

Service delivery report 2019-20



Ofwat

Introduction

The service delivery report provides comparative information on both the total expenditure (totex) and the outcomes delivered to customers, as reported by the 17 largest companies within England and Wales.

This report provides comparative information on important areas of performance. It should not be read as a final statement on performance, but is intended to supplement the more detailed information in companies' Annual Performance Reports (APRs). This information will help us – and stakeholders such as customer groups, environmental groups and investors – to hold companies to account.

This report is based on performance data for the last year of the 2015-20 price control period and also demonstrates trends in totex and outcomes across the five-year control period.

Similar to the report in 2018-19, we:

- provide **comparative ranking** of companies' performance
- present **overall performance** on total expenditure and outcome delivery in a single, tabulated view; and
- examine **longer-term changes** on key indicators

For 2019-20 we also include per capita consumption in our assessments of outcome delivery. We present an assessment of the shadow customer measure of experience (C-MeX) instead of service incentive mechanism (SIM) and include commentary on the developer services and business retail markets.

This year, we also focus more closely on two areas – leakage and environmental performance. For environmental performance, we set out a selection of some of the company specific performance commitments companies were set for 2015-20 and how they have performed. By their nature these are less comparable across companies.



Key messages

Our analyses of companies' relative performance in 2019-20 demonstrates that **Wessex Water** is a better performing company for a second consecutive year. In 2019-20 it is joined in the better performers category by **Northumbrian Water**, **Bristol Water** and **South Staffs Water**. As in 2018-19, there are aspects of leading performance for most companies, as many rank in the top 25% of performers in at least one key area. However, the delivery of services by **Hafren Dyfrdwy** and **Thames Water** remains notably poorer than most companies and in 2019-20 they are joined in the poorer performers category by **Southern Water** and **Affinity Water**



The sector overspent against its total wholesale expenditure allowance by 12% in 2019-20 while over the 2015-20 price control period it overspent against cumulative allowances by 1%

Companies typically underspent against their allowances in the first two years of the price control followed by year-on-year increases in the final three years. The greatest overspend in a single year occurred in 2019-20, driven partly by bringing forward investment from 2020-25



The sector has reduced leakage by 7% in 2019-20, with some companies delivering reductions in excess of 10%

This is in stark contrast to the lack of progress delivered between 2012-13 and 2018-19



Most companies delivered a reduction in per capita consumption in 2019-20, but since 2012-13 the sector's performance has deteriorated by 2%



Supply interruptions and water quality contacts are among the lowest since 2012-13

Five companies outperform 2020-21 performance commitment levels on supply interruptions, with SES Water outperforming the 2024-25 performance commitment level. Water quality contacts have reduced by 10% in 2019 and 26% in comparison to 2012



Performance on internal sewer flooding and pollution incidents has deteriorated after stagnating in recent years

Fewer companies achieve their performance commitment levels in 2019-20 in comparison to previous years

Companies in England and Wales have generally improved performance in water but, in contrast to English companies, those in Wales typically improve wastewater performance



Our method of assessing companies' performance

We have assessed and compared company performance across key service areas and total expenditure (wholesale and residential retail).

For total expenditure we use cumulative performance since 2015, given the movement of expenditure across years. For outcomes we examine performance in the most recent year, 2019-20. We also indicate the direction of change from 2018-19. For example when performance has improved we use this symbol ▲, whereas where it has deteriorated we use this symbol ▼.

We have grouped companies into three categories (better performers, average performers, and poorer performers) based on their in the round performance in relative assessments:

- **Northumbrian Water, Wessex Water, Bristol Water** and **South Staffs Water** are better performers. These companies demonstrate sector leading performance in a large number of areas and generally meet the standards set by the rest of the sector in the remaining areas.
- **Hafren Dyfrdwy, Thames Water, Southern Water** and **Affinity Water** are poorer performers. The performance of these companies falls short of the standards set by the rest of the sector in a large number of areas.
- The performance of the remaining companies is mixed and they represent average performance of the sector overall.

During the 2015-20 price control period, most companies currently had a set of broadly comparable performance commitments with similar, but not identical, definitions. To allow an indicative comparison between companies of different size we have normalised performance across these PR14 performance commitments, for example by kilometre of water main or sewer. For the next price control period, 2020-25, companies have a set of common performance commitments with consistent definitions. This will increase comparability.

