

The background features a large, abstract graphic composed of overlapping, semi-transparent blue triangles and polygons. The colors range from light sky blue to deep navy blue. The graphic is positioned at the top and bottom of the page, framing the central text.

TA 12.1 Wastewater AMP7 Comparative Industry Performance Assessment Technical Annex

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Navigation: TA.12.1 - Wastewater AMP7 Comparative Industry Performance Assessment

Purpose:

This technical annex captures how we have assessed the current and future performance of other water companies to predict their performance, relative to our forecast performance, so we can target upper quartile performance, where this is supported by our customers and stakeholders. It comprises part of the supporting evidence for chapter 6 - Outcomes, performance commitments & ODIs and chapter 12 - Wholesale Wastewater.

The table below summarises the Ofwat tests that are addressed by the evidence presented in this Annex.

Table 1: Relevant Ofwat tests

Ref	Ofwat test		Comment
Primary Focus Areas			
Delivering outcomes for customers – OC1	How appropriate, well-evidenced and stretching are the company’s proposed performance commitments and service levels?	High-quality plan: Performance commitments set at stretching levels, including for leakage and water efficiency, which should be supported by high-quality evidence that the performance commitments are stretching. Take a robust, stretching approach to developing its bespoke performance commitments and service levels. Approach should be supported by high-quality evidence, including CCG support for the effectiveness of its customer engagement. Propose a robust package of ODIs to incentivise itself to deliver performance commitments to customers. This should use reputational and financial outcome delivery incentives grounded in customer research.	We have used our assessment of the current and future performance of other water companies to predict their performance, relative to our forecast performance, so We can target upper quartile performance, where this is supported by our customers and stakeholders.

Risk and reward package focussing strongly on service delivery.
Ambitious and innovative plan:
Propose innovative and sector-leading performance commitments with stretching levels and an ODI incentive package supporting outstanding achievement and innovation as well as protecting customers against the risk of delivery failure.
Present high-quality evidence on its plans to achieve exceptional service performance.

Introduction

This Technical Annex supports the derivation of ODIs, including medium-term (2018 to 2025) industry performance forecasts that have been used to inform our assessment of industry frontier, upper quartile and average performance for the following common wastewater performance commitments:

- Internal Sewer Flooding (Including Severe weather)
- External Sewer Flooding (Including Severe weather)
- Pollution (Category 1 – 3) excluding clean water
- Collapses of Sewers & Rising Mains failures
- Wastewater Treatment Works Compliance

We have not made predictions for AMP7 comparative performance for the new Developer Services Experience performance commitment, or the risk of Sewer flooding in storm conditions performance commitments. This is because historical information is not yet available and some details of these new measures are yet to be finalised.

Internal Flooding Including Severe Weather

We have proposed that the Customer Property Sewer Flooding Internal performance commitment now include performance during severe weather events. We have undertaken an analysis of companies' reported internal flooding events before and after the impact of severe weather events for the four year period 2013-2017. This shows the impact of weather increases the number of flooding events by an average of 9%. It is therefore a more demanding measure of resilience and one which better reflects the requirements of our customers.

Our future assessments of industry performance are developed on the basis that, during AMP7, poorly performing companies have the need and ability to improve at an increased rate compared to the higher performing companies. This would result in the industry all improving but with a narrower gap between frontier and lower quartile.

Our estimates of future industry internal flooding performance projections are based on trends of historic performance before the impact of severe weather. We have assumed future performance improvements are delivered in accordance with the following assumptions:

- Companies already delivering upper quartile (or above) performance obtain a yearly improvement of 1.5% until the end of AMP7.
- Companies delivering above average but less than upper quartile performance increase performance by 2% per year,
- Companies currently delivering below average performance improving at a yearly rate of 5% each year until the end of AMP7.

