As we have stated previously, we do not consider that the revised definition of this performance commitment reflects a true measure of asset health. It is also an output-based metric that does not necessarily reflect customers' experience, in that companies with higher levels of unplanned outage can deliver lower levels of supply interruptions for customers (as has been the case in PR19). As such, our view remains that the performance commitment as currently defined is not a good indicator of performance that matters. If retained, at a minimum, it should be set on a company specific basis, reflecting individual company circumstances, to ensure it does not create perverse incentives that could worsen outcomes for customers.

8.1.2. Summary of response

The rest of this sub-section sets out the following key points:

- The proposed performance commitment level is unachievable for AMP8 for Wessex Water with the change in definition to include raw water quality based on our specific network and supply circumstances. Ofwat has acknowledged that the removal of this exclusion would increase the percentage of unplanned outages, but this has not been recognised in its Draft Determination proposals.
- Related to the above, we believe the metric should not be a common PC. Previous investments in our resilient GRID allow us to maintain a level of unplanned outages due to raw water quality and still maintain services to our customers with no significant outages. Our strategy is essentially to plan for unplanned outage whilst maintaining excellent outcomes to customers (i.e. high-quality water with minimal interruptions – two outcomes for which we are at or near industry leading). To remove the exclusions for raw water quality and maintain a common PC does not recognise that Wessex Water has invested in a resilient network rather than individual water treatment centres that were not needed.

- Our proposed level of base expenditure is required to maintain an existing level of service of unplanned outages. The proposed reduction in base expenditure recovered through the Water Networks+ price control would result in an increased in unplanned outages over AMP8 to around ~5.5%. Significant further enhancement investment would be required to meet Ofwat’s proposed common target based on this new definition.
- Under the new definition of unplanned outage, our 2023-24 performance for unplanned outage would be 6.24%. Despite this, our customers were not impacted, which highlights the resilience of our network and GRID and that this measure does not reflect poor performance or poor asset health. It also demonstrates that a target of 5.02% is a stretching target given the 2023-24 performance (due to external factors).

8.2. Change requested

We request that Ofwat sets our target for this performance commitment at the stretching but achievable values we proposed in our business plan of 5.02%, and request that this is considered as a bespoke performance commitment level taking into account company specific circumstances.

Table 8.1 – Summary of changes requested

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.19	Draft Determination profile	4.44%	3.86%	3.28%	2.70%	2.14%
	Our requested profile	5.02%	5.02%	5.02%	5.02%	5.02%

We request that Ofwat allows our base maintenance expenditure proposal, to ensure we can maintain existing levels of unplanned outage. This is set out in more detail in representation WSX-CX (base expenditure).

We also request that Ofwat reconsider the ODI penalty for this performance commitment. We believe that by increasing the ODI, companies will consider unnecessary infrastructure and treatment projects that will not ultimately benefit customers or the environment. Despite the large increase in ODI penalty and proposed PCL it will not be the best option for customer (or that of the Environment) to invest the large sums required on new water treatment centres to improve our performance towards this target. With our proposed level of performance of 5.02% we can maintain customer supplies with our integrated network GRID which has been heavily invested in in previous AMPs to improve our resilience to unplanned outages.

8.3. Rationale

8.3.1. Performance commitment definition

We would encourage a view that provides further justification as to why the definition of this performance commitment has changed.

In the Draft Determination Ofwat states that “We explained in our PR24 methodology that we do not consider that exclusions for factors that are outside company control are appropriate in general. We expect companies to use their efficient cost allowances to mitigate the impacts of poor water quality. For example, by improving treatment processes or working with stakeholders to reduce the risk of deterioration of quality through work on catchment”. Considering our specific company circumstances we disagree with this view.

We are investing in both treatment processes and catchment work in AMP8, however as explained to Ofwat as part of its query process, treatment work improvements will generally not have a benefit in AMP8 and this is not directly

relevant when considering the AMP8 performance commitment. For example, a scheme to improve the water treatment works at Friar Waddon is in the list of preferred options in our WRMP, but with no impact prior to 2050.

Another way to reduce the risk to customers of raw water quality deterioration is to have a resilient network. The work we have done on our GRID means that as we face raw water quality issues at sites where there is no suitable treatment (will contribute to the metric in AMP8) we have enough resilience to allow these sites to be taken out of service, whilst maintaining our water supply provision to our customers. We actively and strategically manage our water supply system by taking these sites out of supply that are affected by raw water quality in the winter months, but these are categorised as unplanned outages (category D) currently. They cannot be categorised as planned outages because, as per the PC definition, they are not to enable maintenance or capital works to be completed, but are purely a strategic decision in the whole management of our GRID. We have enough resilience in our network to maintain supplies to our customers during these periods. This reflects that the new definition is not a good measure of asset health and is not well-correlated with customer outcomes, so we believe it is the wrong metric to target.

We have previously set this out in our business plan and as part of Ofwat's query process, but we do not believe that the Draft Determination explains how Ofwat have accounted for this.

8.3.2. Setting a common performance commitment target

We would encourage that further justification is provided for why the performance commitment, based on the revised definition, is not company-specific.

In the Draft Determination Ofwat states that *"If the number and duration of unplanned outages increases, the risk to service increases, regardless of the existing mitigations or redundancies in the company's system."* We consider that Ofwat has not taken into account our evidence on water supply interruptions performance and capacity headroom when forming this view.

We are an industry-leading performer in respect of water supply interruptions, as shown in the chart below. This performance is evidence of the resilience of our supply system and that we manage our network effectively despite the necessary outages we anticipate and plan for every year due to raw water quality. As such, investing in additional water treatment centres to deliver a more stretching level of performance for this specific performance commitment would not be the best option for our customers or the environment.

We have also been able to minimise the impacts of poor water quality risk by meeting peak demand with clear headroom available. This is because the setup of our network provides us with resilience to meet peak demand with headroom available across our supply zone. This is evidenced by the fact that:

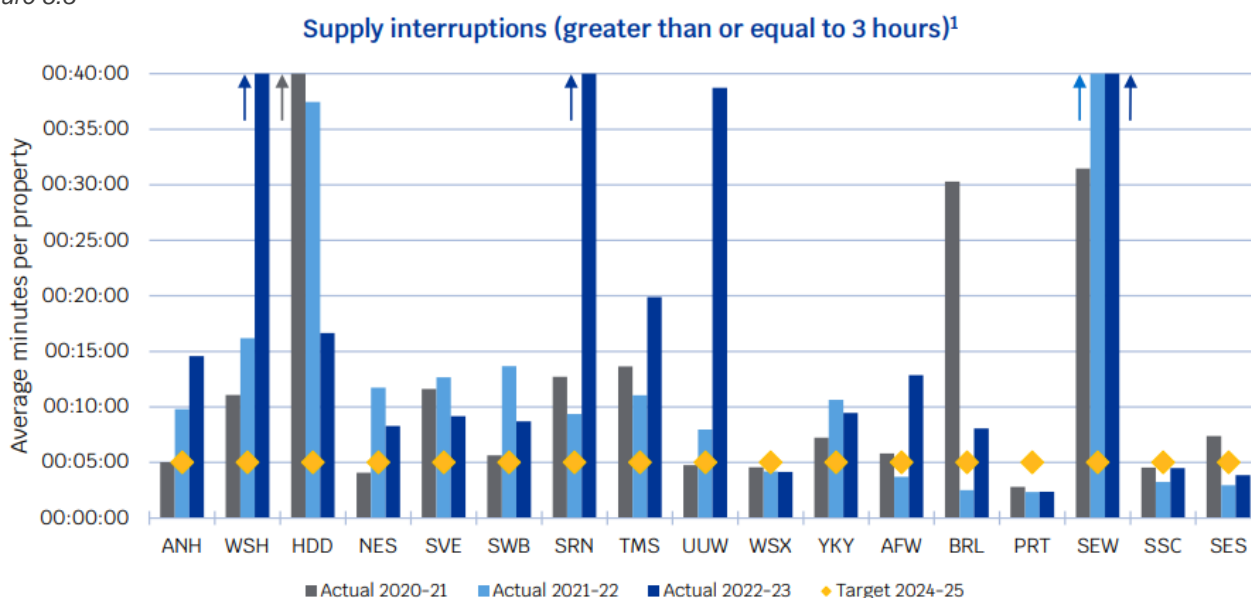
- We have not had to impose any customer water use restrictions since 1976. This was illustrated particularly during the drought conditions we experienced in 2022. During that year we did not need to set any restrictions on water use for our customers or apply for drought permits to manage our supply and demand.
- We have not had any major supply failures that have resulted in significant impacts to our customers or exceedance of our Supply Interruptions target since 2018-19.
- We have maintained a reduction in supply interruptions in the last three years as a result of continual improvement in our processes and procedures. This is shown in the chart below from the 2022-23 Water Company Performance Report. Our overall actual performance improved from 00:04:34 in 2020-21 to 00:04:12 in 2021-22 to 00:04:10 in 2022-23. For 2023-24 our performance of water supply interruptions was 00:05:35, below the Performance Commitment. This puts us among the top performing companies for this metric, with significantly lower levels of supply interruptions than many companies.

Figure 8.2

Company	Performance		
	Actual	Commitment	
	Average minutes per property		
Anglian Water	00:14:35	00:05:45	
Dŵr Cymru	00:44:31	00:05:45	
Hafren Dyfrdwy	00:16:39	00:05:45	
Northumbrian Water	00:08:17	00:05:45	
Severn Trent Water	00:09:10	00:05:45	
South West Water	00:08:42	00:05:45	
Southern Water	01:28:00	00:05:45	
Thames Water	00:19:54	00:05:45	
United Utilities	00:38:45	00:05:45	
Wessex Water	00:04:10	00:05:45	●
Yorkshire Water	00:09:27	00:05:45	
Affinity Water	00:12:53	00:05:45	
Bristol Water	00:08:03	00:05:45	
Portsmouth Water	00:02:21	00:05:45	●
South East Water	03:02:21	00:05:45	
South Staffs Water	00:04:29	00:05:45	●
SES Water	00:03:51	00:05:45	●

Categorisation of performance	
●	Top performer ²
■	At or better than performance commitment level
■	Poorer than performance commitment level

Figure 8.3



To provide further evidence, we have looked at previous year performance for supply and demand to demonstrate headroom available in summer months for the past few years. We have used our forecast peak production capacity on a month-by-month basis from individual sites, taking account of yield decline, water quality impacts, licence

restrictions and planned/unplanned outages across the network. This reflects the true position in terms of peak production capacity. Comparing this to our actual distribution input each month gives an indication of the headroom available in our system.

This is shown in the chart below. This illustrates that we have sufficient capacity in our supply system to manage routine outages due to raw water quality without interruption to supply to our customers. The headroom is based on our overall supply system but is not evenly distributed.

Figure 8.4



Taking into account all the above, we believe the most appropriate approach to mitigate the risk of poor raw water quality is to have spare capacity built in to enable changes to water sources as a raw water event occurs – which we have, as clearly evidenced by the points made above. We note that Ofwat has said in its PR24 final methodology that it will consider this when setting performance commitment levels, but we do not consider that Ofwat has done this. To not do so would risk making outcomes worse for customers by compelling companies to make investments which do not reflect how their network is configured, and which would ultimately add to their cost base but would not be justified by any customer benefit.

Wessex Water have up to 80% contribution from groundwater sources, not all of which are connected to water treatment centres and many of which individually are small contributors to our overall water supply. We actively and strategically manage our water supply system in such a way that it allows us to make routine planned maintenance of our assets, and to take sites out of supply that are routinely affected by raw water quality in the winter months, but without impacting on our customers – as it stands in the performance commitment definition, this counts as an unplanned outage despite being the most efficient way to manage the resilience of our network and provide excellent service to customers.

For companies like Wessex Water, with a resilient GRID network, maintaining the network is a far more efficient way of protecting customers from the adverse effects of unplanned outage, even if that means a higher number and duration of unplanned outages.

In the Draft Determination Ofwat also states that “*In addition, at PR19 we set a common PCL to be delivered by 2024-25. For the 2020-23 period, on average, 98% of PR19 PCLs have been met. This indicates that companies are progressing towards a common level.*” We do not consider that this is relevant to the setting of a common PC for the PR24 definition of unplanned outage as PR19 PCLs do not take into account the change in definition to include raw water quality. We consider that applying this logic doesn't take into account company specific circumstances where the change in definition will have a material change in performance.

8.3.3. Implications for customers

In light of the above, we consider that Ofwat's common performance target under the new definition will create unintended consequences.

We have considered the implications of Ofwat's proposed unplanned outage target. To achieve the unplanned outage PCL to 2.14% we would need to build 10+ water treatment centres at a cost of ~£180m. Ofwat would need to allow a significant enhancement uplift. This would clearly not be in customer's best interests as it would not confer any real benefit (as demonstrated in the section above). This is based on the following:

- Potential Capex costs for improvement schemes at these sites are estimated to vary between £5m and £20m with Opex costs of up to £1m. These estimated costs are based on similar historic schemes.
- A review of our sources with recurring annual outages due to raw water quality in the winter shows an average contribution to this metric for each source. We have then assumed a 75% performance improvement from a new water treatment centre at each site. Performance improvement contributions of between 0.05% and 0.4% per site are typical.
- So, a combination of benefit contributions to achieve a 2.88% improvement would require us to build 10+ new water treatment centres.
- We have estimated at a high-level (based on similar historic schemes and allowing for some cost uncertainty) that this would require capex costs of over £180 million and opex costs of over £3.5 million per annum. It would also increase both our embedded and operational carbon footprint.
- The ODI penalty for this performance commitment is proposed to set at £1.8m per % per year. Compared to the likely scale of investment required to achieve this reduction in planned outages, it is clear that the additional cost of the investment required to achieve this level of performance would far outweigh the customer benefits from this change in performance.

Making these large investments would not therefore represent best-value for customers, particularly as our resilient network allows for the current level of outages without increasing interruptions for our customers, and so customers would not in any case experience any better outcome for the investment made. The very little customer benefit would ultimately need to be recovered from customers, so we consider that it is very clear that this is not the best option for customers.

Furthermore, Ofwat's proposed cut to base expenditure (-36.4%) would exacerbate the implications set out above. Our estimated impact would be a performance of ~-5.5% against the PR24 definition. This would require an additional investment of the order of £80M to reach the proposed PCL of 2.14%.

Ofwat has stated that “*We have provided all companies with a climate change resilience uplift to address their priority issues relating to flooding and power resilience. We expect this investment to support the delivery of improved unplanned outage levels.*” We do not consider this relevant to this metric because the change in definition to include raw water quality is the primary driver for a material change in the performance against this metric.

8.3.4. How we will maintain our service

There are no specific interventions planned for AMP8 to improve our level of service for this PC in AMP. We aim to continue to maintain our assets with planned maintenance to allow enough resilience in our GRID to manage unplanned outages (including those from raw water quality) without interruptions to customer supplies, as we have done in AMP7. Investing in new raw water treatment centres to reduce the contribution to unplanned outage from raw water quality problems is not considered the best use of investment for Wessex Water and therefore we are not proposing any step change in performance.

Our maintain our proposed baseline at 5.02%, based on PR24 definition of Unplanned Outage. Contributors to this category are primarily from polluting catchment activities from third parties and the weather. There will always be uncontrolled contributions from these factors given that we have groundwater assets that contribute 80% to our supply volume.

Ofwat have previously stated in its query process that they “...recognise that the inclusion of raw water quality in the definition of unplanned outage for PR24 could lead to higher level of unplanned outage than before”. We would welcome a view that takes this into account when setting the proposed common PCL for AMP8.

We do not believe a static target of 5.02% reflects poor performance. The rationale for our proposed PR24 baseline is that it is based on the past three-year average performance (back-calculated for the PR24 definition for 2020-21 to 2022-23), where no customers have had supplies restricted and we've been able to meet peak demands with headroom available and continue a programme of planned outages to improve our resilience.

We have reviewed our calculation and rationale for our proposed PCL, and our view remains that a forecast target of 5.02% is a stretching yet achievable level of performance from base expenditure (reflecting that we have requested no enhancement expenditure for this area). This target reflects our current performance over the three years 2020-21, 2021-22 and 2022-23. We have not included our performance in 2023-24 in the average calculations for current performance as we believe this to be an outlier wet winter.

We do not anticipate any material reductions in peak week production capacity during AMP8, though we recognise that there has been a small decline over recent years (though in this time no customers have had supplies restricted, and we have been able to meet peak demands with headroom available – see section below). However, to the extent that there has been a decline in peak week production capacity over the past few years, we consider this will make a given PCL more stretching to achieve because we would need to achieve a reduction in outage volume to continue to meet the 5.02% target. We are therefore confident in our justification of a flat target for AMP8.

There are no other drivers for this PC. There is no environmental benefit of any of these potential schemes. Improving this metric doesn't benefit our customers as we currently have a resilient network to allow for these unplanned outages that don't result in interruptions to our customers.

Instead, we are actively exploring nature based solutions in our catchments that are affected by raw water quality problems as our preferred option. It is likely that some options to improve this metric (the contribution from category D raw water quality) will be included in WRMP29 as there may be some supply demand balance benefits.

8.3.5. 2023-2024 performance

Wessex Water's performance for unplanned in 2023-24 outage against this metric for PR24 definition was 6.24% (4.71% from raw water quality category, 1.53% from operational categories as per the PR19 definition). If this outturn data was used in the calculation for the three year average baseline performance, it would be 5.56%.

However, the primary cause of this reduced performance in 2023-24 is raw water quality outage, primarily nitrate and turbidity, influenced by the record rainfall of the 2023-24 winter and continuing into 2024 longer than is usual for some of our groundwater sources. In the 12 months to end of March 2024 Wessex Water has experienced 167% of the long-term average rainfall in our area. In the 12 months to end of June 2024 this has been maintained at a level

of 148%. We have therefore not used 2023-24 outturn performance data to set our proposed PCL as this year is considered an outlier based on a wet winter.

We see the proposed PCL in our business plan of 5.02% as particularly stretching in periods of wet weather, the extent of which we've not experienced in previous recent years. It is also stretching against a revised three-year average of previous performance of 5.56%. Despite these conditions from external factors, we have maintained headroom across our GRID and maintained customer supplies.

8.4. Why the change is in customers' interests

As we have set out in this representation, the unique circumstance of Wessex Water's integrated GRID ensures that our customers are not impacted by our current level of unplanned outages. With the significant reduction in base maintenance proposed in the draft determination this level of performance could not be maintained and would inevitably result in an increase in operational unplanned outages from the operational category.

With an elevated ODI set for this PC we believe that this will incentivise companies to invest in unnecessary water treatment infrastructure to improve the performance against this metric. In the case of Wessex Water investment of the order of £180m would be required to meet the proposed PCL without improving the level of service for our customers. We do not consider that this is in any way best value for our customers, with a high environmental impact. We consider it to be a penalty for previous investment in an integrated GRID to improve our resilience to unplanned outages.

In light of this, we request that Ofwat:

1. Reassesses its definition of the performance commitment for the reasons explained above.
2. If it maintains the current definition, sets the performance commitment on a company specific basis.
3. Considers the impact of 2023-24 performance in its calculation of the target.

9. Total pollution incidents

9.1. Summary

We are seeking to revise the baseline for the common performance commitment ‘Total Pollution Incidents’ as part of our draft determination response. We believe that the AMP8 performance commitment baseline should be adjusted to reflect a re-forecast performance which has been developed using the latest data for 2023-24 reporting.

When the performance commitment baseline was developed for the October 2023 submission, we considered the 2022-23 increase in reported incidents to be an anomaly. However, the reported data for 2023-24 and our performance to date for 2024-25 has shown that this emerging trend is continuing.

We have identified that the increase in pollution incidents in 2022 and 2023 is not due to a degradation in asset performance but is primarily due to simply identifying more incidents through greater monitoring at SPS and Water Recycling Centres (WRCs). We believe this emerging trend should be taken into account when setting the AMP8 baseline, as at present we will not be able to achieve a performance level of 18.33 (equivalent to 64 incidents) in 2025-26. A summary of how we have calculated the baseline can be found in section 2.3.2.

Table 9.1 – Summary of changes requested.

Data table line	Data table line	Baseline 2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	% reduction
OUT1.12	Original Business Plan Submission	22.26 (78 incidents)	21.18 (74)	20.23 (71)	18.81 (66)	17.67 (61)	15.67 (55)	30%
	Draft Determination profile	19.50 (68)	18.33 (64)	17.16 (60)	15.99 (56)	14.82 (52)	13.65 (48)	30%
	Our requested revised profile	35.49 (124)	31.19 (109)	26.79 (94)	22.51 (79)	17.95 (63)	13.68* (48)	61%

The changes to the reporting methodology and technology used to capture data (Event Duration Monitoring, EDM), discussed in detail in section 8.3.1. has led to an increase in pollution incidents which justifies a resetting of the 2024-25 baseline. The adjusted target profile between 2024-25 and 2029-30 starts at a higher absolute number of pollution events 35.49 (124 incidents) but leads to a higher reduction in total pollution incidents than previously proposed in our original submission as we are now targeting 13.65 (48 incidents) by 2029-30. This is a 61% reduction compared to the originally proposed 30% reduction. Therefore, despite an increase in the starting position (related to an increase in incidents being identified) we are still aiming to achieve the target that Ofwat is setting for the industry as a whole.

9.2. Change requested

We request that Ofwat sets our target for this performance commitment at the stretching but deliverable profile we have proposed in Table 1 (refer to section 8.1), which is reflective of our most recent reporting including EDM data.

*Note: We accepted the 2029-30 target of 13.65, however, there is a discrepancy in the 2029-30 calculated field for ‘Total pollution incidents per 10,000 km of sewer length’ when compared to Ofwat’s proposed draft determination figure, 13.68 vs 13.65. This is due to only being able to provide whole numbers of pollution incidents and the Sewer Length normalisation figure. The sewer length used is a forecasted figure, the EA in 2025-26 through publication of the EPA guidance will confirm the normalisation figure to be used.