Overall assessment of efficiency and effectiveness of service delivery

Company	Total expenditure		Outcomes								
	Wholesale	Retail	Customer service ²	Meeting performance commitments	Earning financial incentives	Leakage	Water use ²	Supply interruptions	Water quality contacts	Internal sewer flooding	Pollution incidents
Better performance											
Northumbrian Water				▲				▲	▲		
Wessex Water					▲			▼	▼		
Bristol Water				▲	▲▲	▲		▲	▲	-	-
South Staffs Water	▲			▲	▲					-	-
Average performance											
Anglian Water				▼	▼▼			▼			
Dŵr Cymru										▲	▲
Severn Trent Water ¹						▼					
South West Water					▼					▼	
United Utilities				▼	▼						▼
Yorkshire Water				▲		▲					▲
Portsmouth Water										-	-
South East Water	▲					▼				-	-
SES Water				▲				▲▲		-	-
Poorer performance											
Hafren Dyfrdwy ¹											
Thames Water											
Southern Water	▼			▼				▼		▲	
Affinity Water	▼			▼				▼		-	-

The table demonstrates our overall categorisation of companies based on their in-the-round performance on relative assessments.

Wessex Water remains in the better performers category for a second consecutive year. **Hafren Dyfrdwy** and **Thames Water** remain in the poorer performers category for a second consecutive year.

Key		
Top 25%	▲	Moves up a category
Middle 50%	▲▲	Moves up two categories
Bottom 25%	▼	Moves down a category
	▼▼	Moves down two categories

¹ The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other. A comparison with 2018-19 performance on each measure is therefore not provided for these companies.

² In our 2019-20 analysis of normalised performance we have used a new measure of customer service (C-MeX) and we have introduced the assessment of water use. Therefore a comparison with categorisations in 2018-19 is not provided for these measures.