We have then taken these projections and increased them by 9% to convert them into future performance projections which include the impact of severe weather (based on the analysis described above). Our industry projections are shown below in Figure 1:

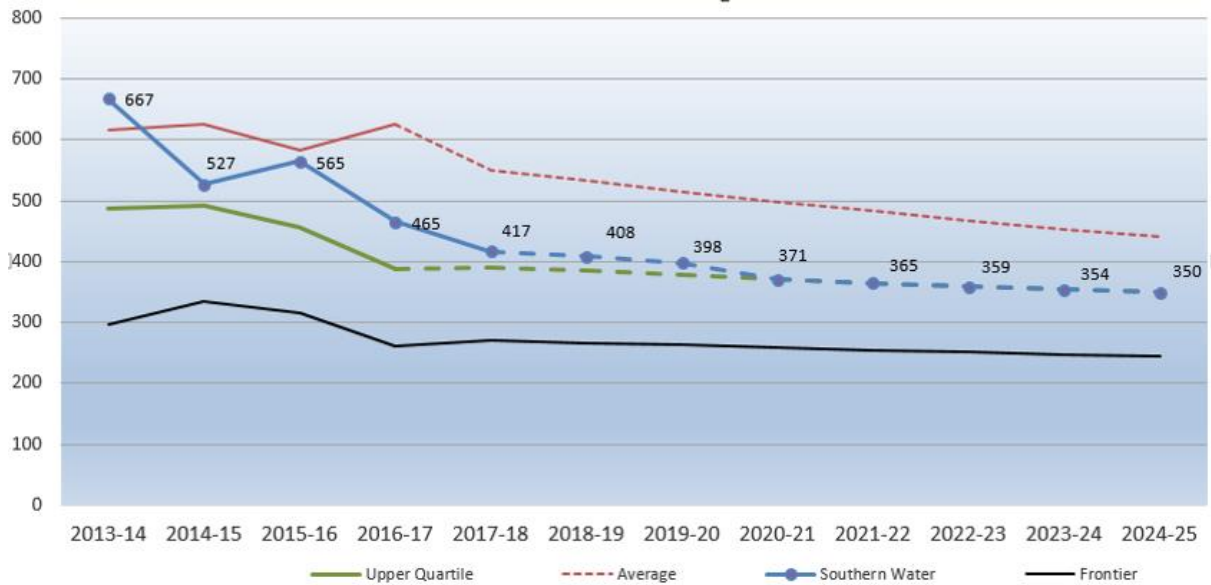


Figure 1: Internal Flooding Including severe weather 2013-2025

Performance information of all companies has been normalised on the basis of numbers of properties served. This allows for a better comparison of performance. Our conclusions are summarised below in Table 2:

Table 2: Predicted Industry Performance for Internal Flooding (including impact of severe weather events).

	2016-17	2024-25
Frontier Performance	260	244
Upper Quartile Performance	388	350
Industry Average Performance	625	441
	Our 16-17 position = 6th	Our 24-25 position = 4 th
Southern Water actual and projected performance	465	350

External Flooding

In common with the approach taken with Internal Flooding of customers' properties the external flooding performance commitment also includes the impact of severe weather events. However as External Flooding (curtilage only – only including flooding within the curtilage of the property) reporting only began in 2016-17, future industry performance projections are much less certain. We have used the methodology outlined below.

Our future assessments of industry performance are developed on the basis that during AMP7 poorly performing companies have the need and ability to improve at an increased rate compared to the higher performing companies. This would result in the industry all improving but with a narrower gap between frontier and lower quartile.

Our estimates of future industry external flooding performance projections are based on trends of historic performance before the impact of severe weather. We have assumed future performance improvements are delivered in accordance with the following assumptions:

- Companies already delivering upper quartile (or above) performance obtain a yearly improvement of 1% until the end of AMP7.
- Companies delivering above average but less than upper quartile performance increase performance by 2% per year,
- Companies currently delivering below average performance improving at a yearly rate of 5% each year until the end of AMP7.