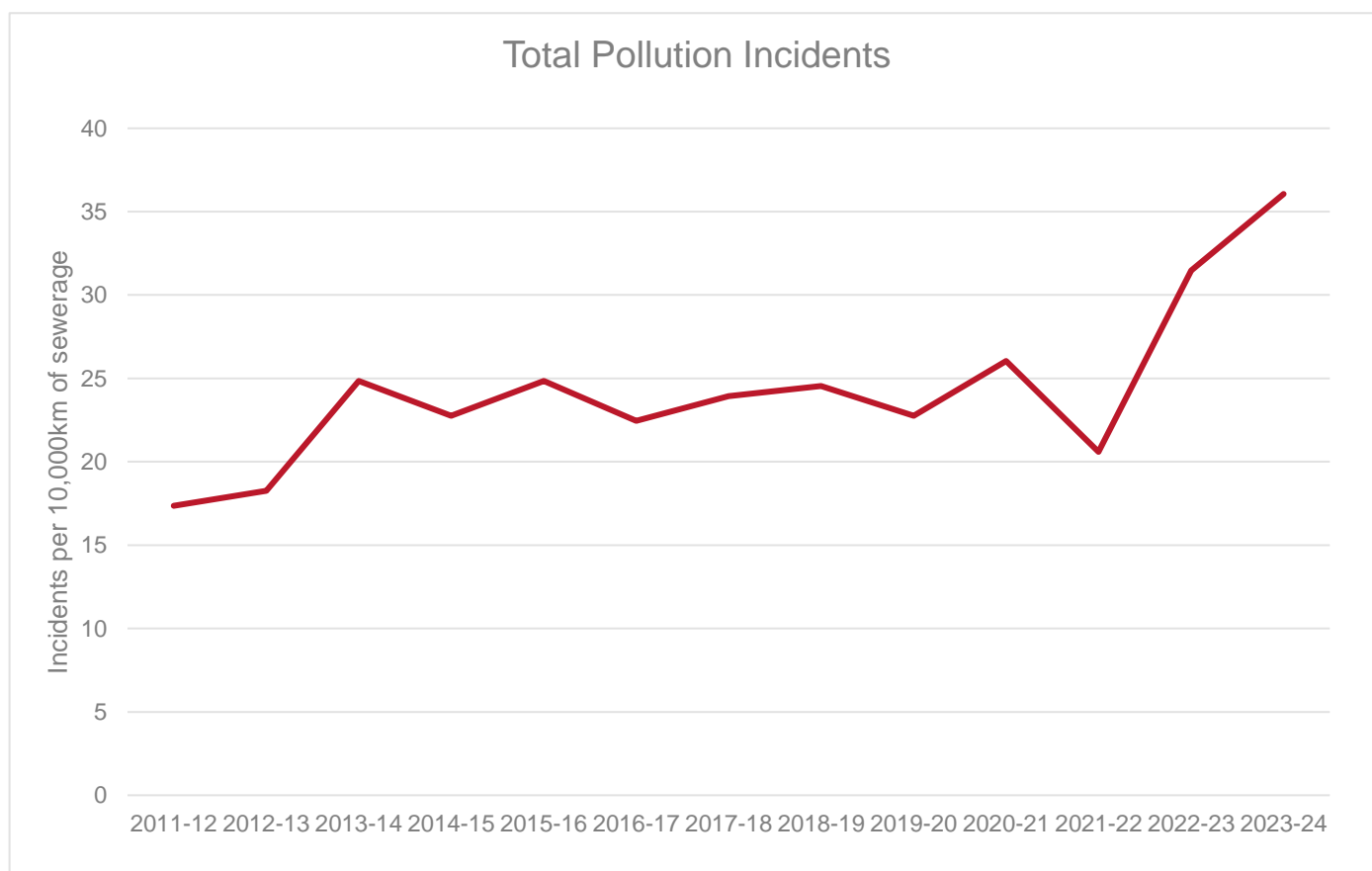
9.3. Rationale

9.3.1. Changes to pollution interventions and reporting

Reporting trends over time

We have seen an increase in reported pollution incidents in reporting years 2022 and 2023 - see Figure 9.2. This is due to a combination of recent regulatory and monitoring requirements.

Figure 9.2 – Reported Total Pollution Incidents profile (From Oct 2023 submission) normalised.



In 2022 the Environment Agency confirmed that all incidents identified through retrospective review of EDM data were to be reported through the National Incident Recording System (NIRS). Previously, EDM data was not included in the reporting, and this has led to an increase in reported incidents.

This has contributed to the largest increases in pollution incidents to be at Sewage Pumping Stations (SPS) and WRCs (see Figure 9.3) which is where we have installed the greatest number of monitors.

The increase in pollution incidents in 2022 and 2023 is not caused by a degradation in asset performance but is primarily due to identifying more incidents through increased monitoring at SPS and Water Recycling Centres (WRCs) and a requirement to include EDM in regulatory reporting. We have seen little movement in pollution incident numbers for other asset types.

With further monitoring planned, whether from UMON6 monitoring at EOs, UMON4s at WRCs or in-sewer through the Smart Network programme, there is likely to be a continuing increasing trend which we accept we need to address to achieve the proposed 29/30 target.

Figure 9.3 – Reported pollution incidents split by asset type.

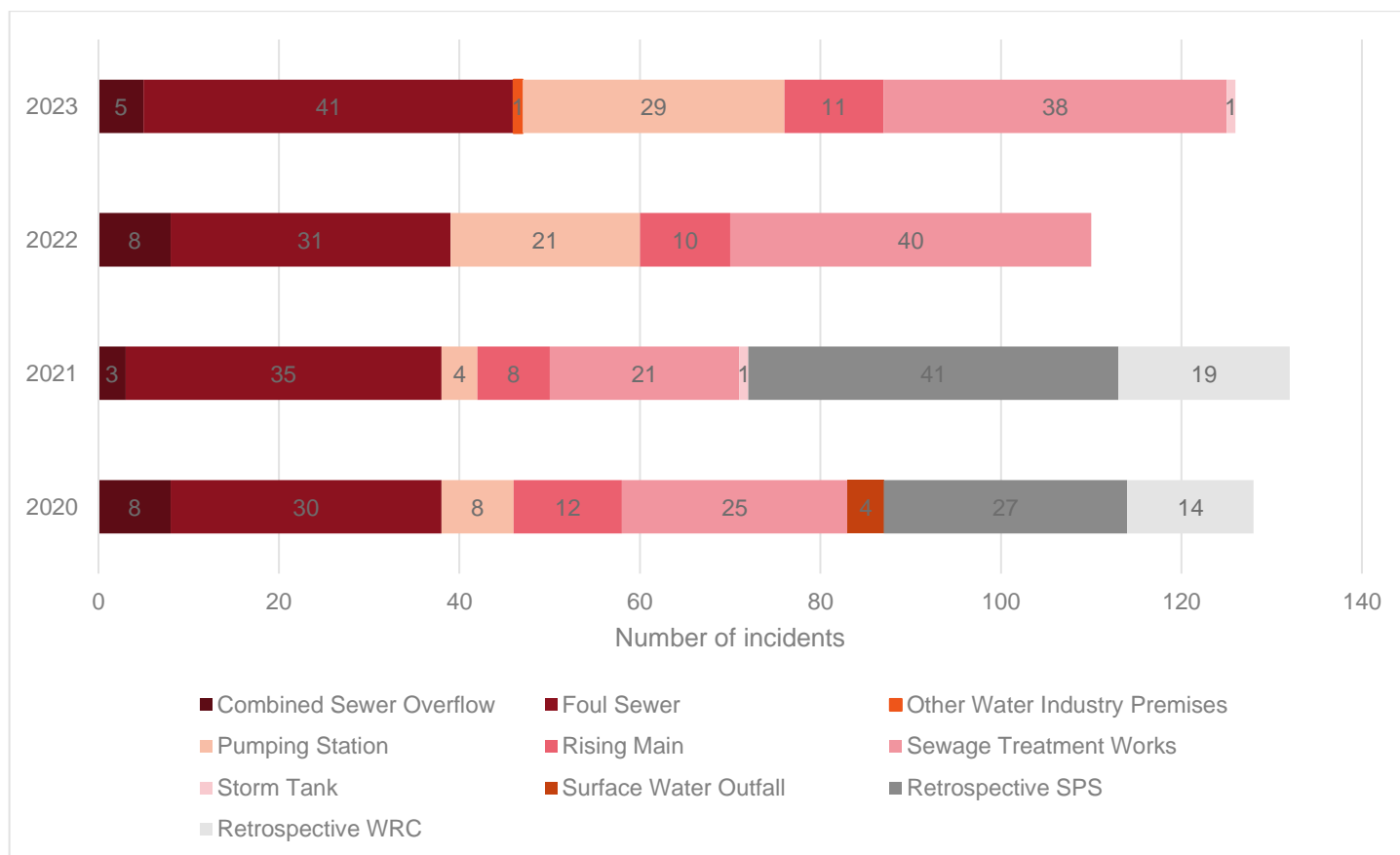


Figure 9.3 also shows the results of retrospective analysis completed in June 2024. Data was analysed for 2020 and 2021 to assess what the reported total number of pollution incidents would have been at SPS and WRC had the EA requirement to report EDM spill data been in place. This shows that total pollution incidents have remained broadly the same between 2020-2023.

Although the number of incidents has not reduced, the number has remained stable despite the upward pressure as a result of increased monitoring of our assets. This is a result of the ongoing work we have been doing to reduce the number and severity of pollutions through our [PIRP¹³](#) activities since 2019. We have added emphasis to our pollution awareness training to enable our teams to identify and mitigate issues sooner to reduce the likely impact.

We regularly look at root causes for total pollutions and focused our actions directly on influencing the reduction against our largest areas; these have been initially on rising mains and foul sewer incidents. As mentioned above, in the last two years we have seen an increase through more monitoring which has shown the asset types of WRC and SPS to have had a noticeable increase. We have therefore added actions into our [PIRP](#) targeting these areas but maintaining the activities we have instigated in previous years. This includes:

- Knowing our asset and sites better through an intensive programme of survey including WRC site drainage and reconfirming asset data and current condition status.
- Blockage reductions targeting for example:-

¹³ [Pollution Incident Reduction Plan](https://corporate.wessexwater.co.uk/our-future/our-plans/pollution-incident-reduction-plan): <https://corporate.wessexwater.co.uk/our-future/our-plans/pollution-incident-reduction-plan>

- domestic misuse through letter, media campaigns and face to face visits in hotspot areas,
- commercial food establishments through a programme of targeted education, encouraging fat traps and enforcing through cost recharges.
- Vegetation root intrusions following the inclusion of additional data layers into our Sewer Intervention Management Plan (SIMP) risk model to target CCTV survey programme to assess asset condition.
- Power interruption impact reduction through more standby generators at sites with repeated power disruptions and auto restart systems for pumps at SPS, which will ensure the automatic restart of the pumping station once the power returns.
- Failures that have crossed over from foul to surface systems – dual manholes with foul and surface water lines in close parallel are now one of our prioritisation conditions in our planned CCTV programme and are key locations for our new in-sewer monitoring programme.
- Rising Main burst detection has been rolled out to our highest risk rising mains and we continue this process to cover a great proportion of our rising mains.

There is always a level of risk of the unknown, with the sewerage network being open to any discharges and covering such a wide area, with a variety of root causes that can lead to a pollution regardless of the impact. We have to continue to deliver a widespread list of actions to make a substantial difference as part of our ongoing focus on reducing the number and impact of any pollution.

We are always seeking to innovate and try new pollution reduction measures to ensure we are delivering the most effective solutions to manage pollution. This is demonstrated through our participation in the National Pollution Group, the industry forum where good practice and new ideas are shared so we can seek improvements across the industry, this is discussed further in WSX-C12 Enhancement costs – pollutions, Section 2.2.

Pollution management activities

We have worked hard to monitor and prevent pollution incidents in a changing environment. Historically the number of pollution incidents has remained stable over-time and we have adapted to new regulatory requirements and data analysis. However, in 2022-23 we saw an unexpected increase in pollution incidents which has been replicated in the 2023-24 reporting year. To identify what may have caused this uplift in reported incidents we have completed a review of all pollution related activities since 2018. After analysing changes to our approach to the data capture of pollution incident and operational response, we have concluded that there are three primary drivers for this change in performance:

- New regulatory requirements
- Methods of data collection and increased monitoring
- Changes to our internal procedures

Recent changes to our reporting and operational approach which are believed to have had a significant impact on recent pollution incident reporting have been summarised in Table 9.4 below. We have grouped these changes under each of the three primary drivers.

Table 9.4 – Summary of key changes to Wessex Water reporting and operational approach to pollution 2021-2023.

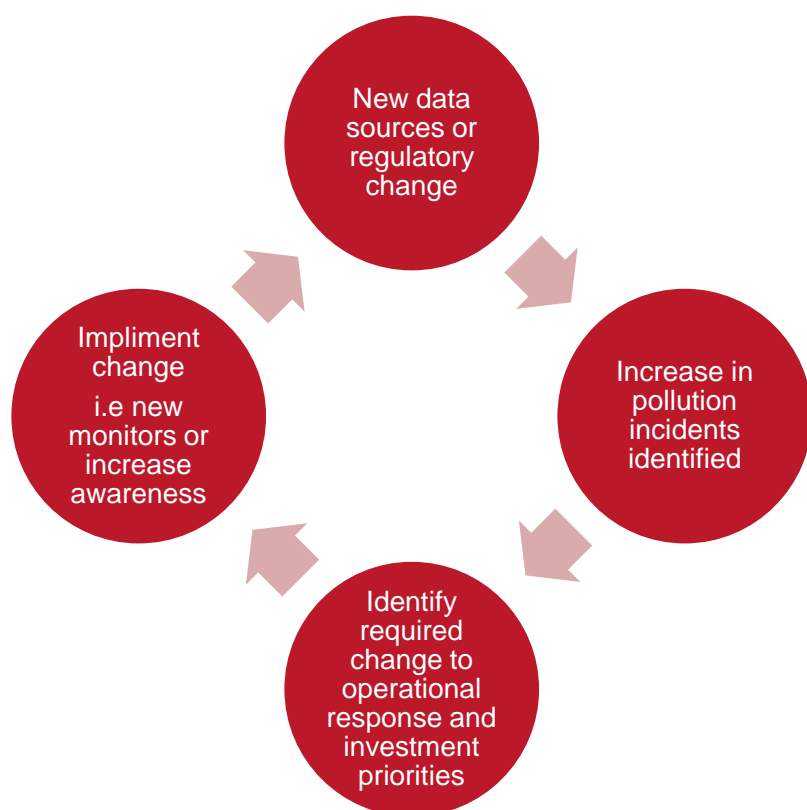
Theme	Change	Applies from	Impact
Regulatory requirement	Environment Agency confirm that incidents relating to mains power supply cannot be attributed to a third party. Amendment to approach to reporting.	2021	Increase in number of incidents reported as previously excluded included are now included. 2021 = 3 x cat 3 2022 = 1 x cat 3 2023 = 6 x cat 3

	Environment Agency confirm that all incidents identified through retrospective review of EDM data are to be reported to National Incident Recording System (NIRS). Change in reporting approach to include EDM identified incidents.	2022	Increase in number of incidents reported as not previously known. 2022: 20 wastewater pollutions (19 cat 4, 1 cat 4) 2023: 13 wastewater pollutions (11 cat 3, 2 cat 4)
	EA confirm the removal of the storm exemption	2023	Increase in number of incidents reported as previously excluded included are now included. All incidents relating to a major storm event will be recorded within the EPA. (this accounted for 7 incidents, which were discounted from the EPA in 2022 and zero incidents that would have qualified in 2023) This will have an impact on incidents reported in future reporting years.
Data collection and monitoring	Increase in monitoring across the asset base, including installation of EDM monitors on permitted storm overflows.	Initial install 2015-16, all Storm Overflow monitors installed by Dec 2023.	EDM monitoring was initially installed for data reporting purposes and has now changed into an operational tool. This coupled with a general increase in monitoring and available data has resulted in increased visibility and identification of pollution events across monitored assets such as SPS and WRC.
	Operationalisation of monitoring data, we begin to use EDM and other available data as an operational tool.	2022	
Internal procedure changes and training	Completion of an updated awareness/education programme across operations to educate operators on the importance of overflows and pollution impacts.	2022	This change in process and increase in awareness around storm overflow operation has allowed us to identify potential missed spill events, provided better evidence capture and an opportunity to investigate spills within a shorter timeframe.
	Introduction of new procedures which focus on overflow operation. This included additional checks at the overflow when responding to an asset issue along with daily checking of storm overflow related data.	2022	
	Implemented a new procedure where the Network Monitoring Team (NMT) scrutinise each EDM spill Storm harvester reports as abnormal on daily basis.	2022	This change in process has allowed the identification of potential missed spill events, provided better evidence capture and an opportunity to

			investigate spills within a shorter timeframe.
	Introduced regular checks of WRC sites for < Flow Passed Forward (FPF) pollutions which resulted in identifying a number of additional pollutions. Previous to this combined with EDM installations these would have been unidentified and unreported.	2022	<p>Increase almost completely due to < FPF pollutions.</p> <p>June 2020 - June 2022 WRC Cat.3 pollutions: Total = 63 < FPF = 20.</p> <p>June 2022 - June 2024 WRC Cat.3 pollutions: Total = 94 < FPF = 47</p>

Whilst the focus of this representation has been on the impact of EDM data on our reported numbers, we also note that there are other types of monitoring which are currently being installed such as in-sewer monitoring. This will improve our network visibility and may also have a similar impact on pollution incident numbers in AMP8.

Figure 9.5 – Impact of new data or regulatory change on pollution incident reporting.



Our pollution management activities demonstrate our considerable effort to reduce the number of pollution incidents on our network, and that the increased in pollution incidents are not due to failures in our processes but through improved data capture technology and changes to reporting requirements. Figure 9.5 shows the impact of new data or regulatory changes and how it is a continuous cycle of changes and business adjustments. We are constantly refining our operational procedures and interventions and there are also 3rd party influences such as changes to regulatory requirements which can alter the number of incidents we need to manage.

With this improved understanding of the number of pollution incidents between business plan submission in October 2023 and draft determination we believe it is appropriate to adjust the Total Pollution Incidents baseline. This will allow time to implement changes to meet the stretching target we have proposed by 2030.

9.3.2. Calculating the baseline

Our proposed baseline is calculated using historic data between 2020 to 2023 plus the retrospective analysis undertaken for 2020 and 2021. The average of these values has been calculated to derive the 2024/2025 baseline. The AMP8 profile has been interpolated between 124 and the draft determination target of 48 which has been set for the industry.

Table 9.6 – Input values for baseline calculation.

	2020	2021	2022	2023	Average / 2024-25 baseline
Number of pollution incidents	128	132	110	127	124

9.4. Other relevant evidence

9.4.1. Evidence provided previously

WSX16 – Wastewater networks plus strategy and investment Section 5.2

WSX47 – Outcome performance commitment

9.5. Why the change is in customers' interests

Adjusting the baseline to the profile proposed in Table 9.1 is in the best interest of customers because a profile which is stretching but also realistic ensures the business carries the appropriate level of risk. There would be key risks if the baseline was not adjusted:

- If our pollution performance commitment baseline is unrealistically low, it will not be possible for us to meet the agreed performance commitment levels in the early years of AMP8.
- If we are unable to meet our targets, we would incur significant financial penalties which would result in diversion of resources away from planned investment to reactive management of pollutions. We believe that the investment should be directed at improving the wastewater service for the customer and the environment. Table 9.7 shows the penalty implications if the baseline is not adjusted.

Table 9.7 – Indicative financial penalty if proposed DD baseline is retained in AMP8.

	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
DD proposed target	19.50 (68)	18.33 (64)	17.16 (60)	15.99 (56)	14.82 (52)	13.65 (48)	
Our requested revised profile	35.49 (124)	31.19 (109)	26.79 (94)	22.51 (79)	17.95 (63)	13.68 (48)	
Difference from Target		12.869 (45)	9.63 (34)	6.52 (23)	3.13 (11)	0.03 (0)	
Possible ODI impact, £m		-16.5	-12.3	-8.3	-4.0	0.0	-41.2

- If we are unable to meet our performance commitments early in the AMP it will erode customer confidence in the performance commitment process. Customers play a part in our pollutions reporting and we want

them to self-report incidents so that we can triage issues and fix them. If we lose customers trust they may be less likely to report incidents to us for investigation.

- With the proposed revised Total Pollution Incident baseline the customer will still benefit from a stretching 2029-2030 target, but we will be able to work most effectively towards targets which are deliverable.

10. Discharge permit compliance

10.1. Summary

In their PR24 Final Methodology, Ofwat proposed a discharge permit compliance performance commitment level of 100%, without a deadband.

In our PR24 Business Plan we proposed a PCL of 99.0%. In acknowledgement of Ofwat seeking a PCL of 100%, we also offered an alternative of a PCL of 100% but with a deadband of 99%, being comparable to that of PR19.

The Draft Determination retained the position for all companies to have a 100% PCL without a deadband.

We reiterate our position as provided in our PR24 Business Plan, that whilst we absolutely aim and work hard to achieve 100% discharge permit compliance, there are a number of factors outside of the control of the company that could lead to a site being classed as not meeting some of its permit conditions. With ever-tightening permits, there is increasingly a need for sites to be running optimally and with adequate redundancy / standby provision for an increasing range of scenarios. We do not believe the level of investment required to guarantee 100% discharge permit compliance under all possible scenarios is best for customers and the environment.