Water and wastewater companies in England and Wales

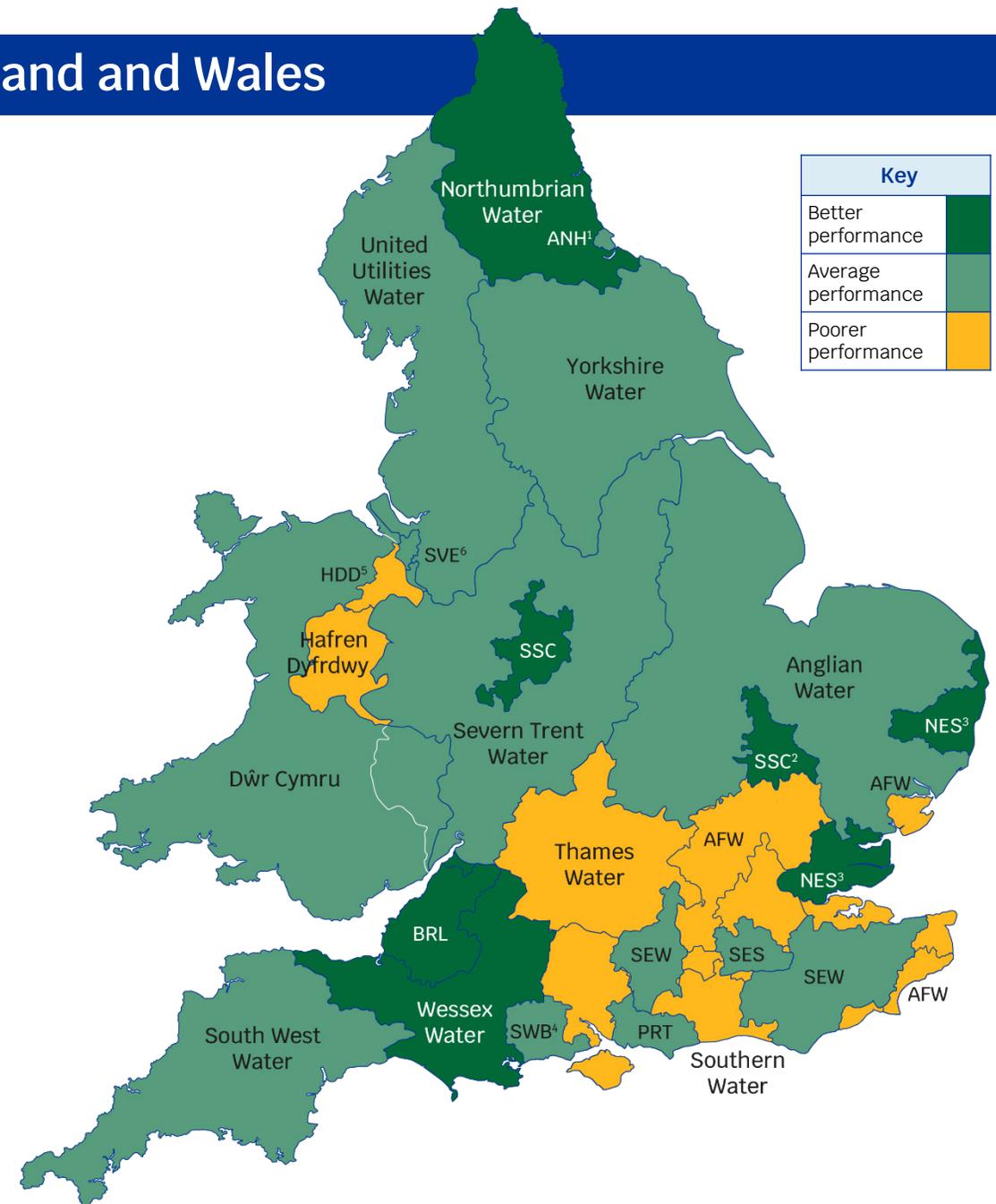
Water and wastewater companies

Anglian Water	ANH
Dŵr Cymru	WSH
Hafren Dyfrdwy	HDD
Northumbrian Water	NES
Severn Trent Water	SVE
South West Water	SWB
Southern Water	SRN
Thames Water	TMS
United Utilities Water	UUW
Wessex Water	WSX
Yorkshire Water	YKY

Water only companies (wastewater provider/s)

Affinity Water	AFW (ANH/TMS/SRN)
Bristol Water	BRL (WSX)
Portsmouth Water	PRT (SRN)
South East Water	SEW (TMS/SRN)
South Staffs Water	SSC (SVE)
SES Water	SES (TMS/SRN)

1. Water services provided under the Hartlepool Water name.
2. Water services provided under the Cambridge Water name.
3. Water services provided under the Essex & Suffolk Water name.
4. Water services provided under the Bournemouth Water name.
5. Hafren Dyfrdwy provides water services only in this area.
6. Severn Trent Water provides water services only in the area.



Underspend and overspend: 2015–20 total wholesale expenditure performance

Company	Cumulative actual wholesale totex (£m)	Cumulative wholesale totex allowance (£m)	Cumulative performance 2015–20
Anglian Water	3,821	4,160	▼ -8%
Dŵr Cymru	2,708	2,552	▼ 6%
Hafren Dyfrdwy ¹	115	113	- 2%
Northumbrian Water	2,152	2,298	▼ -6%
Severn Trent Water ¹	5,475	5,505	- -1%
South West Water	1,421	1,686	▼ -16%
Southern Water	2,613	2,626	▼ -0%
Thames Water	8,065	7,408	▼ 9%
United Utilities	5,640	5,288	▲ 7%
Wessex Water	1,622	1,769	▼ -8%
Yorkshire Water	3,529	3,422	▼ 3%
Affinity Water	1,087	1,063	▼ 2%
Bristol Water	426	422	▼ 1%
Portsmouth Water	138	138	▼ -0%
South East Water	742	777	▼ -4%
South Staffs Water	390	387	▼ 1%
SES Water	219	222	▼ -1%

Key

2019–20 performance compared to 2018–19	Relative performance
Improved ▲	Top 25%
Stable ◀▶	Middle 50%
Deteriorated ▼	Bottom 25%

Companies are responsible for their actual spend and can either outperform (spend less than the allowed amount) or underperform (spend more than the allowed amount).

The table shows company performance against total (cumulative over 2015–20) PR14 cost allowances. Negative figures represent outperformance and positive figures represent underperformance.

We have calculated cumulative out- or under-performance for the wholesale water and wastewater controls combined for the 2015–20 price control period. This compares companies' expenditure in these controls against their respective total allowance.