We have then taken these projections and increased them by 9% to convert them into future performance projections which include the impact of severe weather (see internal flooding, above). Our industry projections are shown below in Figure 2:

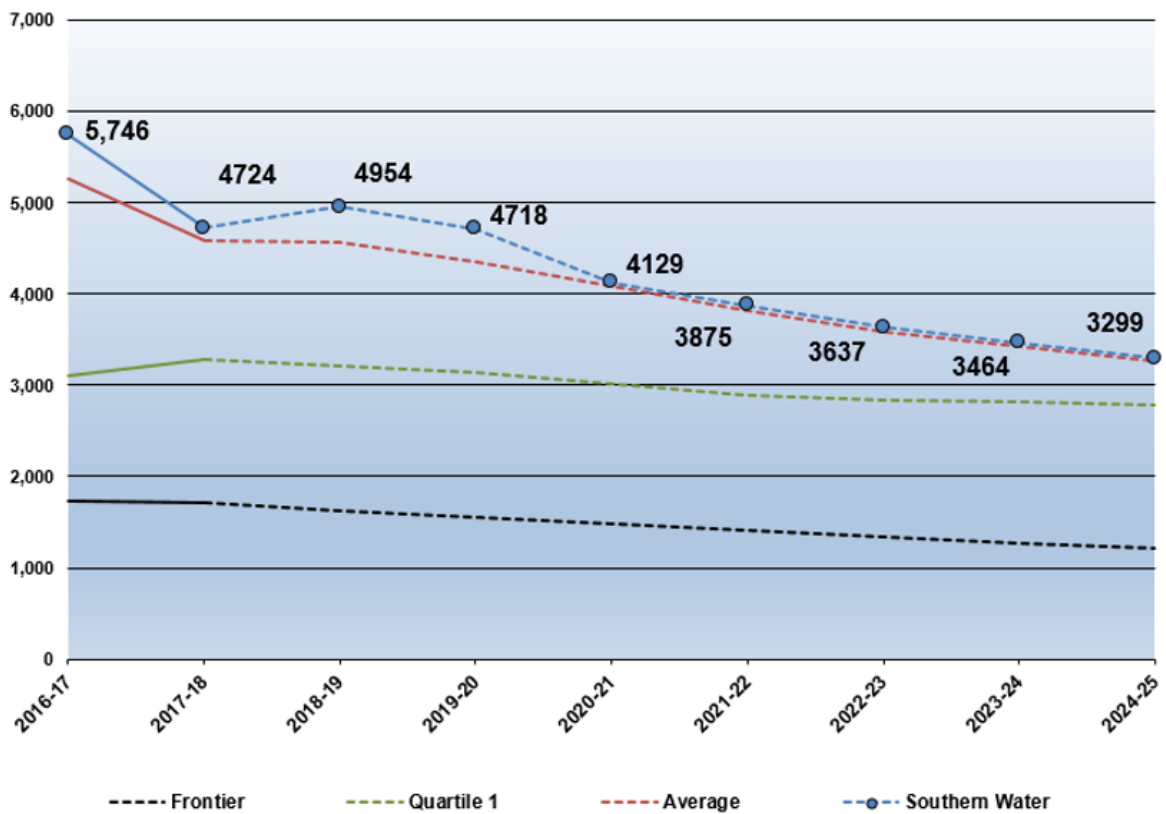


Figure 2: External Flooding Including severe weather to 2016-2025

Performance of all companies have been normalised on the basis of numbers of properties served. This allows for a better comparison of performance. Our conclusions are summarised below in Table 3:

Table 3: Predicted Industry Rankings for External Flooding (including impact of severe weather events).

	2016-17	2024-25
Frontier Performance	1,729	1,213
Upper Quartile Performance	3,112	2,788
Industry Average Performance	5,256	3,257
	Our 16-17 position = 6th	Our 24-25 position = 6th
Southern Water actual and projected performance	5,746	3,299

Wastewater Pollution Incidents (category 1-3)

The wastewater pollution incident performance commitments (category 1 to 3) exclude pollution resulting from clean water main bursts. Assessments of Industry performance is derived on the basis that lower performing companies are able to improve at an increased rate compared to higher performing companies.

Industry projections are based on 2016/17 reported performance levels. We have assumed future performance improvements are delivered in accordance with the following assumptions:

- Companies already delivering upper quartile (or above) performance obtain a yearly improvement of 1% until the end of AMP7.
- Companies delivering above average but less than upper quartile performance increase performance by 2% per year.
- Companies currently delivering below average performance improving at a yearly rate of 5% each year until the end of AMP7.
- As the poorest performing company is an outlier, we have assumed the company has an opportunity to improve at 10% per year.