Table 10.1 – Summary of changes requested

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.14	Draft Determination profile	100.00%	100.00%	100.00%	100.00%	100.00%
	Our requested profile	99.03%	99.03%	99.02%	99.02%	99.02%

10.2. Change requested

We recognise Ofwat are seeking a PCL of 100%, but in the absence of a deadband we are unable to support this.

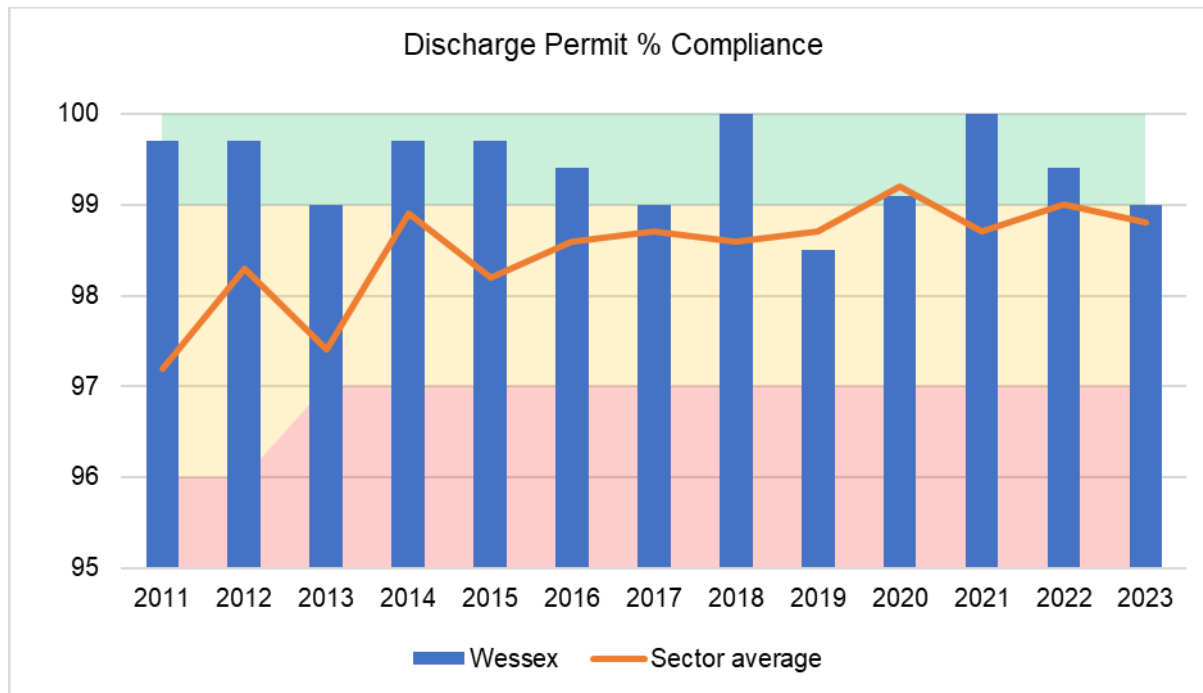
We retain our proposal for a performance commitment level of 99.0%.

Alternatively, if Ofwat were to continue with a performance commitment level of 100%, we would suggest a deadband of 99%.

10.3. Rationale

The following graph shows our historical and current performance in the context of the wider industry. This was included in our business plan submission, but we now extend to cover 2022 and 2023.

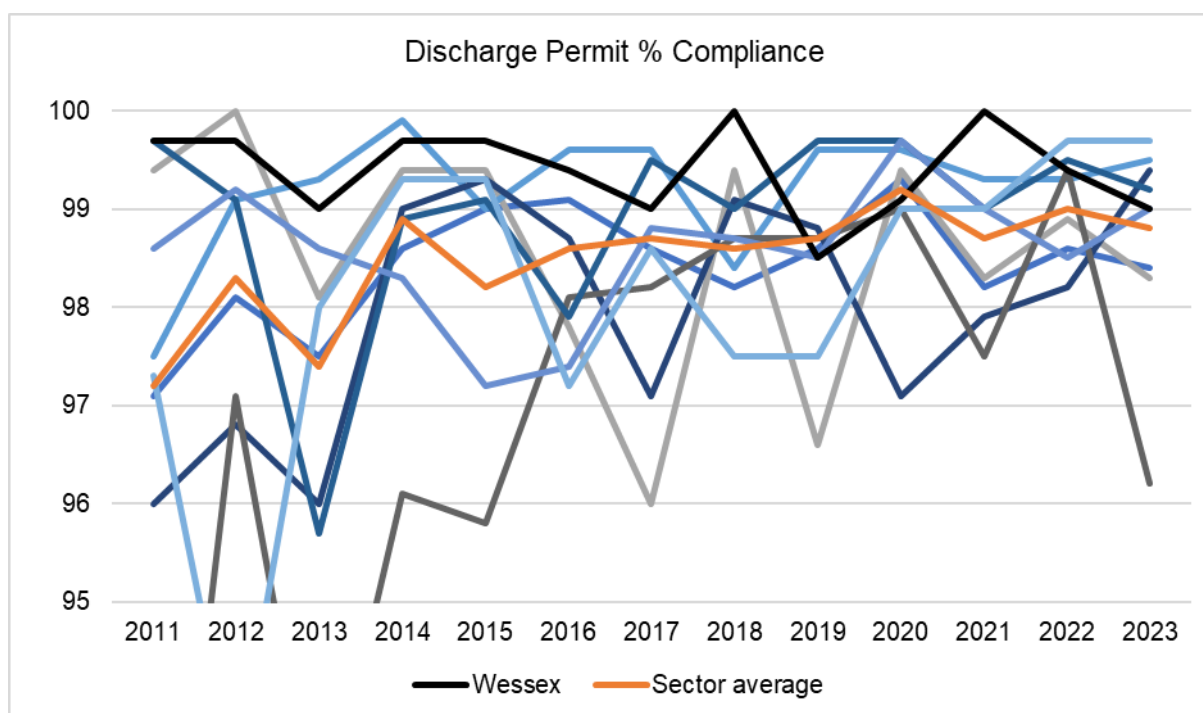
Figure 10.2 - Sector comparison of discharge permit compliance



The sector average for 2023 is somewhat skewed downwards through South West Water having a performance of 96.2%. Excluding them, the average otherwise is 99.1%.

In the following chart we provide individual company performances. The volatility of each company’s performance should be noted. Since 2011, no company other than Wessex Water (in 2021 and 2018) and Northumbrian Water (in 2012) has achieved 100% discharge permit compliance. We recognise and support Ofwat’s desire for a 100% target, but we struggle to reconcile Ofwat setting a target of 100% based on this historically variable performance.

Figure 10.3 - Company comparison of discharge permit compliance



We estimate the cost to us to guarantee 100% discharge permit compliance under all circumstances to be in the order of £250m/yr – by providing improved treatment resilience and asset redundancy, alongside more operational and maintenance staff – this is not cost-beneficial to customers.

10.4. Why the change is in customers' interests

Whilst we fully support a target of 100% for discharge permit compliance, the setting of this PCL at 100% with no deadband is not in customers' interests.

On the assumption of a 100% PCL with no deadband and based on our average performance from AMP6 & AMP7 to date (2016-2023), we would expect an annual penalty of £1.65m at a 100% PCL.

The cost to guarantee 100% discharge permit compliance far exceeds the financial penalty from this PC and is not cost-beneficial, so this would result in immediate penalties which would likely erode customer confidence in the performance commitment process.

11. Bathing water quality

11.1. Summary

Since our original Business Plan submission, three inland bathing waters have been newly designated within the Wessex Water region. Within our region, as of May 2024, we have 47 coastal bathing waters and 3 inland bathing waters (plus Henleaze Lake, unaffected by our assets).

The first year of sampling for these newly designated sites is still ongoing. However, based on samples to date we expect all three to be classified as Poor for the 2024 Bathing Water season. This is typical for newly designated bathing waters and not necessarily related to water company action or inaction. New investigations have been added to the PR24 WINEP to gain a better understanding on source apportionment to inform improvement scheme, to ensure investment is based on sound science. Nevertheless, as a low/no regrets proposal we have added some new improvements to our plan at some storm overflows and one continuous discharge. These, however, will only be completed partway through AMP8 at the earliest, as they had not previously been considered for AMP8 delivery and thus have only had initial feasibility work undertaken. Even on completion of these improvements we do not believe they will have a material impact on bathing water quality in the absence of other sectors making improvements, as described in the following sub-sections and as per our original commentary for this PC (WSX47).

Table 11.1 – Summary of changes requested

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.15	Original Business Plan submission	85.7%	85.7%	85.7%	85.7%	85.7%
	Draft Determination profile	87.9%	87.9%	87.9%	87.9%	87.9%
	Our requested revised profile	80.6%	80.6%	80.6%	80.6%	80.6%

11.2. Change requested

The PCL should be updated to reflect the addition of the three newly designated bathing waters since our Business Plan submission.

Furthermore, with the inclusion of 2023 sample data we request that Ofwat re-visit their forecasts for those where they have proposed a different forecast classification to Wessex Water's own forecast.

We request that Ofwat sets our target for this performance commitment at the stretching but achievable values we proposed in our business plan when revised to account for the addition of the three newly designated bathing waters.

11.3. Rationale

11.3.1. Newly Designated Bathing Waters

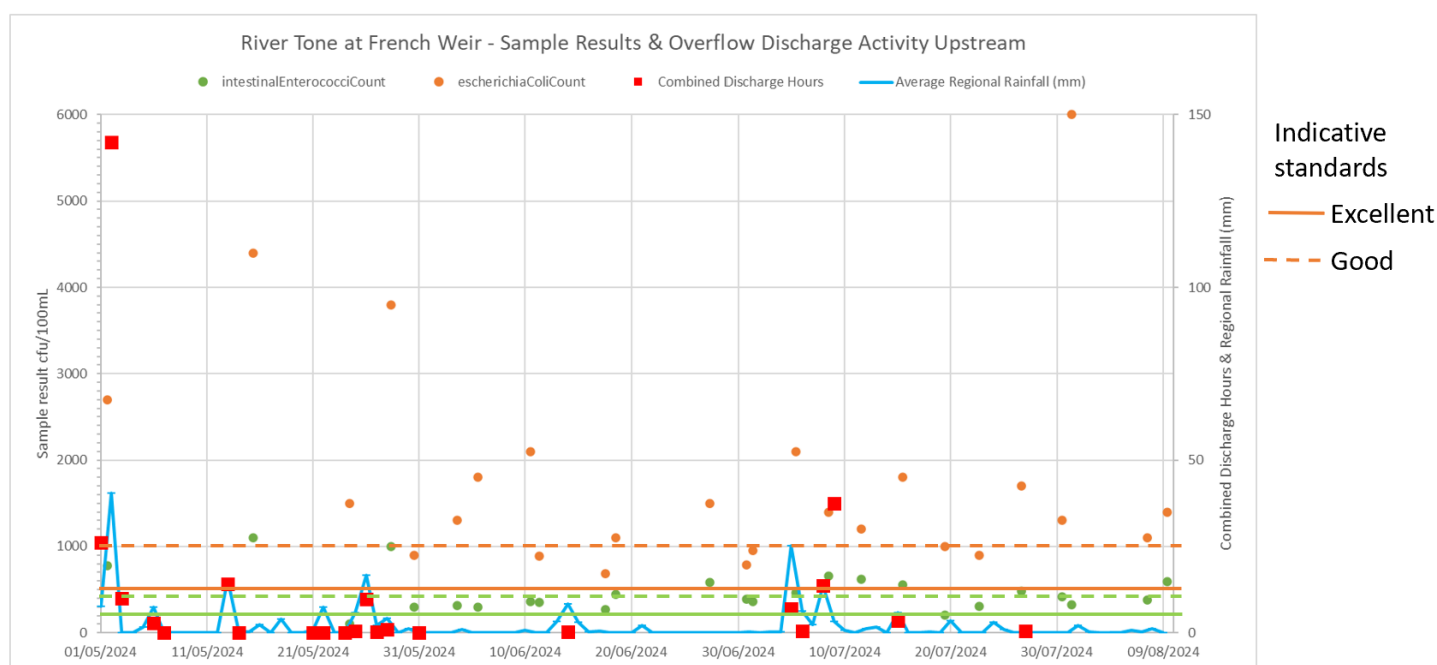
In May 2024 Defra announced the outcome of its consultation on proposals to designate 27 new sites as bathing waters under the Bathing Water Regulations 2013 (S.I. 2013/1675). In the Wessex Water region, three new bathing waters were designated on the River Avon at Fordingbridge, Hampshire, the River Frome at Farleigh Hungerford, Somerset and on the River Tone at French Weir Park, Somerset. Defra acknowledged our response to the consultation:

“Wessex Water broadly supported the applications for the River Avon at Fordingbridge, the River Frome at Farleigh Hungerford and the River Tone in French Weir Park, which are all within the region served by Wessex Water. Wessex Water’s response confirmed it has already been working with stakeholders at each site to improve public understanding of water quality”.

Designation means that these bathing waters will be subject to Environment Agency monitoring during the 2024 bathing season from 15th May to 30th September to determine a classification ranging from Poor to Excellent. More details of these newly designated sites can be found in WSX-C09 – Enhancement costs - wastewater treatment.

The below chart for River Tone at French Weir shows the EA formal water quality samples, along with upstream storm overflow discharges (within 15km upstream), since the start of the 2024 bathing water season. This shows the bathing water exceeding the Excellent and Good (as well as Sufficient) classification limits even on dry days, i.e. without any impact from the operation of storm overflows. Similar data for the other two bathing water locations reiterates our assertion of a multitude of contributory factors to bathing water quality, including many beyond the control of our assets/activities.

Figure 11.2 - Bathing water samples at newly designated Bathing Water site on the River Tone at French Weir



11.3.2. Performance Forecasting

In forecasting classifications for bathing waters, we have assessed past classifications as well as any improvement we have that could have contribute to class changes.

In their draft determination, Ofwat undertook a similar approach based on a number of rules, as to whether to accept or challenge our recommendation.

- If a consistent deterioration (i.e. 2 or more recent) AND investigation - accept
- Where inconsistent past performance, then push higher
- Where investment actions are complete pre 2029, then push higher
- Note down date for improvement activities to allow tracking into PR29.

We accept Ofwat’s rationale and note they suggested changes to our proposed classifications for only three bathing water sites, as tabled below. All three of these bathing waters, however, have had the same classification for 2023 as of 2022 (Sufficient, Good and Poor respectively), supporting our forecasts as appropriate.

Table 11.3 - Bathing water classifications with difference between Wessex Water and Ofwat forecasts

Bathing Water	Wessex Water’s Business Plan forecast	Ofwat’s Draft Determination forecast	Ofwat comment
Bowleaze Cove	Sufficient	Good	Historically good is level delivered so should hold forecast at this level
Poole Harbour Rockley Sands	Good	Excellent	Adjust to excellent - deterioration not justified.
Weston-super-Mare Sand Bay	Poor	Sufficient	Adjust to sufficient - only 1 year of poor

We note that three other bathing water sites have had a lower classification in 2023 than our PC forecast, but we are not changing our forecasts for these. No sites had a better classification than our forecast.

- Berrow North of Unity Farm – 2023 Good; PC Excellent
- Minehead Terminus – 2023 Sufficient; PC Good
- Weston-super-Mare Uphill Slipway – 2023 Poor; PC Sufficient

11.3.3. Revised P10 / P90 profiles

With the addition of the new bathing waters, we provide an updated view of our P10 and P90 values.

Table 1.4 - Bathing water quality - revised P10 and P90s

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.15	Our requested revised PC profile	80.6%	80.6%	80.6%	80.6%	80.6%
	Revised P90	90.6%	90.6%	90.6%	90.6%	90.6%
	Revised P10	73.8%	73.8%	73.8%	73.8%	73.8%

The P10 assumes all three new bathing waters will stay at Poor status for the duration. The P90 assumes the three sites are classified as Sufficient, although we note that with only less than a year of sample data there is no evidence to date to support anything higher than Poor for these sites and so this is a very optimistic P90.

11.4. Why the change is in customers’ interests

This PC should be updated to reflect the newly designated bathing waters within Wessex Water’s region.

The 2021 study of Wessex Water customers identified “Protecting and improving river and beach water quality” as a priority for customers. As part of the willingness to pay survey, customers were asked if they would be happy for bills to increase to improve river and coastal water quality. It was found that approximately 52% of customers surveyed stated they would be willing to accept an increase in their bill to see an improvement above and beyond the status quo, compared to approximately 41% of customers willing to accept the status quo.

Our customers are, however, supportive of the polluter pays principle adopted by the Environment Agency. Whilst we have proposed low/no regrets improvement solutions for these locations, there is a lack of data linking the current poor bathing water quality to Wessex Water assets/activities. Any more substantial investment should be reliant on sound science, and we do not want to prejudice the outcome of the PR24 WINEP investigations for these locations.

12. River water quality

12.1. Summary

We support Ofwat's draft determination proposal to make the river water quality performance commitment reputational only.

We have updated our PCL profile to reflect the latest PR24 WINEP and our corresponding delivery profiles. For more details refer to WSX-C09 section 2. With most schemes coming online at the end of 2029-30 and this PC being calendar year, the phosphorus removal benefit will only be realised in the subsequent year (i.e. 2030/31 for 2030).

Table 2.1 – Summary of changes requested

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.16	Business Plan submission*	0.5760	0.5782	0.5822	0.6142	0.6371
	Draft Determination profile	0.5760	0.5782	0.5822	0.6142	0.6371
	Our requested revised profile	0.5635	0.5635	0.5703	0.6007	0.6144

*Our original submission incorrectly included phosphorus removal from some estuarine discharges sites, which were subsequently excluded – and as stated above – in response to an Ofwat query.

12.2. Change requested

We request that the performance commitment profile is updated to reflect the latest PR24 WINEP and our corresponding delivery profiles.

12.3. Rationale

Refer to WSX-C09 section 2 for details on the updated WINEP and our delivery profiling.

The reduction in the first two years of the AMP relates to the removal of stretch targets from the PR24 WINEP, not considered at time of Business Plan submission, but based on the view of the Environment Agency and Ofwat that these were funded through our PR19 Business Plan. This was not the case as we explained in WSX50. The removal of these lines from the PR24 WINEP means that whilst we accept these stretch targets, we do so only on a trial basis – as per our PR19 plan – and we are thus not targeting any further outperformance at these sites beyond our normal operational performance margin to meet their permit limits.

12.4. Why the change is in customers' interests

The PC should align with the latest PR24 WINEP, as agreed with the Environment Agency.

13. Storm overflows

13.1. Summary

We welcome the application of a performance commitment for storm overflows, as this area is in the spotlight of our customers, many campaign groups and under political pressures. We also welcome the alignment of the reporting the total number of discharge counts with the Environment Agency EDM reporting and simply diving that by the number of overflows monitored with event duration monitoring (EDM).

The table below shows the draft determination profile and our original and latest proposal. The draft determination 2025 starting position of 20.0 has only been achieved once in the last 6 years (i.e. in an exceptionally dry year) in the Wessex area. We have not received enhancement funding to deliver to that standard of performance. Indeed, this is why the government has introduced the Storm overflow reduction plan; to increase enhancement investment over the next 25 years in this area.

Table 3.1 – Summary of changes requested

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30	2030/31
OUT1.17	WSX original	23.50	23.50	22.82	22.14	21.13	20.11
	Draft Determination profile	20.00	19.27	18.54	17.81	17.10	n/a
	WSX requested profile	23.50	23.50	22.76	22.00	20.00	19.00

The performance commitment is mostly out of our control, as it is highly dependent on the weather. Over the past 6 years we have only had one year less than 20 with some wet years resulting in a score greater than 30.

The draft determination 2029-30 position of 17.1, was based on our modelling predictions. These models generally replicate rainfall response and they generally did not replicate groundwater induced infiltration or other slow response inflows. We are re-verifying our computer models to better reflect the EDM actual performance data. This now shows that our average predicted storm overflow discharge count is 22. We believe this is closer to the baseline, but the EDM is the actual performance, so we would encourage the median value of 24 to be used. We believe this sets a realistic target of 23.5, once the AMP7 enhancement improvements are taken into account.

We are accepting Ofwat's draft determination challenge to increase performance in this area. We will endeavour to do this from the cost we submitted in our business plan, through more focussed infiltration sealing, network optimisation and other water management techniques over the medium- to long-term.

13.2. Change requested

We believe that the profile proposed above, in Table 13, should be adopted.

13.3. Rationale

In this section, we discuss the storm overflow performance commitment and reiterate our proposed position, whilst also recognising Ofwat's challenge to provide a stretch from base. We provide:

- new evidence of our PC starting position, including 2023 EDM data which gave a score of 32.0.

- our updated dynamic computer hydraulic models now predicting an average discharge count score of 22.0 (not 17.1 as previously predicted)
- additional stretch, recognising Ofwat’s challenge to increase performance in this area to achieve an average discharge count of 20.0 by 2030. We will accept this additional stretch within the costs submitted.