Some companies outperform cumulative allowances while also reinvesting efficiencies achieved in the earlier years of the price control period. In particular, **Anglian Water** and **South West Water** highlight reinvestment to improve services and resilience and are in the top 25% of companies. **Severn Trent Water**, **Southern Water** and **Portsmouth Water** also report that they have reinvested efficiencies.

Of the eight companies that have overspent, a number report that this is – in whole or part – a result of investing in 2019–20 to deliver for their customers and the environment in the 2020–25; consequently, not all of their expenditure is representative of inefficiency. We conducted assessments during the PR19 price review which exclude these anticipatory investments and indicate which companies have historically incurred inefficient costs: **Dŵr Cymru**, **United Utilities** and **Yorkshire Water** had some of the least efficient costs. All sit within the bottom 25% of performers in our relative assessment.

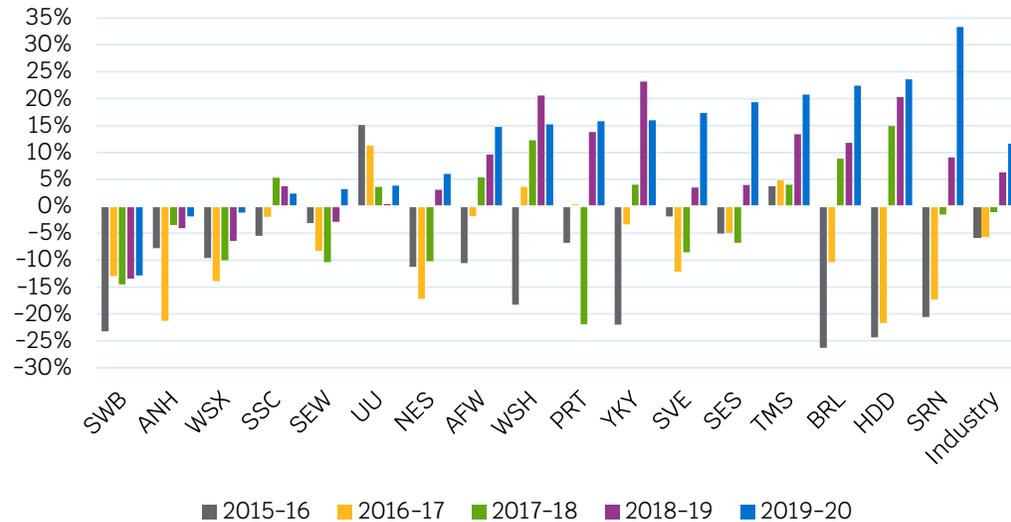
Many companies cite investment in leakage as a driver for increased expenditure in 2019–20 and specifically resources for active leakage detection and control, network monitoring, and mains renewal.

¹ A comparison with 2018–19 performance is not provided for Severn Trent Water and Hafren Dyfrdwy. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other.

