



# Annual Performance Report 2020-2021

## Additional Commentary

This document contains additional technical commentary associated with Southern Water's 2020-21 Annual Performance Report data tables, and commentary addressing specific narrative requirements from Ofwat's Regulatory Accounting Guideline 3.12.

All information in our published Annual Performance Report data tables has been subject to assurance, as set out in our Data Assurance Summary. The additional narrative provided in this document is provided to aid understanding of the published data but has not itself been subject to external assurance

### Required additional commentary

***4.23: The lines in Tables 4L and 4M generally correspond to the standard lines in the PR19 business plan tables WS2 and WWS2 respectively. Where lines from the business plan tables have no corresponding lines in Tables 4L or 4M it is because these lines were either not used by companies or by just one or two companies. Tables 4L and 4M have lines for companies to insert their own expenditure purpose categories. If companies would have allocated expenditure to any of the standard lines in the business plan tables that have not been copied across to RAG4.09 tables, they should instead allocate the expenditure to these 'freeform' lines. If these lines have been used, companies should provide commentary to explain them.***

No additional purpose categories have been added to table 4L and we have added the following purpose categories to table 4M:

- Water Framework Directive managing uncertainty special case – within our AMP 6 plan we included a number of schemes under this category, the costs reported in this line for 2020–21 largely relate to two schemes from AMP 6 at Hailsham North and Hailsham South.
- AMP 6 bathing water enhancements
- NEP groundwater schemes – within our PR14 and PR 19 business plan submissions we included groundwater schemes. As there is no specific row within the table for these we have reported them separately within the table. The costs relate to groundwater work in relation to our Thanet sewers (Phase 2 in AMP6 and Phase 3 in AMP7).
- NEP – Flow 1 schemes – these costs relate to schemes from our AMP 6 plan



**4.24: In table 6A.13 to 6A.27 companies are required to report water treatment works that have not been used in the year but have not been decommissioned. Companies should provide commentary on any instances where this is the case**

There are a number of Water Supply Works (WSW) that are included in the report but which have not been used in the year.

(i) The following sites are listed as “In service WSW” - St Lawrence, Lewes Road, Shalcombe and Rogate. These WSW are not expected to be brought back into supply in the short term and need to be re-categorised as “Mothballed” or “Decommissioned” and therefore removed from the list of in service WSWs in the future.

(ii) WSW sites at Keycol, Three Crutches, Weir Wood and Falmer require maintenance works to be completed in order to be put back into supply.

**4.25: Companies should provide commentary on how they have calculated population and household growth in table 4R including how they have taken account of the 2011 census.**

The population forecast is created by Experian Analytics and takes account of the 2011 census and the Office for National Statistics’ updated population projections. Each year the forecast is then compared against the latest published Office for National Statistics mid-year forecast to check accuracy.

**4.26: Companies are encouraged to provide commentary on how they interpret ‘structurally refurbished’ in completing line 7C.15. If a company is unable to identify the actual length of rising main that has been replaced or structurally refurbished, then it should submit an estimate and fully explain the methodology used and the assumptions made in the accompanying commentary.**

Structural refurbishment comprises a permanent solution such as pipe replacement or bespoke in-pipe renewal such as lining with an expected design life exceeding 50 years. Refurbishment is only claimed where the affected length is greater than 50m in accordance with our Structural Sewer Rehabilitation Policy document.

We do not estimate any rising mains lengths.

**4.27: Companies should explain the basis of its estimate for line 8A.4 of all the untreated sewage sludge (primary, secondary, tertiary) produced by in-area wastewater treatment processes in the report year, and which is produced as a result of treating non-appointed liquid wastes through appointed wastewater treatment assets**

The calculations for sludge TDS generated from non-appointed liquid wastes treated through our treatment works are based on the following:

- For domestic tankered waste a Population Equivalent (PE) has been established from the volumes received. These PEs have been applied to the receiving site’s sludge make/PE to calculate the amount of sludge arising from these imports.
- The commercial tankered waste annual BOD data has been used and converted to a PE for each receiving site, assuming 60 gms/BOD/day. The calculated PE for these wastes has been applied against the sites’ sludge make /PE to generate the amount of sludge from these imports.
- The commercial tankered waste annual BOD data has been used and converted to a PE for each receiving site, assuming 60 gms/BOD/ day. The calculated PE for these wastes has been applied against the sites’ sludge make/PE to generate the amount of sludge from these imports.