We submitted proposed PR24 storm overflow performance commitment levels (PCLs) for the 2025 to 2030 period based on historical data and the benefits of planned solutions. In the draft determination Ofwat has intervened to:

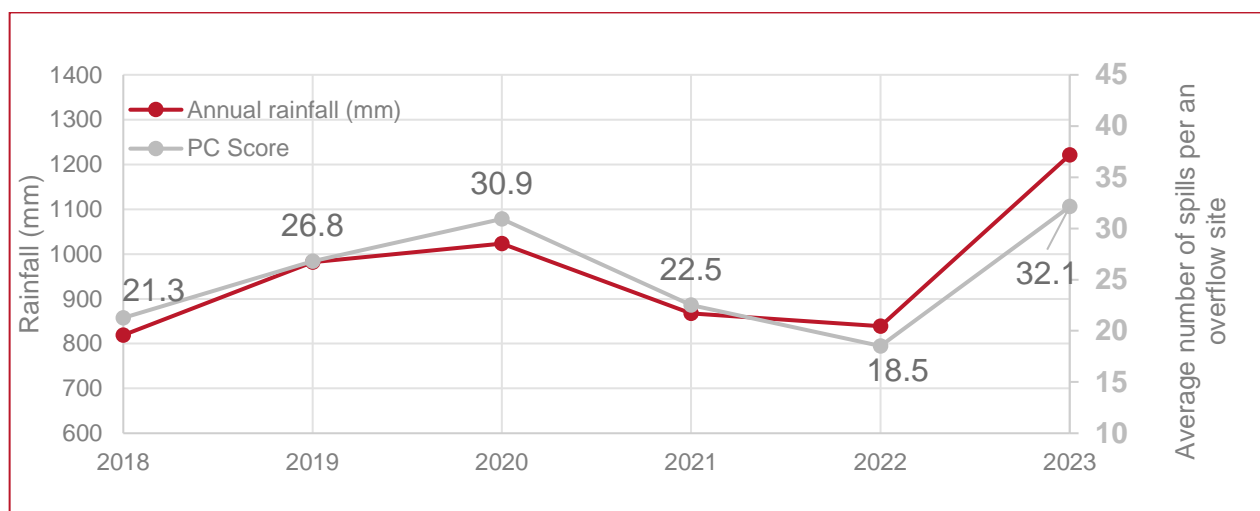
- Reduce the 2025-26 position from 23.5 to 20.0 based on its PR24 methodology and stating the provided evidence indicates we could deliver an average spill level below 20 outside of very wet seasons.
- Reduce the 2029-30 level from 21.1 to 17.1, stating we provided hydraulic modelling information suggesting this value could be achieved.

We discuss and challenge these interventions in the following sub-sections.

2025-26 Performance commitment position

The storm overflow performance commitment is highly dependent on the weather. Over the past 6 years we have only had one year where we observed fewer than 20 discharges per overflow on average, although we have had some wet years resulting in a score greater than 30, as shown in the figure below. The figure includes the data for 2023 which was not available at the original submission last year.

Figure 13.2 - Annual Rainfall (since 2000) and PC score (all overflows)



We submitted PCLs based on our 5-year average (2018 to 2022) actual performance with enhancement adjustments for the expected improvements from the AMP7 enhancement schemes. This included AMP7 enhancement improvements and 100% uptime for full event duration monitor (EDM) coverage of storm overflows. We predicted we will achieve 23.50 average spills by 2025-26. The figure above shows the annual rainfall and our calculated PC score based on the monitored EDM (extrapolated to reflect 100% coverage). This shows that the PC score is proportional to rainfall, with some variation (e.g. due to groundwater inundation – see explanation for this later).

We consider that the EDM data prior to 2018 is not representative or robust enough to use in the analysis as we had less than 25% of our overflows monitored, and where we did have monitors, they were installed as part of a WINEP improvement scheme which would have also improved the storm overflow performance at the overflows where the EDMs were installed (hence not representative of the performance of the unmonitored overflows). The reliability of the data prior to 2019 is also less accurate, as our design standards were less developed as our EDM improvement programme was in its initial stages, being completed in 2020 for these legacy assets.

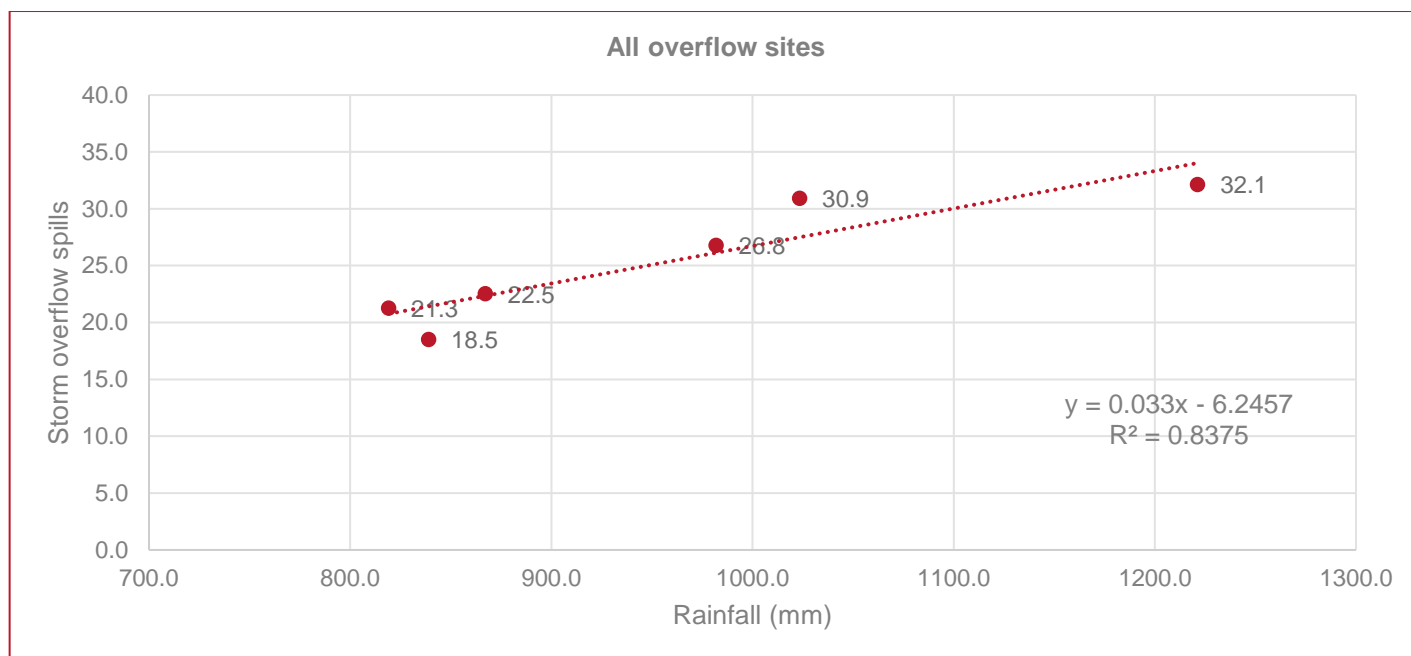
In AMP7 we are investing c£15m at 13 frequently spilling overflows and providing storage at a bathing water site at a cost of c£10m. An average future discharge performance of 17 times per year has been assumed for these improvements, as our AMP7 performance target was 15 to 20 discharges per year. This will lower the future average discharge count by 660, and the PC score by 0.5. In AMP7 we also improved an overflow with a Habitats Directive in 2020-21, so this improvement is already shown in the EDM data, and the site is performing well.

We note that Ofwat refers to the year 2021 as being typical. Our calculation for that year is 22.5, as shown in the figure above. We calculate the P50 is nearer 24.6 (see Table 7 below), and 2021 was a drier than a typical year.

2023 was a wet year and resulted in a PC score of 32.1. If we used 2023 in our average calculations, the starting position of our proposed PC would have been higher than 23.5.

We have used regression analysis to test the strength of the relationship between rainfall and the PC score using six years of historical rainfall and average spill data. The analysis has been applied to the average from all overflow sites, an average number of spills from overflows impacted by excess surface water and overflows we know to be impacted by groundwater infiltration. The outputs are shown in the figure below.

Figure 13.3 – Annual rainfall and average spill level linear relationships



The R^2 value for the relationship shows over 80% of the variability of the number of overflow spills is explained by rainfall.

We have used the regression equations to model the average number of spills for rainfall percentiles of 10, 50 and 90 and the mean average spills are significantly higher for the groundwater sites as shown in the table below. The groundwater sites make up 8% of the total number of overflows and surface water 83% (the remainder are combination sites or unclassified). However, the average number of spills from the groundwater sites are more than three times the average spills at surface water sites at each percentile.

Table 13.44 – Spill level variations

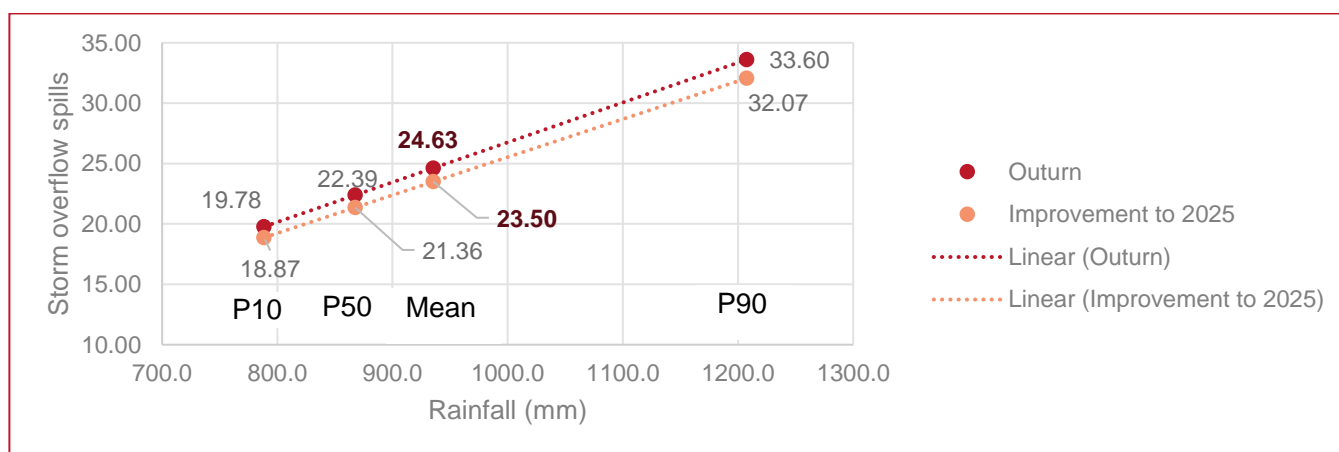
Rainfall %ile	Rainfall (mm)	All sites PC score	Groundwater sites PC score
P90	1207.6	33.60	89.11
P50	867.6	22.39	53.59
P10	788.5	19.78	45.32
Mean	935.5	24.63	60.68

The figure below shows that Ofwat’s proposed average spill level of 20 for all sites is only achieved at rainfall below the P10. When assessing surface water-only sites, an average of below 20 is achievable at the P50 and mean average rainfall (which matches the results of the hydraulic modelling Ofwat has used). The groundwater site spills are 75% higher than the Ofwat baseline PCL at the P10.

As the relation between the two factors is so strong we consider it is unrealistic to achieve a company level PCL of 20, except in very dry years. This should be considered by Ofwat when proposing a target at final determination.

Our proposed 2025-26 value of 23.5 is below the predicted average level of spills for all sites using the mean average rainfall and the regression based on six years’ data. It represents a 4.6% improvement by 2025 compared to the recent actual outturn values, as represented in the figure below. The “improvement to 2025 line” includes a reduction of c4.6% to bring the 6-year P50 average down to our proposed starting level. This difference is greater than the AMP7 enhancement benefits of 0.5 because the 6-year average rainfall is used in the linear baseline.

Figure 13.51 - Improvement of the baseline PCL compared to the recent actual levels



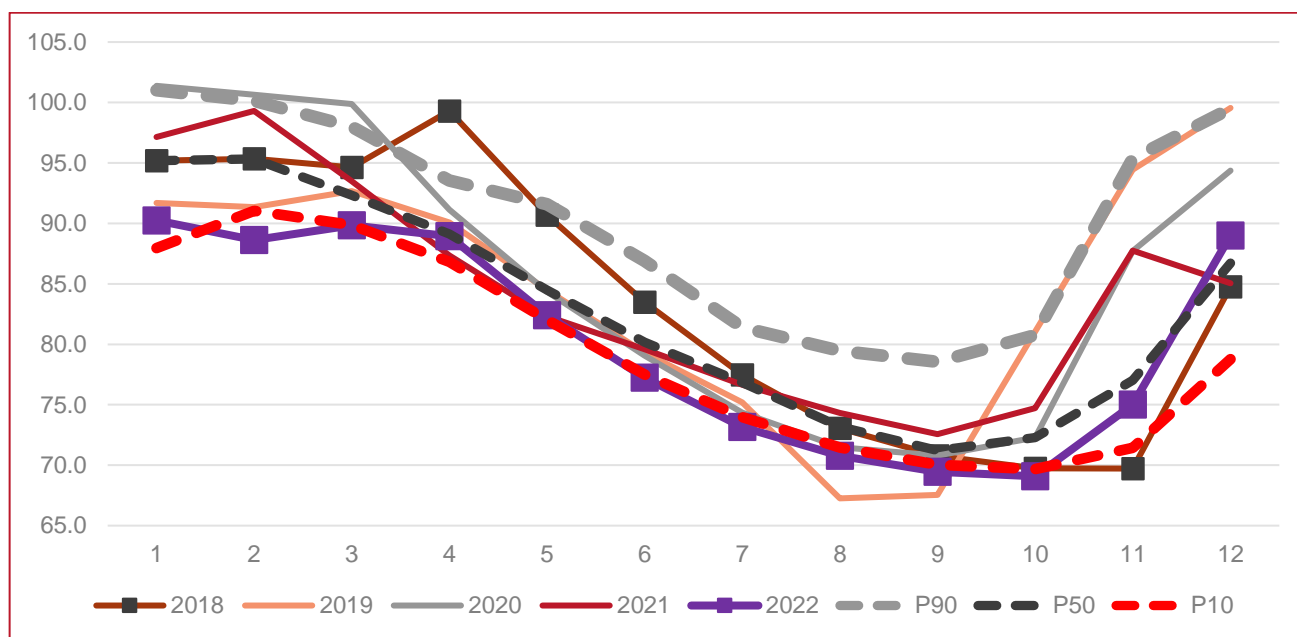
The PCL is, to a large extent, outside of our control as the number of spills correlates strongly with rainfall. The 20-spill average is likely to be met only if rainfall is no greater than just above the P10 rainfall. Such a level of rainfall was only experienced in 3 years of the recent 23 years of rainfall data used in our analysis. We have only a 13% chance of reaching this level, and we anticipate the likelihood will reduce further as climate change leads to wetter conditions on average.

This means the impact of interventions is disproportionately low compared to the impact of rainfall on spills. It is therefore possible for us to reduce the average spills at a given rainfall percentile but not to achieve an average as low as 20 and to reduce further in each year of the AMP, without unfeasibly large and undeliverable investment programmes in the short term.

The 23.5 average is a realistic number although still dependent on in-year rainfall. The level of 18.5 achieved in 2022 was during an exceptionally dry year. Groundwater level analysis shows levels in 2022 were close to the P10 groundwater level. A 20-spill performance level or lower can only be achieved in weather conditions that are close to those experienced in the very dry year of 2022.

The figure below shows that the groundwater table in 2022 was exceptionally low (similar to the P10), so is not representative of normal years.

Figure 13.6 - Annual monthly average groundwater levels at Woodsyate in the Wessex region



We have not been funded to deliver any further improvements, although note that some WRC improvements may slightly improve some storm overflow performance in the short term, until population growth in the catchment occurs, when this temporary 'headroom' will be eroded.

In summary, our 2025-26 starting position of 23.5 is based on our historical average (2018 to 2022) and the funded AMP7 delivery. We have calculated a value of 20.0 represents the P10 value, so propose that this is not appropriate to use. There is no time to make further physical improvements ahead of 2025-26. However, we recognise Ofwat's ambition of 20.0 and so we have proposed a stretch by 2030 from base as described in the following sub-section, on top of the increased AMP8 enhancement programme.

Stretch from base

We already maintain our assets and have had a proactive inspection programme downstream of our storm overflows since PR19. Since then, we have also introduced our StormHarvester AI detection system to automatically detect blockages and other failures that can affect the performance of our storm overflow. The number of incidents affecting storm overflow are not significant compared to the number caused by rainfall, and so historical averages are still valid to use in the above analysis.

We are accepting Ofwat's challenge to increase performance in this area and will endeavour to challenge ourselves and achieved additional stretch from the cost we submitted in our business plan.

We have therefore lowered our 2029-30 position. This stretch of increasing performance from base is to reach an end of AMP8 position of 20.0. This is in line with Ofwat's ambition.

2030 and 2031 Performance commitment positions

Our stretch position of 20.0 in 2029-30 (see above) is further reduced in the first year of AMP9 (2030-31) due to the enhancement schemes delivered in the final year of AMP8 (2029-30). This lowers the 2030-31 position to 19.0. This is lower than our October 2023 submission due to the stretch and the larger number of improvement schemes delivered due to the addition of the inland bathing water and Poole Harbour shellfish water improvements.

This is value of 19.0 higher than Ofwat's target of 17.1 which we consider unrealistic, as detailed in our calculations above. As mentioned previously, we have updated a large proportion of our computer modelling stock over the past year. Our latest model predictions overflow discharge count is 22.0, and no longer 17.1 as previously reported under a query. If our models were updated to replicate groundwater inundation, then this number would be far higher than 22.

13.4. Other relevant evidence

13.4.1. Evidence provided previously

Document 'WSX16 - Waste water networks plus strategy and investment' section 5.1 describes the October 2023 PR24 Storm overflow submission.

Document 'WSX17 - Annexes - Waste Water Networks Plus strategy and investment' contains further details including the list of overflows, and many reports detailing the optioneering undertaken.

Document 'WSX26 - Price control deliverables' Section 3 PCDWW5 - Spill reductions, contains details of our proposed storm overflow delivery profile, which clarifies we proposed no storm overflow outputs before 2027.

Document 'WSX47 - ' Section 1.17 details the storm overflow performance commitment, including the calculation of the EDM data over the period 2018 to 2022 resulting in a storm overflow average discharge count of 24.0.

13.4.2. Evidence provided elsewhere in our draft determination response

Document 'WSX-C11 - Enhancement costs - storm overflows' contains more details of further evidence, including:

- the new evidence of our starting position, including 2023 EDM data which gave a score of 32.0.
- our updated dynamic computer hydraulic models now predicting an average discharge count score of 22.0 (no longer 17.1)
- a larger Storm overflow improvement programme
- a stretch from base, accepting Ofwat's challenge to increase performance in this area.

13.5. Why the change is in customers' interests

Our proposed profile is in the best interest of customers because this profile which is stretching but also realistic ensures the business carries the appropriate level of risk. There would be key risks if the baseline was not adjusted:

- Storm overflow improvements take years to implement, so we would be unlikely to meet the DD PCL in most years. If we invested AMP8 and AMP9 levels of investment, we would still be unlikely to achieve the Ofwat target in a typical year, and yet we would need to raise bills significantly, which is not in our customers' interest.

- If the starting baseline is unrealistically low (e.g. 20) it is unlikely we would meet the agreed performance commitment levels in the early years of AMP8, unless there was exceptionally dry weather.
- With the proposed revised profile, customers will still benefit from a stretching 2029-30 target, but we will be able to work most effectively and efficiently towards targets which are achievable.

14. External sewer flooding

14.1. Summary

In the draft determination, Ofwat has accepted our 2029-30 target of 13.07, but starting from the PR19 final determination target 2024-25 position of 15.68. In our PR24 business plan, the starting position was 16.93 (2024-25 performance) due to not recovering to pre-COVID performance levels.

The significant increase in the proposed ODI underperformance incentive rate of 276% (PR19 to PR24DD) from -£0.800m to -£3.008m, and not adopting our proposed profile, would likely lead to a penalty of £3m in the first year of AMP8, with a corresponding total penalty of £7.1m by the end of the AMP. We do not believe this reflects the objectives of aligning company and customer expectations through the use of ODI payments.

Table 14.1 – Draft Determination and Wessex proposed target profiles.

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.5	Draft Determination profile	15.16	14.64	14.12	13.60	13.07
	Our requested profile	16.14 (2,107)	15.35 (2,013)	14.58 (1,921)	13.81 (1,828)	13.07 (1,737)

Units: Incidents per 10,000 properties (total number of incidents)

14.2. Change requested

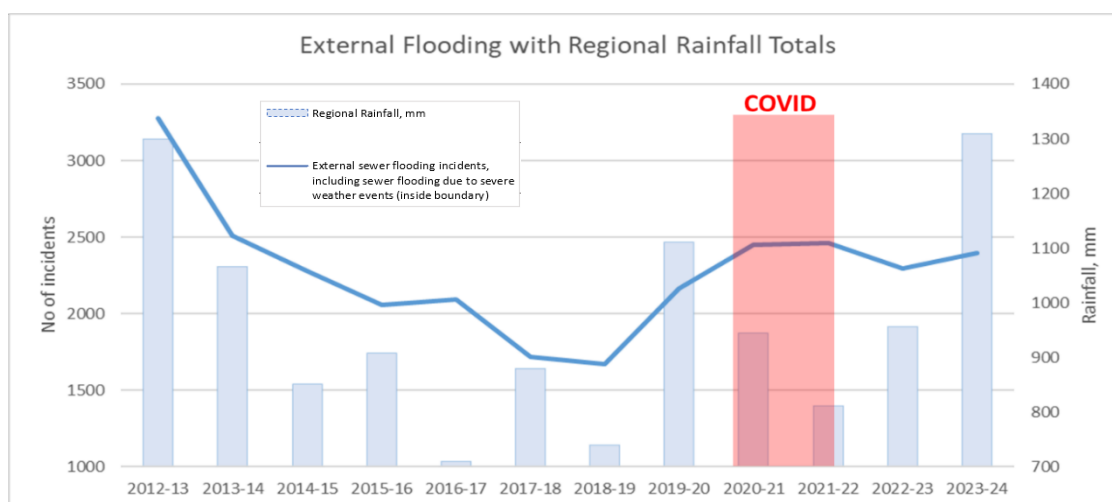
We request that Ofwat sets our target profile for this performance commitment at the stretching but achievable values we originally proposed in our business plan, as outlined in Table 14.1.