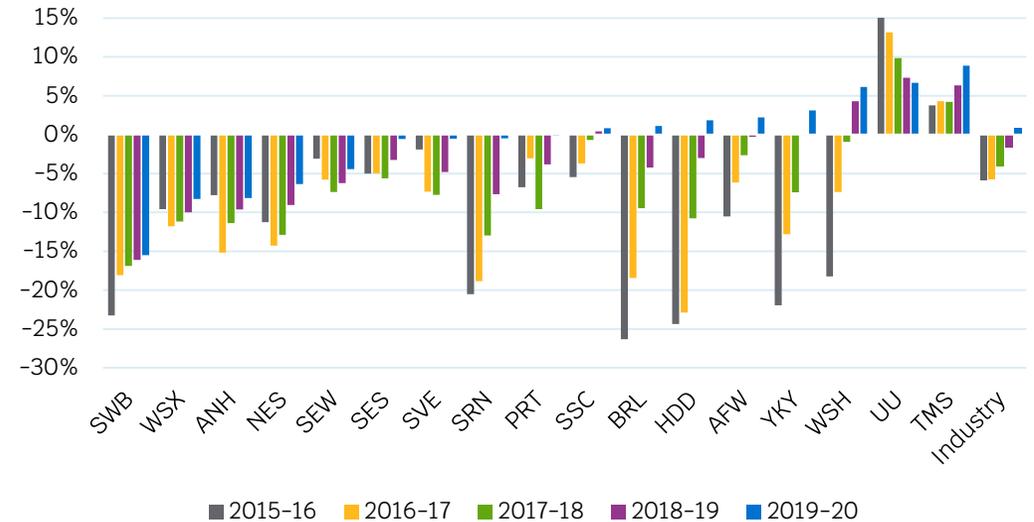


Year-by-year trends in wholesale expenditure performance

Annual outperformance as a % of annual allowed wholesale totex



Cumulative outperformance as a % of cumulative allowed wholesale totex



In previous price controls, by the end of the five year period companies' expenditure was typically aligned with their cumulative allowances in the final year. This has not been the case in 2019-20.

Generally, expenditure across the sector during 2015-20 follows a similar pattern for most companies. The first two years of the price control saw significant underspend; expenditure in 2015-16 and 2016-17 was around 6% lower than allowances. Expenditure then increased year-on-year, out-turning in 2019-20 at 12% higher than allowances. Although there are exceptions and **South West Water**, **Anglian Water** and **Wessex Water** have each underspent in each year of the 2015-20 price control.



Underspend and overspend: cumulative residential retail expenditure performance

Company	Cumulative actual retail totex (£m)	Cumulative retail totex allowance (£m)	Cumulative performance 2015-20	
Anglian Water	387	374	▼	3%
Dŵr Cymru	295	258	▼	14%
Hafren Dyfrdwy ¹	13	13	-	4%
Northumbrian Water	262	266	▼	-1%
Severn Trent Water ¹	480	562	-	-15%
South West Water	156	177	▲	-12%
Southern Water	389	286	▼	36%
Thames Water	892	779	▼	15%
United Utilities	585	575	▼	2%
Wessex Water	155	161	▼	-4%
Yorkshire Water	296	286	▼	4%
Affinity Water	153	133	▼	15%
Bristol Water	50	52	▼	-4%
Portsmouth Water	23	22	▲	3%
South East Water	83	101	▼	-18%
South Staffs Water	72	78	▼	-7%
SES Water	36	27	▼	32%

Key

2019-20 performance compared to 2018-19	Relative performance
Improved	▲ Top 25%
Stable	◀▶ Middle 50%
Deteriorated	▼ Bottom 25%

To improve visibility of performance in the residential retail control, we have calculated an approximate cumulative retail expenditure out- and underperformance. This compares companies' residential retail operating costs with an estimate of allowed retail costs.

The sector has overspent against cumulative retail allowances for 2015-16 to 2019-20, by 4% on average, although there is considerable spread across companies. **Severn Trent Water**, **South West Water** and **South East Water** underspent by more than 10% and **South Staffs Water** by more than 5%.

Most companies reduced outperformance or increased underperformance in 2019-20 in comparison to 2018-19. Many companies advise that increased bad debt provisions are a factor in the increase in costs. They anticipate some customers could find it difficult to pay their bill due to the economic consequences of the COVID-19 pandemic. We note some companies report strong track records of working with customers to manage their debt and therefore reduce the associated cost impacts for their entire customer base, for example **South West Water** and **Severn Trent Water** who are also in the top 25% of companies.

Other drivers of expenditure include investment in systems and teams focussed on improving customer service and restructuring to deliver efficiencies. **SES Water**, **Thames Water** and **Southern Water** – which are in the bottom 25% of companies – each report some of these activities.

Our assessment of efficiency of retail costs at PR19 identified **Yorkshire Water**, **South East Water** and **Anglian Water** as being the most efficient. In contrast, **Southern Water**, **Dŵr Cymru** and **SES Water** were identified as the least efficient and all sit within the bottom 25% of performers in our assessment.

¹ A comparison with 2018-19 performance is not provided for Severn Trent Water and Hafren Dyfrdwy. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other.