**4.28: In lines 8A.10 and 8A.13 we ask for a measure of intersiting work done by tanker. In line 8A.11 we ask for a measure of intersiting work done by truck. In lines 8A.15 and 8A.18 we ask for a measure of work done in sludge disposal operations by tanker. In line 8A.16 we ask for a measure of work done in sludge disposal operations by truck. If actual road distances are not available companies should estimate the road distance and state in the commentary if this is the case.**

Radial mileages for all data sets relating to haulage movements are taken from the actual radial mileage distances submitted by our waste and recycling contractor. These are converted to 'actual kms' by utilising a conversion factor to get from miles to km and then a factor of 1.6 to convert from radial distance to 'actual'. This is in line with previous reporting years.

**4.29: In table 8A where both the incumbent and a third party service provider undertake different stages of sludge treatment, e.g. dewatering followed by lime stabilisation, sludge quantities should not be doubled-counted and should be reported either in line 8A.1 or line 8A.2, not both. Where this situation occurs the companies should report on the quantity involved and the line to which it has been allocated in the commentary.**

N/A. Southern Water undertakes all its sludge treatment and dewatering activities.

**4.30: Companies should explain the basis of their estimate of total sewage sludge produced from non-appointed liquid waste treatment reported in line 8A.4.**

See commentary above

**4.34: Tables 4L and 6C require companies to provide details of the expenditure and related benefits delivered through their internal interconnection programmes. We expect companies to include narrative commentary to report on progress and the deliverables in this areas. This should include detail of installed pipe material, length, diameter and capacity, in particular where these solutions do not provide supply-demand balance benefits but solve intra-zonal deficits. Companies should include explanation of any variances from their business plan and water resources management plan proposals.**

Both entries in 4L and 6C have been recorded as a nil return as there has been no activity planned or otherwise in the 2020-21 financial year

**4.35: Table 6B requires companies to report their total annual leakage. This figure should be derived from the same leakage data that is used in both leakage performance reporting (as an input to the three-year average calculation) and annual water resources management plan reporting. Companies should include explanation of any variances from their business plan and water resources management plan proposals.**

Leakage for 2020–21 is 98.4 MI/d which is below the year-end forecast of 99.6 MI/d contained in our 2019 Water Resources Management Plan. However, our three-year average total leakage, which is the basis of our performance commitment was above target, resulting in an underperformance payment. During last year we maintained the planned level of leakage activity, but the need to maintain social distancing meant that we were unable to increase the level of resources in the field to respond to higher leakage resulting from higher network pressure (associated with COVID-19 related changes in demand patterns).

**4.36: Table 6D requires companies to provide detail of their smart metering programmes. We understand that a number of alternative smart meter technologies can be adopted by companies. Companies should include narrative commentary explaining the smart metering technologies it is utilising and the capabilities and benefits these provide.**

We have a current meter penetration level of 87.6%, with 54.9% of residential customers already having a smart meter installed. We are developing meter replacement plans to increase the level of smart meter penetration from 2022 onwards.



**4.37: We expect companies to include narrative commentary to explain how the metering and leakage figures reported in Table 6D relate to their business plan and water resources management plan forecasts.**

See above responses 4.35 & 4.36

**Information on the Reporting and Assurance requirements (PSR Reach and PSR Data-Checking) for Table 3F as per Ofwat response to APR 2020-21 query SRN 006**

The number of customers on the Priority Services Register (PSR) has almost doubled in the past 12 months. This is largely due to proactive campaigning during the first lockdown (we contacted all customers we held an email address for to make them aware of the PSR), proactive campaigning following water supply outages in the impacted area and data sharing agreements with SSEN and UKPN. Although we have not met the required level to keep us on track to meet the Common Performance Commitment level at the end of the AMP (which remains a challenging target) we have made significant improvements since the previous year.