14.3. Rationale

14.3.1. COVID impact

As discussed in our original business plan submission, WSX47 – Outcomes tables commentary – 1.5 External sewer flooding (PR24_ESF_WSX) – Pg.31, there was an uplift in sewerage incidents during COVID which have not returned to pre-COVID levels following historically high rainfall as shown in the chart below.

Figure 14.2 – External flooding incidents with regional rainfall totals with COVID period shown



Historically, we have prioritised minimising internal sewer flooding, although our external flooding performance has been improving overall and approaching upper quartile. With the number of internal sewer flooding incidents being so low, for AMP8 we are proposing to reduce external sewer flooding incidents by a greater percentage than internals in order to return to pre-COVID levels of performance.

14.3.2. S105A sewerage

A likely reason for an increase of reported external flooding (inside property boundary) incidents could be related to more people having to work from home during COVID with more incidents being recorded on S105A sewers.

S105A sewerage are those sewer lengths when sewerage undertakers were required to adopt privately owned sewers and lateral drains in England and Wales in October 2011. By their nature, these sewers are more likely to be nearer properties.

Table 14.3 below does reflect a modest increase.

Table 14.3 – External flooding incidents spilt by sewerage type.

Data table line	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
External flooding incidents	1,718	1,674	2,166	2,449	2,460	2,295	2,399
Incidents on public sewerage	565	531	736	745	834	716	758
Incidents on S105A sewerage	1,153	1,143	1,430	1,704	1,626	1,579	1,641
% S105A	67%	68%	66%	70%	66%	69%	68%

14.3.3. Starting point – 2024-25 position

Our forecast end point for AMP7 is based on the five-year average (2018-19 to 2022-23) which equals 16.93 (2,208 incidents). This ignores 2023-24 performance of 18.52 (2,399) as this was an extreme year and is significantly higher than the PR19 2024-25 target of 15.68 (2,030).

Based on the Ofwat draft determination target profile, Table 14.4 below demonstrates that we would need to reduce incidents by 48% in the first year of AMP8 to avoid an ODI penalty. This is not a realistic target.

Table 14.4 – Draft Determination target profile and associated reduction rates.

Data table line	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Draft Determination (DD) profile	16.93	15.16	14.64	14.12	13.60	13.07
DD target profile in incidents	2,200	1,979	1,920	1,861	1,800	1,737
% reduction (cumulative)		-11%	-14%	-17%	-20%	-23%
% delivery (cumulative)		48%	60%	73%	86%	100%

Our proposed target profile shows a stretching but more realistic trajectory to achieve this same end of AMP target, with an incident reduction of 23% in 2025-26.

Table 14.5 – Wessex Water target profile and associated reduction rates.

Data table line	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Business Plan (BP) profile	16.93	16.14	15.35	14.58	13.81	13.07
BP target profile in incidents	2,200	2,107	2013	1921	1,828	1,737
% reduction (cumulative)		-5%	-10%	-15%	-19%	-23%
% delivery (cumulative)		23%	43%	62%	81%	100%

14.4. Other relevant evidence

14.4.1. Evidence provided previously

WSX47 – Outcomes tables commentary – 1.5 External sewer flooding (PR24_ESF_WSX) – Pg.29 to 41

14.5. Why the change is in customers' interests

Adjusting the baseline to the profile proposed in Table 14.1 is in the best interest of customers because a profile which is stretching but also realistic ensures the business carries the appropriate level of risk. There would be key risks if the baseline was not adjusted:

- If our external flooding performance commitment baseline is unrealistically low, it will not be possible for us to meet the agreed performance commitment levels in the early years of AMP8.
- If we are unable to meet our targets, we would incur financial penalties which would result in diversion of resources away from planned investment to manage external flooding incidents. We believe that the investment should be directed at improving the wastewater service for the customer and the environment. Table 14.6 shows the penalty implications if the baseline is not adjusted.

Table 14.6 – Indicative financial penalty if proposed DD baseline is retained in AMP8.

	2025-26	2026-27	2027-28	2028-29	2029-30	Total
DD proposed target	15.16	14.64	14.12	13.60	13.07	
Our requested revised profile	16.14	15.35	14.58	13.81	13.07	
Difference from Target	0.98	0.71	0.46	0.21	0.00	
Possible ODI impact, (£m)	-2.95	-2.14	-1.38	-0.63	0.00	-7.10

- If we are unable to meet our performance commitments early in the AMP it will erode customer confidence in the performance commitment process. Customers play a part in our external flooding reporting and we encourage them to report incidents so that we can triage issues and fix them. If we lose customer trust they may be less likely to report incidents to us for investigation.

- With the proposed revised external flooding target profile, the customer will still benefit from a stretching 2029-2030 target, but we will be able to work most effectively and efficiently towards targets which are deliverable.

15. Biodiversity

15.1. Summary

Wessex Water has a long history of acting to conserve and enhance the valuable habitats in its region. In 1998, we became the first water company to publish a Biodiversity Action Plan targeting efforts to conserve and enhance wildlife across our region. We welcome the incentivisation of conservation management across the water industry; however we have some significant concerns with the biodiversity performance commitment.

We disagree with the setting of a common performance commitment level, because capacity to deliver biodiversity unit uplift in a four-year period and over the long term will be company specific owing to the following variables:

- Presence of, or ecological appropriateness to create, ‘quick win’ habitats (i.e., habitats which have short time to target condition) on the company landholding.
- Size of company landholding, including in proportion to the performance commitment denominator (company’s area).
- The nature of the company landholding, including potential biological quality, proportion of operational structures and processes on the landholding and availability of large, continuous areas of land for efficient conservation management delivery.
- Other pressures/requirements of land, for example delivery of Statutory BNG associated with asset improvement schemes, third party interests in the land and operational restrictions on the land.
- The existing biological quality of the nominated land and the company approach to the performance commitment.

Instead of a common performance commitment, based on the following we propose a company specific performance commitment level:

- Review of time to target conditions as prescribed by the Statutory Metric.
- Inherent limitations to biodiversity unit uplift based on the existing high biological quality of our proposed nominated land.
- Making room for sound ecological decisions on habitat intervention, including management for specific species or species assemblages, maintenance of heterogeneity of habitat and landscape-scale management to benefit off-site conservation priorities; none of which necessarily effect an increase in biodiversity unit value and some of which may even bring about a net decrease.
- Our experience with detectability of change through standardised condition assessments and a realistic assessment of the possible change in biodiversity units in the context of natural/biological limitations to potential increase.
- Recognition of other pressures/demands of our nominated land such as access and recreation, third party interests or other environmental requirements.

We disagree with the Draft Determination performance commitment profile of reporting some performance in 2028-29 for the following reasons:

- The need to channel resource to existing (AMP7) conservation delivery to a high standard.
- The need to install biodiversity accounting software prior to baseline surveys.
- Some guidance is still pending for v2 of UKHab, which underpins the baseline surveys for the Statutory Metric.
- A rolling survey programme does not allow for an holistic assessment of the baseline of the entire nominated land, to enable prioritisation of/cost benefit assessment of management across the entire nominated area.
- Previous assurances from Ofwat that commencing baseline surveys in 2025 would be in line with the PC definition.

- July 2024 has been the first explicit indication that baseline surveys must be completed prior to AMP8. July is too late/too little notice to complete baseline surveys of most habitats in 2024.

Instead of the Draft Determination proposed profile of reporting some performance in 2028-29, we propose that all performance should be reported in 2029-30, to enable baseline surveys to be completed in 2025-26 as is consistent with the performance commitment definition.

Having reviewed our landholding's capacity to deliver the industry median of 0.73 biodiversity units per 100km² of company's area, we disagree with the performance commitment definition that '*Improvements in biodiversity that arise as a result of conditions or obligations relating to other forms of regulation, including planning processes, will be excluded from this performance commitment*' because:

- There will be additional costs to the customer/reduced cost efficiency of other workstreams that require biodiversity uplift (i.e., Statutory BNG) by prevention of the mitigation hierarchy if land which could in theory deliver biodiversity unit uplift is already 'locked up' for this performance commitment.

We request that Ofwat reviews this aspect of the definition, in the context of delivery of Statutory BNG for planning achieving the same end as an increase in biodiversity units under this performance commitment (i.e., significant biodiversity and conservation gains).

If at the Final Determination the performance commitment level, profile and definition remain unchanged, we have serious concerns around perverse incentives, disincentivising expenditure on management of sound ecological basis and disincentivising expenditure on management for specific species or assemblages of conservation concern.

- Perverse incentives will be brought about by the short (four year) reporting window in the context of time to target condition: 'quick wins' i.e., habitats of low conservation value and with poor long term potential biodiversity unit uplift, will be incentivised.
- Prioritisation of hedgerow habitats over area habitats will be incentivised, rather than promoting a 'balanced investment' between area and linear habitats.
- Conservation management for specific species or assemblages of conservation concern that does not necessarily bring about uplift in biodiversity unit value will be disincentivised.
- Holistic, landscape scale management where changes to the nominated land which might result in no uplift or even a net loss in biodiversity unit value, but where tangible benefits are provided at a local or landscape scale, will be disincentivised or even penalised.
- There will be additional costs to the customer/reduced cost efficiency of other workstreams that require biodiversity uplift (i.e., Statutory BNG) by prevention of the mitigation hierarchy if land which could in theory deliver biodiversity unit uplift for statutory BNG is already 'locked up' for this performance commitment.

We summarise our full rationale and justification here; but specific new evidence presented, and hence that which we believe Ofwat may not have considered yet, is:

- Analysis of time to target condition as prescribed by the Metric.
- Analysis of company land holding size, including in proportion to the denominator for the performance commitment.
- The nature of Wessex Water's landholding in terms of size of our waste landholding in proportion to company area, average area per site of waste landholding, and proportion of hardstanding and structures on our waste landholding. We also present inherent limitations in potential biological quality of our waste landholding.
- Consideration as to the impact of exclusion of biodiversity units created through other workstreams by the performance commitment definition.
- Our rationale and justification for our proposed performance commitment profile.
- Further elaboration on the need for the performance commitment level to make room for interventions based on sound ecological principles.

- Further elaboration on our concerns over detectability of change using standard condition assessments and over the timescales concerned.

Table 15.1 – Summary of changes requested.

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.6	Draft Determination profile	0.00	0.00	0.00	0.08	0.73
	Our requested profile	0.00	0.00	0.00	0.00	0.17

15.2. Change requested

We request that Ofwat reverts to its original proposal¹⁴ to set a company specific performance level for biodiversity, setting our target for this performance commitment at the stretching but realistic value of 0.17 biodiversity units per 100km² of land in the company's area. The achievement of the additional performance from the original value of 0.05 proposed in our business plan is outlined in this document.

We also request that Ofwat accepts our proposed delivery profile of reporting all of this performance in 2029-30, as opposed to a proportion in 2828/29.

We request that Ofwat reviews the exclusion of biodiversity units created through obligations relating to planning processes (i.e., Statutory BNG) from this performance commitment.

We also note, as per our inbound query OFW-IBQ-WSX-014, that by comparison between OUT5.25 and CWW8.1, we believe that approximately half of the Water and Sewerage Companies' tables refer to CWW8.1 (i.e. sewer catchments) to populate OUT5.25 (and hence OUT4.118). This will affect the denominator used to calculate the performance commitment across the industry. Those referring to the company's instrument of appointment to populate OUT5.25 will have a larger denominator which will reduce reportable performance relative to those referring to CWW8.1. Ofwat has clarified¹⁵ that as per the performance commitment definition, the 'company's area' means "the Area" as defined in Condition A of the company's instrument of appointment and that the supply area and sewerage services area is combined to calculate total company area; however the data used to calculate the industry median will not have been updated since this clarification. The impact on the 2028-29 and 2029-30 industry median may or may not be material, and here we are requesting that Ofwat sets company specific performance commitment level; however, if Ofwat does not accept our representation we request that the 2028-29 and 2029-30 industry medians are recalculated for the Final Determination.

15.2.1. Issues with a common performance commitment level

We were supportive of Ofwat's original proposal in its PR24 Final Methodology for the performance commitment level to be company specific for biodiversity: we do not deem a common performance commitment level appropriate for biodiversity and we request that Ofwat reverts to its original proposal to set company specific performance commitment levels for biodiversity.

Whilst Wessex Water does have highly successful catchment biodiversity initiatives, we consider it inappropriate to deliver this performance commitment on third party (i.e., non-company) land. Guaranteeing management in

¹⁴ [PR24 final methodology Appendix 9 Setting Expenditure Allowances.pdf \(ofwat.gov.uk\)](#)

¹⁵ [PR24-DD-PCM Biodiversity-V1.1.xlsx \(live.com\)](#)

perpetuity exclusively for the purposes of the biodiversity performance commitment (i.e., not to fulfil other obligations) on non-company land will be challenging in the context of the emerging value of land for biodiversity credits, and indeed access onto third party land to enable four-yearly surveys will be difficult to guarantee in perpetuity. It is hence only feasible to deliver this performance commitment on the company property portfolio. In this context, individual companies' capacity to deliver net gain in biodiversity units will be dependent on the size and the nature of their landholdings. The size of company landholdings in proportion to the size of the land in the company's area (i.e., the denominator for the PC) will also vary considerably between companies (for example, depending on whether water supply is predominantly derived from surface or ground water sources, or depending on whether the company is a water only or water and sewerage company). Capacity to deliver net gain in biodiversity units per 100km² of land in the company's area is thus highly company specific, and hence a common performance commitment level is not appropriate. We discuss our reasoning for this in the sections which follow.

Notwithstanding the above, we also do not deem the industry median an appropriate method to set a common performance commitment level. Ofwat states¹⁶ that there is limited historical data, with some companies still completing site surveys and developing plans. If industry performance has been predicted from limited historical data and incomplete baseline surveys, the median is likely to be a poor prediction of the actual performance possible across the industry.

15.2.2. Time to Target Condition and size of Wessex Water's landholding

Creating biodiversity units requires significant areas of land and takes time. Furthermore, initial habitat interventions can result in temporary net reduction in biodiversity unit value, where, for its first few (or possibly many) years the newly created habitat is of poorer condition than the habitat it replaced. Table 2 below draws on some examples of common habitat creation or enhancement options, setting out the net biodiversity unit gain (note the 'original' value of the starting habitat needs to be netted off the biodiversity unit value of the created or enhanced habitat) per hectare for area habitats or per kilometre for linear habitats. Time to target condition for the given creation or enhancement is shown, and the final column indicates how many hectares or kilometres would be required to deliver a net increase of 0.73 biodiversity units per 100 km² of Wessex Water's company area.

As Table 15.2 illustrates, large areas of land are required for Wessex Water to achieve 0.73 biodiversity units under the performance commitment, and the majority of these typical examples have a time to target condition (i.e. the earliest that you might expect the Metric condition assessments to 'register' an increase in condition) which far exceeds the four-yearly reporting cycle imposed by the performance commitment. Of the two options below which have target condition times of less than 4 years, one option – creation of mixed scrub from modified grassland – results in a net loss of biodiversity units within the reportable period (note that over time/beyond the four year reporting period this would pivot to a net gain, as the scrub's condition improves) and the second – planting species-rich hedgerows, would require over 32 km of new hedge planting. This is a huge distance of hedgerow planting; similar in distance to driving from our head office in Bath to the site of Glastonbury Festival, or the entire length of the Isle of Wight.

¹⁶ [PR24-draft-determinations-Delivering-outcomes-for-customers-and-the-environment-1.pdf \(ofwat.gov.uk\)](#)

Table 15.2 – Table to show some common habitat creation/enhancement options, their time to target condition, the total net gain per area or linear unit, time to target condition and the number of area or linear units required to deliver 0.73 biodiversity units (i.e. referring to the proposed PCL for biodiversity) per 100 km² of company area for Wessex Water (i.e., referring to Wessex Water's denominator for the PC). Shading in columns 3 and 4 indicates whether the creation/enhancement option is able to deliver net gain in biodiversity units within a four year period: if one or both columns are shaded red for a given option, this is not possible for the given option.

habitat created/enhanced and habitat 'replaced' if creation	Target Condition	Net BU gain per ha or km	Time to target condition (years)	Number of ha or km required to deliver 0.73 BUs per 100 km ² or company area for Wessex Water
Lowland mixed deciduous woodland (creation), planted on modified grassland in good condition	Poor	0	10	No net change in from achieving Poor condition (as value of modified grassland is netted off).
Lowland mixed deciduous woodland (creation), planted on modified grassland in good condition	Moderate	6	30+	21.05 ha
Lowland mixed deciduous woodland (enhancement), starting in poor and enhanced to moderate condition	Poor enhanced to moderate	6	20	21.05 ha
Lowland mixed deciduous woodland (enhancement), starting in moderate and enhanced to good condition	Moderate enhanced to Good	6	30+	21.05 ha
Lowland calcareous grassland (enhancement), poor condition, and enhanced to moderate condition	Poor enhanced to moderate	6	10	21.05 ha
Lowland calcareous grassland (enhancement), moderate condition, and enhanced to good condition	Moderate enhanced to Good	6	10	21.05 ha
Mixed scrub (creation), poor condition, planted on modified grassland in good condition	Poor	-2	1	63.16 ha
Mixed scrub (creation), moderate condition, low strategic significance, planted on modified grassland in good condition	Moderate	2	5	63.16 ha
Species rich native hedgerow (creation)	Poor	4	1	31.58 km
Species rich native hedgerow (creation)	Moderate	8	5	15.79 km

Tables A.1a to A.1d (see Annex 1) use data from the Statutory Biodiversity Metric Calculation Tool¹⁷ to further explore the impact of time to target condition in the context of a four-year reporting window. Table 15.3 below

¹⁷ [The Statutory Biodiversity Metric Calculation Tool - Macro disabled tool 23.07.2024.xlsx \(live.com\)](#)

summarises the information presented in Tables A.1a to A.1d, showing only habitat types where creation or enhancement could theoretically (according to the Statutory Metric) bring about a net change in biodiversity units within a four year period.

Table 15.3– Summary of Tables A.1a to A.1d (see Annex 1) to show only habitat types where creation or enhancement could theoretically (according to the Statutory Metric) bring about a net change in biodiversity units within a four year period. Columns 1 and 2 of this table show the parent table (i.e. A.1a to A.1d) that this information has been summarised from and give a brief description of the parent table. Column 3 shows the target condition (for creation) or proposed enhancement (for enhancement). Column 4 shows the number of habitats where – according to the Metric – the given target condition or enhancement is possible within a four year period and which are relevant to this performance commitment in general or are present (or ecologically appropriate or potentially feasible to create) on Wessex Water’s proposed nominated land. The final column gives the names of the habitats for which the given target condition or enhancement is possible within a four year period. Those shown in red text are those which are not relevant to this performance commitment in general or are not present (or ecologically appropriate or potentially feasible to create) on Wessex Water’s proposed nominated land, i.e., the black text indicates the options available to Wessex Water to achieve biodiversity unit uplift within a four year period.