Our industry projections are shown below is Figure 3:

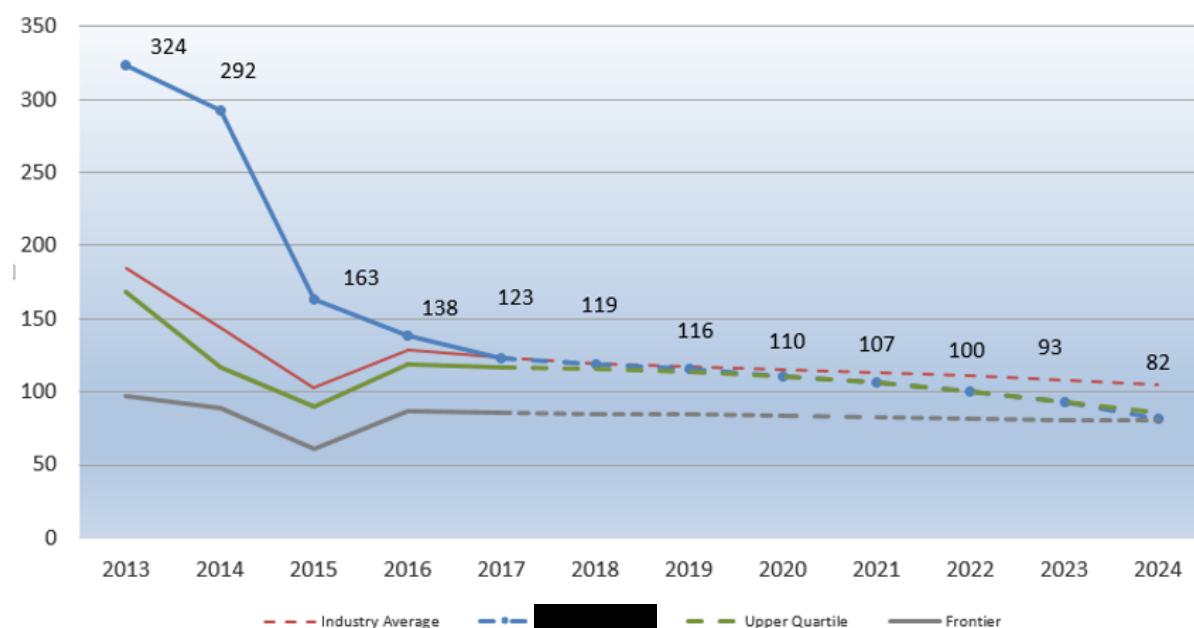


Figure 3: Wastewater Pollution Incidents (Category 1-3):2013 to 2025.

Performance of all companies have been normalised on the basis of numbers of properties served. This allows for a better performance comparison. Our conclusions are summarised below in Table 4:

Table 4: Predicted Industry Rankings for Wastewater Pollution Incidents (Category 1-3).

	2016	2025
Frontier Performance	87	80
Upper Quartile Performance	118	85
Industry Average Performance	128	105
	Our 2016 position = 7th	Our 2024 position = 4th

Sewer Collapses (including rising main failures)

Due to changing reporting practices we do not have industry data for sewer collapse and rising main failures for the two year period 2016-2018. However, as reporting definitions have broadly reverted to those used in the past we have good industry comparative data for the three year period 2013- 2016

Our industry projections are based on the 2013-2016 reported performance levels. From 2018 onwards we have assumed future performance improvements are delivered in accordance with the following assumptions:

- Companies already delivering upper quartile (or above) performance obtain a yearly improvement of 0.05% until the end of AMP7.
- Companies delivering above average but less than upper quartile performance increase performance by 1% per year.
- Companies currently delivering below average performance improving at a yearly rate of 5% each year until the end of AMP7.