In terms of data quality, the calculation of attempted and actual contacts has an element of manual processing as we did not have a date stamp in relation to our PSR accounts until April 2020. For the purposes of the Common Performance Commitment, we have deemed all customers on our PSR prior to April 2020 to have been there for over two years and therefore require contacting. In relation to our vulnerable customer satisfaction survey we have updated the methodology since our 2017-18 survey to make the survey more robust and also to provide a baseline for the subsequent surveys; it also allows for much more detail to be captured around satisfaction or dissatisfaction.

Additional data requirements – 85 customers requested to be removed from the PSR, whilst 10,050 were added. 4,968 customers receive communications tailored to their needs and 11,871 have an indicator that they may have mobility/access issues (we have no way of tracking how many of those customers required such assistance). The remaining 19,602 all have other needs.

All PSR customers will receive help in a supply interruption (again, we don't currently track how many actually receive this assistance) and our reporting does not currently include those with security measures on their account (such as a password).



## Data trends, anomalies and additional commentary in relation to non-financial data

### Table 3C.5

It should be noted that numbers for 2019-20 and 2020-21 are not like-for-like comparisons. Last year was based on written complaints only. There is no like-for-like comparison of all channels data as we were only required to log telephony complaints from October 2019. The numbers submitted for the purpose of this audit are all complaints, through all channels.

### Table 6B.1-3 & 20-26

Applying the updated guidance from Ofwat RAG 4.09 table definitions in Table 6B and guidance in Appendix 2 some quantities and capacities have changed. Potable water pumping stations (definition changed, hence nil reported previous year. However, these lines are match the same definitions in query raised by Ofwat on 7 October 2020 (SRN-APR-CA-007) and the figures align with those provided in response as opposed to the figures in the 2019-2020 APR.

### Tables 5A and 6A

The proportion of Distribution Input (DI) derived from different sources has been calculated differently this year. Last year, the abstraction split was used to derive the DI proportion. This year, the individual site DI has been broken down into different source categories. This is a more accurate apportionment.

The number of sources has increased. A significant number of groundwater sources have been identified as independent sources. These multiple individual sources were previously counted as one source as they feed just one WSW.

Several river abstractions have been included which were previously omitted as they fed a reservoir or river, not directly to a WSW. Bewl SWR has been included following updates to Ofwat guidance.

A number of WSW have been removed from the asset count as they require blending downstream to become potable.

Some sites have changed treatment category due a material process change such as Patchamand Gore. Rogate treatment category has been corrected.

Peak Week Production Capacity assessments have been ongoing over the year which have impacted WSW band size distribution.

### Table 5A.18

The number of service water reservoirs has reduced from seven to four, due to the introduction of new "Balancing Reservoirs" in Table 6A.

### Table 5A.23

On site flow values now calculated from individual abstraction assets flowmeters rather than on as site level where possible. This has also been repeated on for the head values so each individual abstraction point has its own head figure rather than a site level one.

### Table 6A.6

Due to the exceptionally high rainfall of 2020 reduced utilisation of raw water transports throughout the year.

Water Treatment: the previous reporting methodology included taking the resource head value and multiplying it by the distribution flow of each site, in the absence of an ability to calculate the pumping head across treatment assets. Additional data has now been gathered and used to calculate treatment head more accurately. The increase in total DI has also contributed towards this increase.





**Table 6B.28**

In the absence of some key operational WSWs (long-term unplanned outage at Weirwood and Falmer) water is being pumped further distances in order to ensure customer supply. The increase in total DI has also contributed towards this increase.

**Table 7C.22**

As part of a GIS upgrade Southern Water is improving its core GIS base data and mapping. The first step has been to cautiously estimate the missing rising mains. This results from the adoption of former private pumping stations between October 2016 to present. These estimated lengths of missing rising mains were generated through GIS analysis taking the X, Y location of the adopted pumping station and automatically finding the nearest mapped sewer in a straight line, then assuming this distance represents the rising main length. Throughout the next few years of AMP7 we are looking to further improve the mapping and location of these rising mains through a combination of traditional surveying and new innovative techniques. This will be combined with other improvements to the mapping base data that will continue over the next few years. This line contains an additional estimated 72.6 km of previously unmapped adopted rising mains as a first step.

**Table 7E.1**

The difference in Total sewerage catchment area from last year and this year is due to the reconciliation with billing areas completed last year. The data is now more accurate.