Parent table		Target condition or enhancement	No. habitats available on WSX proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Table	Description			
Table A.1a	Time to target condition (in years) for creation of area habitats, summarising data from tab G-4 of the Statutory Biodiversity Metric Calculation Tool	Good condition	0	Urban – Allotments; Urban - Bioswale; Intertidal sediment - Littoral coarse sediment; Intertidal sediment - Artificial littoral coarse sediment Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand
		Moderate condition	6	Urban - Allotments; Urban - Bioswale; Intertidal sediment - Littoral coarse sediment; Intertidal sediment - Artificial littoral coarse sediment; Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand; Lakes - Ponds (priority habitat); Lakes - Ponds (non-priority habitat); Lakes - Temporary lakes ponds and pools (H3170); Sparsely vegetated land - Ruderal/Ephemeral; Sparsely vegetated land - Tall forbs; Lakes - Ornamental lake or pond; Urban - Intensive green roof; Urban - Facade-bound green wall; Urban - Ground based green wall; Urban - Rain garden; Urban - Sustainable drainage system; Urban - Vacant or derelict land; Urban - Bare ground; Intertidal sediment - Littoral mud; Intertidal sediment - Littoral mixed sediments; Intertidal sediment - Artificial littoral mud; Intertidal sediment - Artificial littoral muddy sand; Intertidal sediment - Artificial littoral mixed sediments; Intertidal sediment - Littoral muddy sand; Grassland - Modified grassland; Urban - Open mosaic habitats on previously developed land; Rocky shore - High energy littoral rock; Rocky shore - Moderate energy littoral rock; Rocky shore - Features of littoral rock; Intertidal hard structures - Artificial features of hard structures; Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGGI)
		Poor condition	13	Urban - Open mosaic habitats on previously developed land; Urban - Allotments; Grassland - Other lowland acid grassland; Grassland - Upland acid grassland; Heathland

Parent table		Target condition or enhancement	No. habitats available on WSX proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Table	Description			
				and shrub - Blackthorn scrub; Heathland and shrub - Gorse scrub; Heathland and shrub - hawthorn scrub; Heathland and shrub - Mixed scrub; Heathland and shrub - Dunes with sea buckthorn (H2160); Lakes - Aquifer fed naturally fluctuating water bodies; Urban - Bioswale; Intertidal sediment - Littoral coarse sediment; Lakes - Reservoirs; Intertidal sediment - Artificial littoral coarse sediment; Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand; Lakes - Ponds (priority habitat); Lakes - Ponds (non-priority habitat); Lakes - Temporary lakes ponds and pools (H3170); Sparsely vegetated land - Ruderal/Ephemeral; Sparsely vegetated land - Tall forbs; Lakes - Ornamental lake or pond; Urban - Biodiverse green roof; Urban - Intensive green roof; Urban - Facade-bound green wall; Urban - Ground based green wall; Urban - Rain garden; Urban - Sustainable drainage system; Coastal lagoons - Coastal lagoons; Urban - Vacant or derelict land; Urban - Bare ground; Rocky shore - Low energy littoral rock; Intertidal sediment - Littoral mud; Intertidal sediment - Littoral mixed sediments; Intertidal sediment - Artificial littoral mud; Intertidal sediment - Artificial littoral muddy sand; Coastal saltmarsh - Saltmarshes and saline reedbeds; Coastal saltmarsh - Artificial saltmarshes and saline reedbeds; Intertidal sediment - Artificial littoral mixed sediments; Intertidal sediment - Littoral muddy sand; Grassland - Modified grassland; Rocky shore - High energy littoral rock; Rocky shore - Moderate energy littoral rock; Rocky shore - Features of littoral rock; Intertidal hard structures - Artificial hard structures; Intertidal hard structures - Artificial features of hard structures; Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGGI); Grassland - Other neutral grassland; Sparsely vegetated land - Calaminarian grasslands; Intertidal sediment - Littoral seagrass; Intertidal sediment - Artificial littoral seagrass; Wetland - Reedbeds; Intertidal sediment - Littoral biogenic reefs - Mussels; Intertidal sediment - Littoral biogenic reefs - Sabellaria; Intertidal sediment - Features of littoral sediment; Intertidal sediment - Artificial littoral biogenic reefs
A.1b	Time to target condition (in years) for enhancement of area habitats, summarising data from tab	Poor to Moderate	6	Sparsely vegetated land - Ruderal/Ephemeral; Sparsely vegetated land - Tall forbs; Urban - Bioswale; Urban - Intensive green roof; Urban - Facade-bound green wall; Urban - Ground based green wall; Urban - Sustainable drainage system; Urban - Vegetated garden; Intertidal sediment - Littoral coarse sediment; Intertidal sediment - Littoral mixed sediments; Intertidal sediment - Features of littoral sediment; Intertidal sediment - Artificial littoral

Parent table		Target condition or enhancement	No. habitats available on WSX proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Table	Description			
	G-5 of the Statutory Biodiversity Metric Calculation Tool			coarse sediment; Intertidal sediment - Artificial littoral mixed sediments; Lakes - Ponds (priority habitat); Lakes - Ponds (non-priority habitat); Lakes - Temporary lakes ponds and pools (H3170); Lakes - Ornamental lake or pond; Urban - Open mosaic habitats on previously developed land; Coastal lagoons - Coastal lagoons; Rocky shore - High energy littoral rock; Rocky shore - High energy littoral rock - on peat, clay or chalk; Rocky shore - Moderate energy littoral rock; Rocky shore - Moderate energy littoral rock - on peat, clay or chalk; Rocky shore - Low energy littoral rock; Rocky shore - Low energy littoral rock - on peat, clay or chalk; Rocky shore - Features of littoral rock; Rocky shore - Features of littoral rock - on peat, clay or chalk; Intertidal sediment - Littoral mud; Intertidal sediment - Littoral biogenic reefs - Mussels; Intertidal sediment - Littoral biogenic reefs - Sabellaria; Intertidal sediment - Artificial littoral mud; Intertidal sediment - Artificial littoral muddy sand; Intertidal sediment - Artificial littoral biogenic reefs; Intertidal sediment - Littoral muddy sand; Intertidal hard structures - Artificial hard structures; Intertidal hard structures - Artificial features of hard structures; Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGGI)
		Moderate to Good	10	Sparsely vegetated land - Ruderal/Ephemeral; Sparsely vegetated land - Tall forbs; Urban - Bioswale; Urban - Intensive green roof; Urban - Facade-bound green wall; Urban - Ground based green wall; Urban - Sustainable drainage system; Urban - Vegetated garden; Intertidal sediment - Littoral coarse sediment; Intertidal sediment - Littoral mixed sediments; Intertidal sediment - Artificial littoral coarse sediment; Intertidal sediment - Artificial littoral mixed sediments; Heathland and shrub - Blackthorn scrub; Heathland and shrub - Gorse scrub; Heathland and shrub - hawthorn scrub; Heathland and shrub - Mixed scrub; Intertidal sediment - Features of littoral sediment; Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand; Heathland and shrub - Blackthorn scrub; Heathland and shrub - Gorse scrub; Heathland and shrub - hawthorn scrub; Heathland and shrub - Mixed scrub; Intertidal sediment - Features of littoral sediment; Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand
Table A.1c	Time to target condition (in years) for creation of	Poor condition	9	Species-rich native hedgerow with trees - associated with bank or ditch; Species-rich native hedgerow with trees; Species-rich native hedgerow - associated with bank or ditch; Native hedgerow with trees - associated with bank

Parent table		Target condition or enhancement	No. habitats available on WSX proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Table	Description			
	hedgerow habitats, summarising data from tab G-6 of the Statutory Biodiversity Metric Calculation Tool			or ditch; Species-rich native hedgerow; Native hedgerow - associated with bank or ditch; Native hedgerow with trees; Native hedgerow; Non-native and ornamental hedgerow
Table A.1d	Time to target condition (in years) for enhancement of hedgerow habitats, summarising data from tab G-6 of the Statutory Biodiversity Metric Calculation Tool	Poor to Moderate	4	Species-rich native hedgerow - associated with bank or ditch; Species-rich native hedgerow; Native hedgerow - associated with bank or ditch; Ecologically valuable line of trees
		Moderate to Good	8	Species-rich native hedgerow - associated with bank or ditch; Species-rich native hedgerow; Native hedgerow - associated with bank or ditch; Ecologically valuable line of trees; Species-rich native hedgerow with trees - associated with bank or ditch; Species-rich native hedgerow with trees; Native hedgerow with trees - associated with bank or ditch; Native hedgerow with trees

Tables A.1a to A.1d as summarised by Table 15.3 above demonstrate that options to create biodiversity unit uplift that is detectable by the Statutory Metric condition assessments within a four year period are extremely limited.

For creation of area habitats, of 107 habitats for which net gain is possible within four years according to the Metric (i.e. the Metric has assigned these habitats a condition assessment), if we consider only habitats which are relevant to this performance commitment in general or which are present (or ecologically appropriate or potentially feasible to create) on Wessex Water's proposed nominated land:

- 0% can deliver Good condition within a four year time period
- fewer than 6% can deliver Moderate condition
- just over 12% can deliver Poor condition.

The habitat types contributing to the percentage stated in each of these categories are not necessarily mutually exclusive.

For enhancement of area habitats, of 108 habitats for which net gain is possible within four years according to the Metric, if we consider only habitats which are relevant to this performance commitment in general or which are present (or ecologically appropriate or potentially feasible to create) on Wessex Water's proposed nominated land:

- fewer than 6% can deliver Poor to Moderate condition within a four year time period

- just over 10% can deliver Moderate to Good condition.

Again, the habitat types contributing to the percentage stated in each of these categories are not necessarily mutually exclusive.

Linear terrestrial habitats are a little more 'lucrative': for creation of hedgerow habitats, of the 12 habitats for which net gain is possible within four years according to the Metric, all are potentially relevant to this performance commitment in general or are present (or ecologically appropriate or potentially feasible to create) on Wessex Water's proposed nominated land and 75% can deliver Poor condition within a four year period. However, further improvements to condition (i.e. attaining Moderate or Good condition) are not possible for any of the habitats within the same period.

For enhancement of hedgerow habitats, of the 12 habitats for which net gain is possible within four years according to the Metric, fewer than 34% can deliver Poor to Moderate condition within a four year period, and fewer than 67% can deliver Moderate to Good.

Many of the area habitats which are 'capable' of delivering biodiversity unit uplift within a four year period are of low biodiversity unit (i.e. conservation) value, such as modified grassland and tall forbs. Thus whilst a net gain may be possible, that net gain will be small and short-term, compared to creating or enhancing habitats which have a longer time to target condition but which ultimately would give a much higher conservation return. Whilst hedgerow habitats can deliver gains more quickly, it is not practical or ecologically desirable to focus all effort and resource on boundary features to the detriment of making long-term gains in area habitats.

We provide our rationale above for avoidance of delivery of the PC on third party land: our company landholding hence represents the total available landholding to deliver net increase in biodiversity units for this performance commitment, i.e., the total possible area of land which we could theoretically nominate for inclusion under this performance commitment. Thus our numerator ('space' – i.e. capacity – to create biodiversity units) is dictated by the size of our landholding.

We illustrate in Table 2 above that creating biodiversity units requires 'space'. However, Wessex Water is not a large landowner. Table 4 below uses data submitted by all companies in OUT9 to review size of company landholdings. Wessex Water has the second smallest land ownership of all the water and sewerage companies. The next largest landowner, Thames Water, has over twice the size of our landholding and the largest landowner, United Utilities, has over 19 times the size of our landholding.

Table 15.4 – Comparison of size of company landholdings using data from OUT9.

Company	Water only or Water and Sewerage Company	Land owned km ² (OUT9.1)	Rank: size of land holding
UUW	WaSC	563	1
WSH	WaSC	361	2
YKY	WaSC	275	3
HDD	WaSC	102	4
SVE	WaSC	100	5
SWB	WaSC	97	6
NES	WaSC	76	7
ANH	WaSC	71	8
TMS	WaSC	66	9
WSX	WaSC	29	10
SRN	WaSC	25	11
SEW	WoC	22	12
AFW	WoC	15	13
BRL	WoC	14	14
SSC	WoC	8	15
SES	WoC	3	16
PRT	WoC	1	17

In addition to the numerator, performance reportable under this performance commitment is also impacted by the denominator (company's area). The larger the capacity to deliver net change in biodiversity units (i.e. 'space' available) is in proportion to the denominator, the greater the performance reportable for a given net change in actual biodiversity units. According to data submitted in the outcome tables, compared to other water companies Wessex Water has a comparatively small land holding in proportion to its company area. Table 5a below uses data submitted by all companies at OUT 4.119 and OUT9.1 to express company land ownership as a percentage of land in the company's area. These data show that Wessex Water has the third smallest landholding in proportion to the land in the company's area. Thus our numerator ('potential space' – i.e. capacity – to create biodiversity units) is small in relation to the PC denominator in comparison to other companies, which limits our reportable performance in the context of the performance commitment level being set based on industry median. For transparency, we note that in our inbound query OFW-IBQ-WSX-014 we raised concerns regarding inconsistent completion of OUT4.119 between water and sewerage companies (i.e. we do not believe that the data which feed in to Table 5 below are derived from a consistent definition). We have used data available from the House of Commons Library on water company areas to repeat the analysis at Table 5a, and the impact of using these data to substitute the 'land in company area' for all water and sewerage companies is shown at table 5b: here, Wessex Water has the joint third smallest landholding in proportion to the land in the company's area. I.e. our concerns regarding consistent population of OUT4.119 do not materially impact this point.

Table 15.5a – Comparison of size of company landholdings as a proportion of company area using data from OUT9 and OUT4.

Company	Land owned km ² (OUT9.1)	Company area km ² (OUT4.119)	Land owned as a percentage of land in company's area (%)
HDD	102	2872	3.55
UUW	563	29513.46	1.91
YKY	275	27883.64	0.99
WSH	361	41238.673	0.88
SWB	97	12342	0.79
BRL	14	2362	0.59
NES	76	13128	0.58
SVE	100	20215	0.49
SEW	22	5576.834	0.39
SES	3	835	0.36
AFW	15	4515	0.33
TMS	66	21762.44	0.30
SSC	8	2672	0.30
ANH	71	26935	0.26
WSX	29	17304.4	0.17
SRN	25	20973.124	0.12
PRT	1	864	0.12

Table 15.5b – Size of company landholdings as a proportion of company area: an alternative calculation calculated using data from OUT9.1 and data from the House of Commons Library¹⁸ as an alternative to OUT4.119.

Company	Land owned as a percentage of land in company's area (%)
HDD	2.14
UUW	1.97
YKY	0.98
WSH	0.87
BRL	0.59
SWB	0.39
SEW	0.39
NES	0.36
SES	0.36
AFW	0.33
TMS	0.31
SSC	0.30
SVE	0.27
SRN	0.17
WSX	0.17
ANH	0.14
PRT	0.12

15.2.3. Nature of Wessex Water’s landholding

Irrespective of the size of our landholding, there are two key points in relation to the nature of our landholding in respect of our capacity to deliver performance – as defined by this performance commitment – on biodiversity.

1. The performance commitment denominator is larger for water and sewerage companies than it is for water only companies, since the company area (OUT4.119) is summed from OUT4.22 and OUT5.25. This presumably works to the principle that a water and sewerage company has a larger landholding (i.e. ‘space’ to create biodiversity units, the numerator) on account of additional landholding associated with waste water treatment; making the assumption that the landholding associated with supply and waste activities (i.e. the space available to create BUs) is equivalent in size and potential biological quality. This assumption does not hold true for Wessex Water’s landholding. On our landholding:
 - Landholdings associated with waste water activities tend to be smaller. Of a total of 2,868 ha of our landholding, 1,951 ha is attributable to water supply activities (562 sites), whereas only 917 ha is attributable to waste water activities (1629 sites). i.e., we have an average of 3.47 ha per supply site versus only 0.56 ha per waste treatment site.
 - Landholdings associated with waste water activities tend to host fewer semi-natural habitats. 57 ha of our water supply landholding is hardstanding or structures/buildings i.e. 2.9%, compared to 236 ha of our waste water holding i.e. 25.8%. It is also worth noting that landholdings associated with wastewater activities are likely to have far more limited scope to create biodiversity unit uplift owing to their enriched nature. Most semi-natural habitats depend on nutrient-poor conditions to persist.

Our waste water landholding (‘space’ to create the numerator) is hence proportionately smaller in proportion to our sewerage services area (the denominator at OUT5) compared to the equivalent for the OUT4 table and hence the assumption that our capacity to deliver biodiversity units because we own and operate waste treatment land is increased in proportion to our company area for sewerage services is not valid. Additionally, irrespective of size, our ability to create biodiversity units on our waste land holding is more limited than on water supply land owing to the potential biological quality of that land. We thus draw attention to the fact that the denominator for the PC disproportionately penalises Wessex Water (and likely others), as a water and sewerage company.

2. As we explain elsewhere¹⁹, our approach to the biodiversity performance commitment has been to nominate a subset of our largest sites. The benefit of this is twofold. First, a given habitat of a larger size has inherently more conservation value than the same habitat in the same condition but of a smaller size. We hence look to deliver disproportionate conservation gains by working on our larger areas of semi-natural habitat. Second, habitat management and project management costs are more efficiently targeted at fewer, larger landholdings than many, geographically dispersed smaller landholdings of cumulatively equivalent area. Wessex Water’s landholding is, in general, not comprised of large tracts of land. We have a landholding comprised of many small, dispersed sites: of 2191 sites, 2151, or 98% are less than 10 ha in area. With reference to the areas required to deliver 0.73 biodiversity units per 100km² of company area for Wessex Water presented in column 5 of table 2 above, only 0.5 % of our sites are above 60 ha and only 1.1% of our sites are above 20 ha. Hence our capacity to deliver biodiversity units in addition to our proposed performance commitment level on other, currently un-nominated land in this same, efficient manner is limited.

¹⁸ [Constituency information: Water companies \(parliament.uk\)](#)

¹⁹ Please see our additional data table commentary for OUT4-5 biodiversity shared with Ofwat on 25 January 2024

15.2.4. Exclusion of biodiversity unit creation through other workstreams by the PC definition

Each water company will have unique pressures and demands of its landholding. As evidenced above, Wessex Water has a limited landholding compared to other companies. Data collated to populate our response to OUT9 indicated that we currently estimate that 453 ha of land (over 15% of our landholding) will be associated with planning obligations in AMP8. These schemes requiring planning permission will have associated Biodiversity Net Gain (BNG) obligations: land (i.e. 'space') is required to deliver this statutory BNG – i.e. creation of additional biodiversity units – and the net gain achieved through these planning schemes, although it achieves the same end, is excluded from reporting under the biodiversity performance commitment by the PC's definition.

There will be additional costs to the customer/reduced cost efficiency of other workstreams that require biodiversity uplift (i.e., Statutory BNG) by prevention of the mitigation hierarchy (i.e., giving preference to on-site mitigation) if land which could in theory deliver biodiversity unit uplift for statutory BNG is already 'locked up' for this performance commitment.

It is notable that nature based solutions such as wetlands require planning permission and hence statutory BNG. For AMP8, we have 36 nature based solutions listed in our WINEP to deliver part of our storm overflow programme. The most advanced and significant of this is the Bulbury Lane wetland to reduce storm spills to 10 per year and provide treatment. The wetland area is c. 0.8 ha, including the land to deliver the requisite statutory BNG associated with the planning permission. These activities proposed for AMP8 are excluded from nomination under the performance commitment, despite the fact that they will deliver significant conservation benefit and biodiversity unit increase.

15.3. Rationale and justification for Wessex Water's proposed performance commitment level

15.3.1. Additional performance proposed in response to Ofwat's Draft Determination

Our business plan submission proposed a performance commitment level of 0.05 biodiversity units per 100km² of company area for the period 2025-30. Having reviewed the industry median and the data provided at tables A.1c and A.1d above, we now propose a further stretch to 0.17 for this period. The additional 0.12 biodiversity units per 100 km² of company area has been derived from an assessment as to the likelihood of being able to plant c. 5 km of hedges across our nominated landholding.

Our method statement for OUT4-5 Biodiversity was very clear that, in the spirit of the performance commitment definition that management interventions should be guided by appropriate expert ecological advice, we would not commit to habitat creation (i.e., 'substitution' of one habitat type for another) until we had our baseline surveys to inform the appropriateness of the new habitat. Our decision to stretch our performance based on the possibility of hedge planting is somewhat at odds with this and represents some risk, as until baseline surveys and wider feasibility assessment of the hedge planting has been assessed we have no guarantee that these hedges will be appropriate or feasible; however on balance we believe that this is a risk that can be accepted.

15.3.2. Existing biological quality of our proposed nominated land

In line with good ecological and good economic principles to enhance before creating or restoring, our proposed nominated land for this performance commitment is our 'best' land for biodiversity. Our proposed nominated land represents just under 10% of all company freehold land and over 20% of the company land defined as 'eligible' for

this performance commitment²⁰. Our proposed nominated land has been calculated to contribute over 40% of the current total biodiversity unit value of the land defined as ‘eligible’ for consideration for the PC. Our nominated land already contributes a disproportionate amount to the total biodiversity unit value of the Wessex Water estate and this inherently limits the biodiversity unit uplift available on this land (i.e., if the land is already high in biodiversity unit value, there are fewer gains to be made than if we had elected to nominate our ‘poorest’ land for biodiversity). We have chosen to observe good conservation and economic principles to use the performance commitment to best effect for the environment and for our customers, but this is at the expense of performance as measured by the performance commitment. Setting the performance commitment level based on the industry median does not accommodate individual companies’ approach to the performance commitment in terms of choosing to nominate land of current ‘high’ or ‘low’ value for biodiversity.

15.3.3. Interventions based on sound ecological principles, including consideration of species of conservation concern

We have been very careful to construct a proposed performance commitment level that accommodates habitat management based on sound ecological principles as opposed to necessarily maximising uplift in biodiversity unit value on any given piece of land. For example:

- The Statutory Metric does not have any provision to attribute a value to individual species of conservation concern. One of our proposed nominated sites comprises significant areas of bracken. The site in question has records of small pearl bordered fritillary butterfly *Boloria selene*, a UK Priority Species of High Priority for Butterfly Conservation, which relies on specific bracken conditions to complete its lifecycle. In the grassland condition assessments for the Statutory Metric, a cover of bracken of >20% is a negative indicator (i.e., one of the condition assessment criteria would be failed). If we were seeking only to maximise the biodiversity unit value of this landholding we would uniformly reduce bracken to <20% cover (commensurate with the ‘pass/fail’ threshold for this attribute in the grassland condition assessments in the Metric). As a result, the conservation status of the small pearl-bordered fritillary butterfly would be jeopardised on site, and potentially the butterfly could even go extinct from this site. Our proposed performance commitment level leaves room for habitat management on our nominated land which is targeted towards species of conservation concern but which doesn’t necessarily maximise the net gain in biodiversity units.
- The Statutory Metric has no multiplier for heterogeneity of habitat. The juxtaposition of one habitat with another (for example, scattered stands of scrub on calcareous grassland) can render the overall value of the habitats present to be ‘more than the sum of their parts’. The Metric takes no account of this; indeed if the scrub in this example was of lower biodiversity unit value than the footprint of the calcareous grassland that it is ‘at the expense of’ then, depending on minimum mapping unit, the habitat would be assigned a lower biodiversity unit value than if the calcareous grassland was homogeneous. Similar to the above, our proposed performance commitment level provides for decisions on habitat interventions that are ecologically sound (i.e., retention of scattered stands of scrub if appropriate) as opposed to necessarily maximising the uplift in biodiversity units on any given piece of land.
- In some instances, expert ecological/environmental judgement may dictate that it is not appropriate to undertake the interventions required to bring a habitat into ‘good’ condition, for example some semi-improved grassland may in theory be a good candidate for seed enhancement, but the ground preparations required for seed enhancement could compromise a community of waxcap fungi of conservation interest, or

²⁰ Criteria to define the ‘eligibility’ of Wessex Water’s landholding were agreed with the Wessex Water Catchment Panel, our stakeholders for this performance commitment. Please refer to our Please see our additional data table commentary for OUT4-5 biodiversity shared with Ofwat on 25 January 2024.

an area of archaeological importance. Again, our proposed performance commitment level makes room to take account of these additional values of our nominated land which are not conveyed through the Metric.

15.3.4. Detectability of change in biological value in the timescales concerned

Above we discuss the impact of time to target condition, and the limited number of habitats of conservation interest in which biodiversity unit increase can be shown within a four year period, according to the Statutory Metric.

Even for those habitats that the Metric prescribes as ‘capable’ of showing biodiversity unit uplift within four years, we have concerns over the detectability of conservation enhancement using standardised condition assessments in such a short time period.