Our industry projections are shown below in Figure 4:



Figure 4: Sewer collapses (including rising main failures) 2013-2025

Performance of all companies has been normalised on the basis of numbers of properties served. This allows for a better comparison of performance. Our conclusions are summarised below in Table 5:

Table 5: Predicted Industry Rankings for Sewer collapses (including rising main failures).

	2016	2025
Frontier Performance	3.21	3.85
Upper Quartile Performance	6.11	5.40
Industry Average Performance	10.77	8.69
	Our 2016 position = 7th	Our 2024 position = 4th
Southern Water actual and projected performance	6.11	5.70

Wastewater Treatment Works (WTW) Compliance

For AMP7 we are proposing to rationalise the way we measure our performance of wastewater compliance by combining the two AMP6 performance commitments into a single measure, one that reflects both the total number and relative size of failed treatment works (as measured by population equivalent). The principles behind this proposal are:

- We would align the definition of a failed works, basing it on the more comprehensive set of measures used for numeric compliance. This is far more transparent for stakeholders and simpler to communicate to our operational workforce, effectively a 'fail is a fail'.

- We would align the penalty threshold with the Environment Agency’s (EA) definition of a 4 star works, as used in their annual Environmental Performance Assessment. This demonstrates our commitment to improve performance and aligns our measures of success.
- Any penalties would take account of the number of customers affected by a failed works, with a simple cost per customer served.

The section of a penalty threshold not only aligns with the EA’s definition of a 4 star works but also equates to industry upper quartile performance.

Figure 5 below presents the level of performance we commit to achieving against the treatment works compliance customer measure in AMP7. As defined by the EPA methodology, in AMP7 we will have 328 permitted discharges that contribute towards performance against this target, 309 on WTWs and 19 on WSWs.

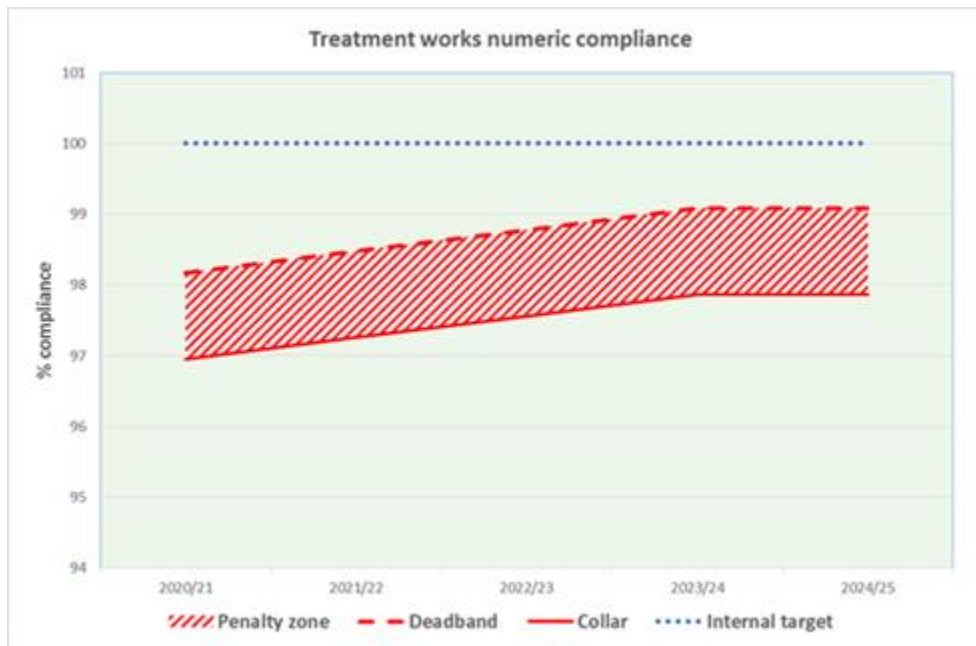


Figure 5: Treatment works numeric compliance. AMP7 projected

Our performance commitment is to aim for 100% compliance at our treatment works. Our forecast performance is 99.09% which is equal to 3 Treatment Works in breach of their environmental permits per year of AMP7. This meets the Environment Agency’s assessment criteria of a 4 star company and aligns to upper quartile industry performance.