Our concerns stem from direct experience of this: Wessex Water’s AMP6 WINEP investigation at Clatworthy Reservoir (6Wx000671) demonstrated this point: significant investment in habitat management was made over five years, overseen by an experienced ecologist. Professional judgement indicated that some of these habitats were much improved by the end of the project; however, the condition assessment used at the start and end of the project was not able to detect change in condition, as the improvements and habitat development that followed were below the threshold for detection. Standardised condition assessments will have inherent limited sensitivity: they will not detect, or ‘acknowledge’, improvements in habitat condition which are still beneath the threshold for the ‘next condition score up’. i.e., transition between habitat condition categories is binary, whereas habitat response to intervention will be continuous: a habitat may be greatly improved, to just under the threshold for the next condition category up, but this increase will go undetected and these improvements in habitat condition are hence not documented or acknowledged until the threshold is reached.

Specifically, we have concerns over the condition assessments either used or not assigned in the Statutory Metric for certain habitats present on our proposed nominated landholding.

- One of our land holdings of our proposed nominated land has a significant area (36%) of saltmarsh. The condition assessment for saltmarsh used by the Metric is atypical in that it does not require a record or assessment of the species assemblage present to undertake the condition assessment. Our aim in nominating the saltmarsh area is to enhance its value by tending its community away from SM24 sea couch *Elymus pycnanthus* salt-marsh community to other, more species-rich saltmarsh assemblages; however using the Metric’s condition assessment form for saltmarsh, this enhancement will not be ‘registered’. We have approached Natural England on several occasions with our concerns regarding how this condition assessment can be applied to saltmarsh.
- As noted above, another of our land holdings of our proposed nominated land has a significant area (15%) of bracken, and here we aim to create optimal conditions for small pearl bordered fritillary butterfly. This may involve retention of some stands of very dense bracken (i.e., meeting the definition to record bracken as the primary code under UKhab and hence recorded as bracken in the Metric); however bracken is not subject to condition assessment in the Statutory Metric, i.e., any improvements to bracken habitat, unless they result in a change in the definition of the habitat to another habitat, will not be ‘registered’ by the Metric.

15.3.5. Natural/biological limitations to potential biodiversity unit increase

On land where habitat interventions are possible and ecologically appropriate, environmental conditions (for example edaphic properties) of the site will inherently limit the potential to achieve the maximum ‘potential’ biodiversity unit value of a given habitat. I.e., although we can attempt to project and profile performance against time to target condition data for any given habitat, it is perfectly possible that target condition is just not possible at that given location. To a great extent, soil nutrient status, hydrology, topography etc ‘are what they are’ and we must be realistic about the biodiversity unit gains that can be achieved.

15.3.6. Third party interest on our proposed nominated land

Around 30% of our proposed nominated land is subject to occupation by, or licence to, a third party. We are nominating this land to accept the long-term challenge of working with agreement holders and licensees to effect biodiversity gain on our landholding; however it must be recognised that changes can only be implemented when agreements renew, and rendering an agreement untenable owing to too many restrictions or requirements for a tenant or licensee is not desirable. This, coupled with the operational function of the nominated land, restricts the nature and extent of habitat interventions that will be possible, at least within the first instance.

15.3.7. Other potential pressures on our proposed nominated land

The Statutory Metric measures only biodiversity value on any given piece of land and does not take into account other ecosystem services or socio-economic benefits that the land may provide. There may be some occasions where maximising the potential biodiversity units on a given piece of land is not the most appropriate course of action, as this may be at the expense or compromise of other benefits (for example catchment or flood risk management or Access & Recreation) conferred by the land.

15.3.8. Realistic projections of performance level

Our proposed nominated land aims to present a genuine proxy for the wider net change in biodiversity unit value possible on land in use during the exercise of the company's functions, in the proper spirit of this performance commitment: our proposal is not simply a 'grab' for biodiversity units. Our proposal to nominate our 'best' land for biodiversity is the right thing to do for customers and the environment. Above, we present the various limitations to our potential performance for biodiversity, including time to target condition, the size and nature of our landholding, our approach to nominate our 'best' land for biodiversity (i.e. limiting potential uplift in biodiversity units), making room for sound ecological and environmental decisions on habitat interventions, other pressures on our land (such as Statutory BNG, third party interest or other environmental requirements of our land), and concerns over detectability of change (notwithstanding time to target condition).

Our proposed performance commitment level was drawn up based on good base data (derived from site survey as opposed to desk-based assessment), with good knowledge of the sites concerned and with in-house staff having knowledge and experience of conservation management. We are confident that our projections are realistic as opposed to unambitious and make room for sound ecological and environmental decisions on habitat interventions rather than necessarily incentivising the maximum 'available' biodiversity unit uplift on our nominated land. This is the best thing to do for our customers and for the environment.

15.4. Rationale and justification for Wessex Water's proposed performance commitment profile

For our business plan submission, we specifically chose to avoid a rolling survey programme and had opted instead to survey all of our nominated land in 2025-26 (year 1 of AMP8) for both cost efficiency purposes (i.e. initiating contracts with surveyors and project managing surveys once as opposed to twice or more) and so that an holistic analysis of the baseline can be undertaken when drawing up management plans and allocating/prioritising spend and resource for habitat management. This will still enable us to report in-AMP performance, in 2029-30.

Additionally, we had opted not to commence baseline surveys until year 1 of AMP8 for resourcing and practical reasons, such as:

- Biodiversity and conservation staff resource is currently directed to delivering AMP7 biodiversity schemes and performance commitments to a high standard;
- We are currently working with software providers to put biodiversity accounting software in place. We plan to have this in place prior to commencement of baseline surveys, to make field survey and condition

assessment more efficient (by using field app mapping and condition assessment tools) and also to avoid us having to transfer baseline data gathered in a different format onto our new accounting system; and

- The UK habitat Classification ('UKhab') v1 was succeeded by v2 in July 2023 and all v1 documents were withdrawn; however, whilst the habitat classifications for v2 have been published, the v2 field key and technical guidance are still pending release. Mapping of habitats to UKhab underpins the Statutory Metric and hence the baseline surveys for this performance commitment: it would be logical to await these key documents prior to commencing baseline surveys.

Surveying a subset of our nominated land in 2024-25 will force us to initiate management on that subset (once the baseline has been completed the 'clock is ticking' to begin habitat interventions to attempt to register net change in biodiversity unit value within the following four year period) before we have data to enable us to prioritise work across the remainder of our nominated landholding.

Ofwat states²¹ "The delivery profile for 2028-29 was set to push companies to complete a baseline survey in 2024-25". In response to our query on this matter (Ofwat ref. DTR-503), Ofwat noted that it was urging water companies to complete surveys in 2024-25 but did explicitly confirm that "The [Wessex Water's] company approach would be in line with the definition". Since it is in line with the PC definition to commence baseline surveys in the first year of AMP8, it does not appear appropriate to penalise Wessex Water for opting to do so – for the good reasons given above – by requiring a net change in biodiversity units to be reported in year 4 of the AMP. If there was an explicit requirement for baseline surveys to commence in 2024-25, this would need to have been stated much earlier than July 2024 (and indeed stated in the performance commitment definition): if observing the performance commitment definition "*Biodiversity units will be assessed in surveys, using information gathered from site visits conducted at appropriate times ...*", July is too late to conduct woodland survey, and gives insufficient notice to enable us to organise grassland survey (which would optimally be conducted in May, June or July). We thus request that Ofwat accepts our proposed delivery profile of reporting all and overall performance in 2029-30.

15.5. Other relevant evidence

15.5.1. Evidence provided previously

WSX25 – Improving Biodiversity

WSX47 – Outcomes tables commentary (Section 1.6)

Additional data table commentary for OUT4-5 biodiversity shared with Ofwat on 25 January 2024

15.6. Why the change is in customers' interests

Accepting our proposed changes to

- revert to Ofwat's original proposal to set company specific, as opposed to a common, performance commitment level for biodiversity
- accept our proposed and revised performance commitment level of 0.17 biodiversity units per 100 km² of land in the company's area

²¹ [PR24-DD-PCM_Biodiversity-V1.1.xlsx \(live.com\)](#)

- accept our proposed performance commitment profile of reporting all net change in biodiversity units in year 5 of AMP8 as opposed to reporting some change in year 4 of the AMP

is in the best interest for our customers and the environment.

We explain above that the Statutory Metric's time to target condition data demonstrate that options for delivery of net gain in biodiversity units within such a short period as four years are extremely limited. We have serious concerns that enforcing the current proposed performance commitment level of 0.73 will bring about unintended incentives, in particular:

- Incentivising 'quick wins', which in the long term have much more limited biodiversity unit (i.e. conservation) value and hence represent poor value for money for our customers and a poor outcome/missed opportunity for the environment, such as:
 - Focusing on creation or improvement of area habitats which have a low value but which are quick to demonstrate biodiversity unit uplift through the Metric such as modified grassland, other neutral grassland or tall forbs. These habitats have a lower value (but shorter time to target condition) than other habitats of higher conservation value, but this effect is augmented over the long-term. I.e., short-sighted investment into habitats which have a much quicker, but lower, 'return' is incentivised to achieve biodiversity unit uplift within the four year period.
 - Prioritisation of creation of hedgerow habitats (which Tables A.1a to A.1d above demonstrate give generally quicker/more instant uplift in biodiversity unit value than area habitats) over area habitats of conservation value but which are a much 'slower burn' in terms of net gain in biodiversity units. Depending on appropriate context, native, locally appropriate hedgerows are of course generally positive for biodiversity; however the performance commitment should promote a 'balanced investment' between area and linear habitats. Having said that hedgerow planting would generally be positive for biodiversity, there are some notable exceptions where hedge planting would be to the detriment of the ecological function of certain habitats. For example, some of our proposed nominated land is considered to be Functionally Linked land, supporting a SSSI/SPA/Ramsar/SAC site for coastal waterbirds. Planting hedges on this land would interfere with sightlines for waterbirds, significantly reducing the habitat's functional value, but would show significant biodiversity unit uplift through the Metric. I.e., the requirement of the current performance commitment level to bring about 'quick wins' could incentivise poor ecological decisions. We note that we will not be planting hedges on this land.
- Undertaking management which achieves conservation gain but which would not result in uplift in biodiversity unit value is disincentivised, as enhancement investment is still required for these tasks but performance would not be reportable for them in the context of the performance commitment.
 - The example which we present above regarding bracken management for small pearl bordered fritillary butterfly illustrates this point: managing bracken to achieve the required cover for this species of conservation concern results in a failure against one of the condition assessment criteria for grasslands in the Metric.
- Holistic, landscape-scale management, where habitat interventions on nominated land which may not necessarily bring about an uplift in biodiversity units on that land but which have a wider landscape benefit for conservation, is disincentivised. For example, one of our proposed nominated landholdings is adjacent to a waterbody, which is not included within the nominated land. There is consensus between stakeholders for that site that felling of willows which are on the nominated land, immediately adjacent to the waterbody, would be beneficial for waterbirds. Felling these willows has negligible conservation benefit to the nominated land when considered in isolation and would represent a net loss in biodiversity units on the nominated land, despite this habitat intervention being the correct thing to do. The biodiversity performance commitment definition prescribes use of the Statutory Metric pre-intervention assessment in perpetuity, i.e. the post-intervention assessment is never undertaken. Whilst this allows an 'as seen' assessment it makes no provision for post-intervention strategic significance to impact the biodiversity unit calculations. Thus, here, the biodiversity performance commitment disincentivises the best practice of landscape-scale management (indeed it goes further, penalising the best practice of landscape scale management); rather it incentivises

insular assessment and management of the nominated land. We note that we intend to proceed with willow removal in AMP8, despite the fact that we will be penalised through the performance commitment.

Our approach to the performance commitment has been to propose nominated land which maximises survey and management efficiency costs, i.e. by nominating fewer, larger (some of our largest) landholdings. We have explored ways to achieve a more stretching target. As outlined above, because the majority of our landholding is comprised of small, geographically dispersed sites, simply nominating more and more land is not efficient and would represent a huge distraction from our other conservation work in AMP8²². We have modelled delivery of 1 biodiversity unit per 100 km² of company area using an alternative approach, purchasing arable land (i.e. land of poor conservation value) to be held specifically for the purposes of this performance commitment and converting it to modified grassland (i.e., a habitat for which the time to target condition allows reporting of biodiversity unit uplift within four years). This would involve a totex of £3.57M at P50 and offers poor value for money for the customer in the context of prioritising creation before enhancement of habitats and much diminished long-term performance (i.e. creation of modified grassland). We also do not believe that this approach would be in the spirit of the performance commitment definition to nominate land in use during the exercise of the company's functions.

Finally, forcing a more stretched target than our proposed performance commitment level, particularly if the performance commitment definition remains unchanged that improvements in biodiversity that arise as a result of conditions or obligations relating including planning processes will be excluded from this performance commitment, could result in us 'locking up' land that would otherwise be used by the company for statutory BNG, i.e. preventing the mitigation hierarchy from being followed and hence making BNG required for asset improvement schemes more expensive for the customer.

²² We take the opportunity here to clarify in response to [Ofwat's statement](#) that "Wessex Water suggested that total land owned by a company should be used, instead of nominated areas", that this is not what we suggested: In response to consultation on this new performance commitment, Wessex Water agreed with the premise of normalisation but proposed that "total land owned" would be a more appropriate denominator to use in the normalisation. We have never suggested that it would be appropriate to nominate all company land, owing to the inefficiency described above.

16. Operational greenhouse gas emissions – water and wastewater

16.1. Summary

Water

We are broadly in agreement with the emissions profile of the draft determination. However, we have recently updated our modelled forecast of emissions in relation to chemical use, which has produced a marginal increase in each year. On this basis we request the profile shown below.

Table 16.1 – Summary of changes requested

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.7	Draft Determination profile	30,617.80	30,395.25	30,135.76	29,965.41	29,072.53
	Our requested profile	31,109.48	30,775.79	30,606.60	30,413.10	30,280.78

Wastewater

We wish to again propose the schemes that we submitted in the business plan for enhancement funding, with the same level of emissions reduction as offered previously. We consider that these are instrumental for reducing our greenhouse gas emissions in three critical areas: process emissions, transport and heat, all of which are decarbonising nationally more slowly than electricity. Furthermore, without enhancement investment, achievement of the profile in the draft determination would be extremely challenging – even with the net zero base cost allowance. It is very unlikely that we would be able to reduce emissions by a further 9%, i.e. the 10,087 tonne gap from our own projected performance from base to the draft determination PCL of 98,162 tCO₂e.

As part of our response to the draft determination, we also wish to amend our forecast emissions profiles. This is to account for changing sludge quantities and treatment, composting of grit and screenings, and projected increases in the use of chemicals, especially ferric sulphate and lime.

Table 5.2 – Summary of changes requested

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.8	Draft Determination profile	116,498.73	114,911.07	112,454.10	108,763.60	98,161.55
	Our requested profile – if enhancement proposals are accepted	119,530.99	118,290.23	115,893.07	112,669.86	107,158.74
	Our requested profile – if enhancement proposals are rejected	119,530.99	119,020.03	117,570.10	116,785.68	113,742.05

16.2. Change requested

We request that Ofwat sets our target as follows:

Water: as set out in the table below (which includes a recent updated of emissions attributable to chemicals)

Table 16.3 – Summary of changes requested

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.7	Draft Determination profile	30,617.80	30,395.25	30,135.76	29,965.41	29,072.53
	Our requested profile	31,109.48	30,775.79	30,606.60	30,413.10	30,280.78

Wastewater: as set out in the table below (which includes a recent updated of emissions attributable to changing sludge volumes and treatment types, grit & screenings and chemicals). The tables include stretching but achievable pathways in either scenario where our proposed investments funded by enhancement are accepted or rejected.

Table 16.4 – Summary of changes requested

Data table line	Data table line	2025-26	2026-27	2027-28	2028-29	2029-30
OUT1.8	Draft Determination profile	116,498.73	114,911.07	112,454.10	108,763.60	98,161.55
	Our requested profile - if enhancement proposals are accepted	119,530.99	118,290.23	115,893.07	112,669.86	107,158.74

16.3. Rationale – water emissions

16.3.1. Our business plan case

The table below shows the emissions trajectory that we proposed in our business plan submission. As we did not propose enhancement investment in relation to the water service the two rows are the same.

Table 16.5

	2025-26	2026-27	2027-28	2028-29	2029-30
Our business plan – from base	30,618	30,395	30,136	29,965	29,848
Our business plan – from base + enhancement	30,618	30,395	30,136	29,965	29,848

16.3.2. Draft determination

The table below shows the emissions trajectory for water in the draft determination.

Table 16.6

	2025-26	2026-27	2027-28	2028-29	2029-30
Draft Determination “Stretch from base”	30,618	30,395	30,136	29,965	29,072
Difference vs our business plan	0	0	0	0	-776

16.3.3. Our response

All other things being equal we would be willing to accept the profile put forward in the draft determination.

However, we have recently updated our modelled forecast of emissions in relation to chemical use, which has produced a marginal increase in each year. This affects all of the emissions profiles i.e. the baseline scenario with no additional emissions reduction activity, emissions from base maintenance and emissions from base maintenance and enhancement. We have therefore restated the related lines in OUT1-OUT4

Table 16.7

	2025-26	2026-27	2027-28	2028-29	2029-30
Our business plan – from base	31,109	30,776	30,607	30,413	30,281
Our business plan – from base + enhancement	31,109	30,776	30,607	30,413	30,281

16.3.4. Our recommendation

To adopt the revised profile shown above.

16.4. Rationale – wastewater emissions

16.4.1. Our business plan case

The table below shows the emissions trajectory that we proposed in our business plan submission. The differences related to the emissions savings that we forecast attributed to effluent heat recovery, and nitrous oxide monitoring and control (submitted in part as standard enhancement and in part for the net zero challenge).

Table 16.8

	2025-26	2026-27	2027-28	2028-29	2029-30
Our business plan – from base	117,244	116,381	114,862	113,602	108,249
Our business plan – from base + enhancement	117,244	115,651	113,185	109,486	101,666

The profile is broadly linear in years 1-4, and then falls more sharply in year 5. This sharper change is for 2029-30 is in anticipation of behind-the-meter renewable electricity supplies from third parties coming to fruition by the end of AMP8.

16.4.2. Draft determination

We note that the PCL is close to our submission for years 1-4, but widens in year 5; however, our proposal for enhancement investment was turned down in the draft determination, which would make achievement of the profile in the draft determination extremely challenging – even with the net zero base cost allowance.

Table 16.9

	2025-26	2026-27	2027-28	2028-29	2029-30
Draft Determination: "Stretch from base"	116,499	114,911	112,454	108,764	98,162
Difference vs BP from base + enhancement	- 746	- 740	- 731	- 723	- 3,504
Difference vs BP from base alone	- 746	- 1,470	- 2,408	- 4,838	- 10,087

16.4.3. Our response

We wish to again propose the schemes that we submitted in the business plan for enhancement funding. We consider that these are instrumental for reducing our greenhouse gas emissions in three critical areas: process emissions, transport and heat, all of which are decarbonising nationally more slowly than electricity. Furthermore, the proposals that we have put forward are for new assets and activities which have not been funded previously.

In the absence of enhancement investment for the items set out in WSX-C14 - Enhancement costs - greenhouse gas emissions, it is very unlikely that we would be able to reduce emissions by a further 9%, i.e. the 10,087 tonne gap from our own projected performance from base to the draft determination PCL of 98,162 tCO₂e.

Revising our overall profile

As part of our response to the draft determination, we wish to also amend our forecast emissions profiles. This is to account for the following aspects that were not factored into the forecast emissions submitted with the business plan:

- **Scope 1 process emissions** - changing sludge quantities and treatment combinations (instead of a flatline profile from the base year), and emissions from composting grit and screenings
- **Scope 3 chemicals** - projected increases in the use of ferric sulphate and lime
- **Scope 3 Sludge to land tCO₂e, disposal of grit and screenings** - updated sludge volumes and emissions from disposal of the compost-like product from treating grit and screenings.

The table below summarises the 2029-30 position for the items that have been changed, with all calculations using the emissions factors in CAW17.

Table 16.10

	BP submission	Revised	Difference
Sc1 Process emissions tCO₂e	34,688	37,056	2,368
Sc3 Chemicals tCO₂e	3,976	6,022	2,046
Sc3 Sludge to land tCO₂e	12,398	13,005	607
Sc3 Grit & screenings disposal	-	472	472
TOTAL			5,493

There have been no revisions to the estimated emissions savings from base or enhancement. All the revisions made are to our 'do nothing additional' profile – however, by changing the 'starting point' there is knock-on effect on the residual emissions after carbon reduction investment.

The table below shows the resulting changes, year by year, for total wastewater service emissions.

Table 16.11

	2025-26	2026-27	2027-28	2028-29	2029-30
Additional emissions in 'do nothing' forecast	2,286	2,639	2,708	3,184	5,493
Revised emissions in 'do nothing' forecast	120,947	122,384	124,108	126,069	129,986

16.4.4. Our recommendation

If our enhancement proposals are accepted in the final determination, we would be able to deliver the revised 'base maintenance and enhancement' profile set out below. This is our preferred profile, as we wish to carry out the items put forward in our enhancement proposals.

Table 16.12

	2025-26	2026-27	2027-28	2028-29	2029-30
With base maintenance and enhancement					
Business plan	117,244	115,651	113,185	109,486	101,666
Revised	119,531	118,290	115,893	112,670	107,159

If our enhancement proposals are rejected in the final determination, we would be able to deliver the revised 'base maintenance only' profile set out below. We believe that this would also represent a challenging but realistic PCL profile.

Table 16.13

	2025-26	2026-27	2027-28	2028-29	2029-30
Additional emissions in 'do nothing' forecast	2,286	2,639	2,708	3,184	5,493
Revised emissions in 'do nothing' forecast	120,947	122,384	124,108	126,069	129,986
With base maintenance only					
Business plan	117,244	116,381	114,862	113,602	108,249
Revised	119,531	119,020	117,570	116,786	113,742

16.5. Other relevant evidence

16.5.1. Evidence provided previously

Further information on the emissions reductions that we aim to achieve in AMP8, and the resulting emissions from base and emissions with enhancement, are detailed in our business plan submission document WSX23 – Our route to net zero. Specifically:

- 4.2 Background emissions reductions
- 4.3 Assessing reduction opportunities
- 4.5 Reductions from base maintenance

4.6 Reductions from enhancement

6.1 Forecast performance commitment levels.

16.5.2. Evidence provided elsewhere in our draft determination response

Further information on the proposed schemes, specifically those for which we are re-affirming our enhancement case, is provided in WSX-C14 - Enhancement costs - greenhouse gas emissions.

16.6. Why the change is in customers' interests

We need to decarbonise fully across all our activities, including activities where progress nationally is happening more slowly. Where we are proposing new activities and assets – process emissions monitoring, on-site vehicle charging, effluent heat recovery – we consider that enhancement funding is appropriate, and we have proposed this accordingly.

The adoption of low carbon transport is key to meeting our net zero targets, and providing access to suitable EV charging infrastructure is paramount to delivering a low carbon fleet. Customers will benefit from the productivity benefit of having on-site EV charging.

Effluent heat recovery provides the opportunity to substitute imported natural gas, and reduce exposure to gas price volatility, offering future opex efficiencies.

N2O monitoring is a pre-requisite for subsequent targeted interventions. While current emissions estimates are very broadly estimated and vary widely; through this work we seek to be in a position to better quantify our emissions and better inform corrective action or management practices.

By contrast, stretch targets without dedicated enhancement funding will be unachievable. We are concerned that attempting to carry out this work through base maintenance is at odds with other areas where monitoring and first-time infrastructure have been funded through base.

17. Revised proposals

We are not requesting any changes in respect of the following performance commitments: Water supply interruptions; Compliance Risk Index; Mains repairs; Internal sewer flooding; and Sewer collapses. However, we set out our views below on Ofwat's approach to setting these performance commitments.

17.1. Water supply interruptions

Ofwat's proposed PCL trajectory is consistent with our PR24 business plan proposal.

Ofwat also set out in its Draft Determination that it was minded to introduce a new performance commitment on severe water supply interruptions. However, it has since said that its approach in this area would benefit from more time. We welcome this. We consider that an additional performance commitment in this area could risk being largely duplicative of existing protections including the existing water supply interruptions performance commitment, and SEMD regulations which require us to report significant interruptions to the DWI and Defra. We are happy to engage further on how best to secure the right outcomes for customers in this area.

17.2. Compliance Risk Index (CRI)

We strive to achieve a CRI score of zero, however, the increasing tightening of regulatory expectations and statutory obligations means it will be excessively expensive to provide the resilience to ensure we consistently achieve this ambition. Therefore, we proposed a deadband set at 1.5 in our business plan to ensure penalties are not incurred for industry leading performance.

This is also consistent with Drinking Water 2023: The Chief Inspector's report for drinking water in England in which the Chief Inspector of the DWI states *"Compliance Risk Index (CRI) is shared with the water industry's financial regulator, OFWAT, as a common performance measure. A CRI target of two has been set as the point at which financial penalties apply ensuring outcomes remain achievable and equitable when used as a water quality objective"*.

Ofwat has proposed a deadband for CRI beginning at 1.83 (in 2025-26) and falling to 1 by 2029-30.

We welcome Ofwat's recognition that a deadband is appropriate for this performance commitment. We are an industry-leading performer for CRI and we are seeking to build on our strong track record in this area to continually improve performance, reflecting that we continually strive to achieve a CRI score of zero. On this basis, we do not propose any changes to Ofwat's proposed deadband.

17.3. Mains repairs

Ofwat's proposed PCL trajectory is similar to our PR24 business plan proposal and we are accepting this trajectory. For clarity, we consider Ofwat's proposal for mains repairs to be a stretching target, and we would not expect to achieve any further stretch in this area without significant further investment.

Ofwat has not made any adjustments to repairs to burst mains levels to account for leakage reduction programmes despite explicitly recognising there are two opposing incentives at play. Our view remains that leakage reduction is a key driver of mains repairs.

Increased Active Leakage Control (ALC) (i.e. employing more and more leakage inspectors to go out and detect more and more leaks) has been central to our leakage reduction strategy in recent years. We have previously provided clear evidence of this relationship in a [report](#) by RPS, a globally regarded sector expert. The report concluded that "As leakage levels have fallen, due to the increase in ALC activity, there has been an increase in the number of detected bursts and a reduction in the number of customer-reported bursts. The combined impact is an overall increase in mains bursts." It went on to say that "This clearly shows the additional leakage reduction will

result in an increase in mains bursts/repairs which is not due to underlying network asset health, but results from repairing existing leaks to meet the new leakage targets.”

Since then, in order to ensure delivery of our leakage reduction target we significantly increased the number of leakage inspectors early on in AMP7, resulting in an increase in the number of proactive repairs in 2020-21.

17.4. Internal sewer flooding

Ofwat’s proposed PCL trajectory is similar to our PR24 business plan proposal and we are accepting this trajectory.

In our PR24 business plan, our proposed performance from the PR19 2024-25 target (1.34 incidents per 10,000 properties) was a 11% decrease in incidents and Ofwat’s proposal in the draft determination was a 13% decrease in the number of incidents by 2029-30.

17.5. Sewer collapses

Ofwat’s proposed PCL trajectory is similar to our PR24 business plan proposal and we are accepting this trajectory.

In our PR24 business plan, our proposed performance from the PR19 2024-25 target (6.33 collapses per 1,000km of sewer network) was a 3% decrease in collapses and Ofwat’s proposal in the draft determination was a 9% decrease in the number of collapses by 2029-30.

17.6. Serious Pollution Incidents

We have accepted Ofwat’s proposed target in the draft determination of zero serious pollutions across the whole AMP8 period. We fully support the Environment Agency and Ofwat’s ambition that there should be no serious pollution incidents and agree, therefore, with a target of zero. However, we do not expect this to be achievable through base expenditure.

17.6.1. Historical performance – Wessex

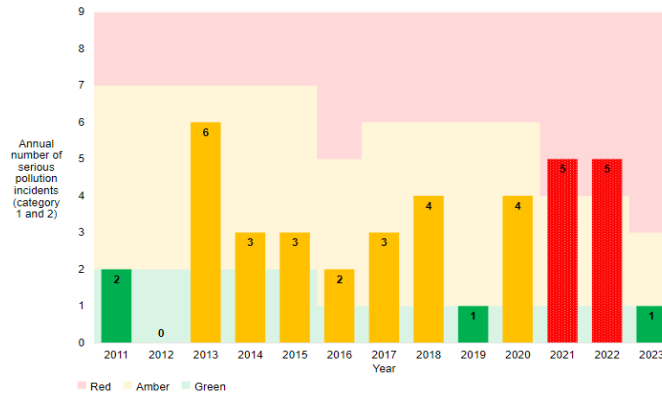
In our PR24 business plan submission, we stated that our five-year average was four serious pollution incidents. This has reduced to three as a result of our performance in 2023.

Table 17.1

	2018	2019	2020	2021	2022	2023	Five-Year Average
Number of serious pollution incidents	4	1	4	5	5	1	3

Chart 17.2

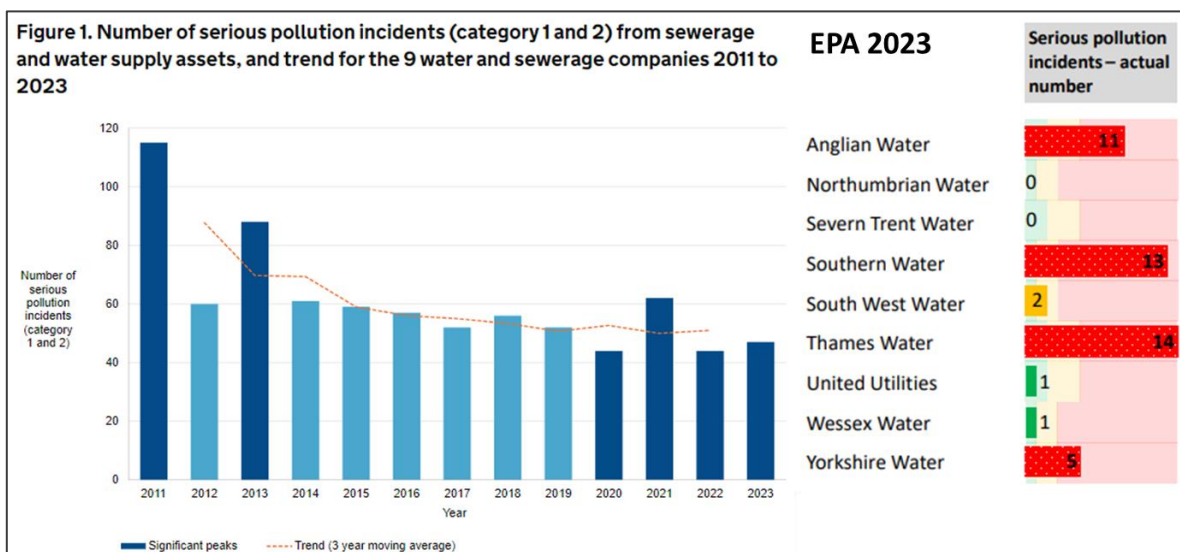
Annual number of serious pollution incidents (category 1 and 2) from Wessex Water assets (sewerage and from 2021 including water supply), also showing EPA status and thresholds



17.6.2. Historical performance – all WaSCs

There were 47 serious pollutions across the industry in 2023, the table below shows WaSCs collective historic performance as well as individual performance in 2023, from the EA’s ‘Water and sewerage companies in England: environmental performance report 2023’.

Chart 17.3



Whilst this demonstrates an improving trend, the data does not support a target of zero.

If we are unable to meet our performance commitments early in the AMP it will erode customer confidence in the performance commitment process. Customers play a part in our pollutions reporting and we want them to self-report incidents so that we can triage issues and fix them. If we lose customer trust they may be less likely to report incidents to us for investigation.

Annex 1 – Biodiversity

Tables A.1a to A.1d presented here are consolidated into Table 15.3 of our representation on Biodiversity at Section 15.2.2. The tables summarise:

- for area habitats and hedgerow habitats and for creation or enhancement of these habitats, the time to target condition for each given target condition (i.e., Good, Moderate, Poor)
- for creation of habitats and the time to target condition for each given target condition for enhancement of habitats (i.e., Poor enhanced to Moderate, Moderate enhanced to Good).

Also shown is the number of habitats for which that time to target condition is possible. Green and red shading in the tables indicate where the time to target condition is \leq or $>$ four years (i.e. for the latter, net gain cannot be shown – according to the Statutory Metric – within the AMP8 period) respectively. Where a net gain in biodiversity units is possible – according to the Metric – within the four year period, the habitat types concerned are named. habitat types shown in red text indicate those which are not relevant to this performance commitment in general or are not present (or ecologically appropriate or potentially feasible to create) on Wessex Water’s proposed nominated land (and it is often the case that this statement would apply to Wessex Water’s entire landholding). The penultimate column thus gives an ‘adjusted’ number of habitat types for which biodiversity unit net gain could theoretically be achieved within the four year period on our proposed nominated land.

Table A.1a – Time to target condition (in years) for creation of area habitats, summarising data from tab G-4 of the Statutory Biodiversity Metric Calculation Tool

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Good	1	1	0	Urban - Allotments
Good	3	3	0	Urban - Bioswale; Intertidal sediment - Littoral coarse sediment; Intertidal sediment - Artificial littoral coarse sediment
Good	4	2	0	Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand
Good	5	17		
Good	6	2		
Good	7	1		
Good	10	13		
Good	12	1		
Good	13	4		
Good	15	12		
Good	20	10		
Good	25	1		
Good	30	11		
Good	30+	30		

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Moderate	1	6	0	Urban - Allotments; Urban - Bioswale; Intertidal sediment - Littoral coarse sediment; Intertidal sediment - Artificial littoral coarse sediment; Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand
Moderate	3	19	5	Lakes - Ponds (priority habitat); Lakes - Ponds (non-priority habitat); Lakes - Temporary lakes ponds and pools (H3170); Sparsely vegetated land - Ruderal/Ephemeral; Sparsely vegetated land - Tall forbs; Lakes - Ornamental lake or pond; Urban - Intensive green roof; Urban - Facade-bound green wall; Urban - Ground based green wall; Urban - Rain garden; Urban - Sustainable drainage system; Urban - Vacant or derelict land; Urban - Bare ground; Intertidal sediment - Littoral mud; Intertidal sediment - Littoral mixed sediments; Intertidal sediment - Artificial littoral mud; Intertidal sediment - Artificial littoral muddy sand; Intertidal sediment - Artificial littoral mixed sediments; Intertidal sediment - Littoral muddy sand.
Moderate	4	7	1	Grassland - Modified grassland; Urban - Open mosaic habitats on previously developed land; Rocky shore - High energy littoral rock; Rocky shore - Moderate energy littoral rock; Rocky shore - Features of littoral rock; Intertidal hard structures - Artificial features of hard structures; Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGGI)
Moderate	5	16		
Moderate	7	3		
Moderate	10	18		
Moderate	15	6		
Moderate	20	8		
Moderate	25	2		

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Moderate	27	2		
Moderate	30	6		
Moderate	30+	14		
Poor	0	1	0	Urban - Open mosaic habitats on previously developed land
Poor	1	46	11	Urban - Allotments; Grassland - Other lowland acid grassland; Grassland - Upland acid grassland; Heathland and shrub - Blackthorn scrub; Heathland and shrub - Gorse scrub; Heathland and shrub - hawthorn scrub; Heathland and shrub - Mixed scrub; Heathland and shrub - Dunes with sea buckthorn (H2160); Lakes - Aquifer fed naturally fluctuating water bodies; Urban - Bioswale; Intertidal sediment - Littoral coarse sediment; Lakes - Reservoirs; Intertidal sediment - Artificial littoral coarse sediment; Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand; Lakes - Ponds (priority habitat); Lakes - Ponds (non-priority habitat); Lakes - Temporary lakes ponds and pools (H3170); Sparsely vegetated land - Ruderal/Ephemeral; Sparsely vegetated land - Tall forbs; Lakes - Ornamental lake or pond; Urban - Biodiverse green roof; Urban - Intensive green roof; Urban - Facade-bound green wall; Urban - Ground based green wall; Urban - Rain garden; Urban - Sustainable drainage system; Coastal lagoons - Coastal lagoons; Urban - Vacant or derelict land; Urban - Bare ground; Rocky shore - Low energy littoral rock; Intertidal sediment - Littoral mud; Intertidal sediment - Littoral mixed sediments; Intertidal sediment - Artificial littoral mud; Intertidal sediment - Artificial littoral muddy sand; Coastal saltmarsh - Saltmarshes and saline reedbeds; Coastal saltmarsh - Artificial saltmarshes and saline reedbeds; Intertidal sediment - Artificial littoral mixed sediments; Intertidal sediment - Littoral muddy sand; Grassland - Modified grassland; Rocky shore - High energy littoral rock; Rocky shore - Moderate energy littoral rock; Rocky shore - Features of littoral rock; Intertidal hard structures - Artificial hard structures; Intertidal hard structures - Artificial features of hard structures; Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGGI)

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Poor	2	4	1	Grassland - Other neutral grassland; Sparsely vegetated land - Calaminarian grasslands; Intertidal sediment - Littoral seagrass; Intertidal sediment - Artificial littoral seagrass
Poor	3	5	1	Wetland - Reedbeds; Intertidal sediment - Littoral biogenic reefs - Mussels; Intertidal sediment - Littoral biogenic reefs - Sabellaria; Intertidal sediment - Features of littoral sediment; Intertidal sediment - Artificial littoral biogenic reefs
Poor	5	19		
Poor	10	20		
Poor	15	5		
Poor	30+	7		

Table A.1b – Time to target condition (in years) for enhancement of area habitats, summarising data from tab G-5 of the Statutory Biodiversity Metric Calculation Tool

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Poor-Moderate	1	4	0	Urban - Allotments; Urban - Rain garden; Urban - Vacant or derelict land; Urban - Bare ground

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Poor-Moderate	2	13	2	Sparsely vegetated land - Ruderal/Ephemeral; Sparsely vegetated land - Tall forbs; Urban - Bioswale; Urban - Intensive green roof; Urban - Facade-bound green wall; Urban - Ground based green wall; Urban - Sustainable drainage system; Urban - Vegetated garden; Intertidal sediment - Littoral coarse sediment; Intertidal sediment - Littoral mixed sediments; Intertidal sediment - Features of littoral sediment; Intertidal sediment - Artificial littoral coarse sediment; Intertidal sediment - Artificial littoral mixed sediments
Poor-Moderate	3	3	0	Sparsely vegetated land - Calaminarian grasslands; Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand
Poor-Moderate	4	24	4	Lakes - Ponds (priority habitat); Lakes - Ponds (non-priority habitat); Lakes - Temporary lakes ponds and pools (H3170); Lakes - Ornamental lake or pond; Urban - Open mosaic habitats on previously developed land; Coastal lagoons - Coastal lagoons; Rocky shore - High energy littoral rock; Rocky shore - High energy littoral rock - on peat, clay or chalk; Rocky shore - Moderate energy littoral rock; Rocky shore - Moderate energy littoral rock - on peat, clay or chalk; Rocky shore - Low energy littoral rock; Rocky shore - Low energy littoral rock - on peat, clay or chalk; Rocky shore - Features of littoral rock; Rocky shore - Features of littoral rock - on peat, clay or chalk; Intertidal sediment - Littoral mud; Intertidal sediment - Littoral biogenic reefs - Mussels; Intertidal sediment - Littoral biogenic reefs - Sabellaria; Intertidal sediment - Artificial littoral mud; Intertidal sediment - Artificial littoral muddy sand; Intertidal sediment - Artificial littoral biogenic reefs; Intertidal sediment - Littoral muddy sand; Intertidal hard structures - Artificial hard structures; Intertidal hard structures - Artificial features of hard structures; Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGGI)
Poor-Moderate	5	5		
Poor-Moderate	6	2		

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Poor-Moderate	7	4		
Poor-Moderate	8	4		
Poor-Moderate	10	21		
Poor-Moderate	12	1		
Poor-Moderate	13	3		
Poor-Moderate	15	8		
Poor-Moderate	16	2		
Poor-Moderate	20	9		
Poor-Moderate	25	1		
Poor-Moderate	30+	4		
Moderate-Good	1	4	0	Urban - Allotments; Urban - Rain garden; Urban - Vacant or derelict land; Urban - Bare ground

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Moderate-Good	2	12	2	Sparsely vegetated land - Ruderal/Ephemeral; Sparsely vegetated land - Tall forbs; Urban - Bioswale; Urban - Intensive green roof; Urban - Facade-bound green wall; Urban - Ground based green wall; Urban - Sustainable drainage system; Urban - Vegetated garden; Intertidal sediment - Littoral coarse sediment; Intertidal sediment - Littoral mixed sediments; Intertidal sediment - Artificial littoral coarse sediment; Intertidal sediment - Artificial littoral mixed sediments
Moderate-Good	3	7	4	Heathland and shrub - Blackthorn scrub; Heathland and shrub - Gorse scrub; Heathland and shrub - hawthorn scrub; Heathland and shrub - Mixed scrub; Intertidal sediment - Features of littoral sediment; Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand
Moderate-Good	4	10	4	Heathland and shrub - Blackthorn scrub; Heathland and shrub - Gorse scrub; Heathland and shrub - hawthorn scrub; Heathland and shrub - Mixed scrub; Intertidal sediment - Features of littoral sediment; Intertidal sediment - Artificial littoral sand; Intertidal sediment - Littoral sand
Moderate-Good	5	2		
Moderate-Good	6	5		
Moderate-Good	7	10		
Moderate-Good	8	5		
Moderate-Good	10	13		

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Moderate-Good	12	4		
Moderate-Good	14	2		
Moderate-Good	15	11		
Moderate-Good	16	2		
Moderate-Good	20	14		
Moderate-Good	30+	7		

Table A.1c – Time to target condition (in years) for creation of hedgerow habitats, summarising data from tab G-6 of the Statutory Biodiversity Metric Calculation Tool

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Poor	1	9	9	Species-rich native hedgerow with trees - associated with bank or ditch; Species-rich native hedgerow with trees; Species-rich native hedgerow - associated with bank or ditch; Native hedgerow with trees - associated with bank or ditch; Species-rich native hedgerow; Native hedgerow - associated with bank or ditch; Native hedgerow with trees; Native hedgerow; Non-native and ornamental hedgerow
Poor	5	4		
Moderate	5	4		
Moderate	10	4		
Moderate	20	4		
Good	12	4		
Good	20	4		
Good	30+	4		

Table A.1d – Time to target condition (in years) for enhancement of hedgerow habitats, summarising data from tab G-6 of the Statutory Biodiversity Metric Calculation Tool

Target condition	Time to target condition	No. of habitats	No. habitats available on WW proposed nominated land	habitat type(s) if target condition achievable in <=4 years
Poor-Moderate	3	4	4	Species-rich native hedgerow - associated with bank or ditch; Species-rich native hedgerow; Native hedgerow - associated with bank or ditch; Ecologically valuable line of trees
Poor-Moderate	6	4		
Poor-Moderate	20	4		
Moderate-Good	2	4	4	Species-rich native hedgerow - associated with bank or ditch; Species-rich native hedgerow; Native hedgerow - associated with bank or ditch; Ecologically valuable line of trees
Moderate-Good	4	4	4	Species-rich native hedgerow with trees - associated with bank or ditch; Species-rich native hedgerow with trees; Native hedgerow with trees - associated with bank or ditch; Native hedgerow with trees
Moderate-Good	10	4		