Customer measure of experience performance in 2019-20

Company	Shadow year C-MeX scores
Anglian Water	79.01
Dŵr Cymru	82.47
Hafren Dyfrdwy	75.01
Northumbrian Water	79.64
Severn Trent Water	77.65
South West Water	76.35
Southern Water	68.85
Thames Water	65.12
United Utilities	79.76
Wessex Water	81.05
Yorkshire Water	79.20
Affinity Water	72.70
Bristol Water	78.13
Portsmouth Water	82.09
South East Water	73.36
South Staffs Water	77.47
SES Water	72.85

Key	
Top 25%	
Middle 50%	
Bottom 25%	

Customer satisfaction, as measured by the customer measure of experience (C-MeX), is an important measure of how customers feel about the services companies provide. We introduced C-MeX as part of PR19. C-MeX replaces the service incentive mechanism (SIM) as our key tool to drive companies to improve the experience of residential customers, particularly among the best performers.

During 2019-20 (the 'shadow year') C-MeX scores indicate how the sector is currently performing and sets the baseline for analysis in future years, however we did not apply financial incentives. We include analysis of C-MeX in our 2019-20 assessment of companies' overall performance to demonstrate customer service and satisfaction.

Dŵr Cymru tops the C-MeX league table during the shadow year. **Northumbrian Water**, **Wessex Water**, **United Utilities** and **Portsmouth Water**, are in the top 25% of performers; the latter three were also in the top 25% performers in our 2018-19 assessment of SIM.

South East Water, **SES Water**, **Affinity Water**, **Southern Water** and **Thames Water** are in the bottom 25% of performers. The latter four were also in the bottom 25% of performers in our 2018-19 assessment of SIM, with **Thames Water** ranking lowest in both assessments. Many of these companies report they are driving improvements in customer satisfaction and experience by creating customer-focused teams and investing in new technology, for example websites and applications. **Southern Water** reports it has outsourced customer services.

¹ [C-MeX and D-MeX 2019-20 results](#)

² [State of the Market 2019-20](#)

³ [MOSL Annual Market Performance Report](#)

⁴ [MOSL league tables](#)

⁵ [Review of incumbent company support for effective markets \(RISE\)](#)

Markets can deliver benefits for customers, society and the environment in the form of innovation, improved company performance, greater choice and quality of service as well as lower prices.

The developer services market is well established. At PR19 we introduced the developer measure of experience (D-MeX) which is a measure of customer experience for developer services customers, for example property developers requesting a connection. We published shadow D-MeX scores in 2019-20¹. Portsmouth Water achieved the sector's best D-MeX score, while Yorkshire Water had the poorest.

The business retail market expanded in April 2017, allowing eligible business customers of companies whose systems are mainly in England to choose their water and wastewater retail service provider. The market in Wales continues to apply to water services and only for premises which consume 50 Ml or more a year. Wholesalers are subject to Operational Performance Standards (OPS); these relate to bilateral processes between wholesalers and retailers which facilitate efficient functioning of the market, such as prescribing timescales for completing physical connections or meter replacements. Ofwat² and the market operator³ (MOSL) both noted improvement in OPS performance between 2018-19 and 2019-20. MOSL⁴ reports Anglian Water as the water and wastewater provider with the best OPS performance while Southern Water has the poorest. It reports Affinity Water as the company providing only water services with the best OPS performance and SES Water as the poorest.

In 2019-20 we published a review of the incumbent companies' support for effective markets⁵. We concluded that the companies should be more active in working collaboratively with Retailers to make interactions less cumbersome and more efficient.



Meeting performance commitment levels

Company	Performance	
	In 2019-20 compared to 2018-19	2019-20 (% achieved) ²
Anglian Water	▼	66%
Dŵr Cymru	▲	67%
Hafren Dyfrdwy ¹	-	51%
Northumbrian Water	▲	70%
Severn Trent Water ¹	-	62%
South West Water	▼	70%
Southern Water	▼	33%
Thames Water	▲	58%
United Utilities	▼	59%
Wessex Water	◀▶	78%
Yorkshire Water	▲	88%
Affinity Water	▼	70%
Bristol Water	▲	67%
Portsmouth Water	▼	75%
South East Water	▲	50%
South Staffs Water	▲	73%
SES Water	◀▶	71%

Key		
2019-20 performance compared to 2018-19	Relative performance	
Improved	▲	Top 25%
Stable	◀▶	Middle 50%
Deteriorated	▼	Bottom 25%

Performance commitments are the specific promises companies have made to their customers about the services they will deliver. The service each company provides to its customers must meet or exceed this level in order for the performance commitment level to be achieved.

The table shows whether each company has achieved a higher or lower percentage of its performance commitments in 2019-20 in comparison to 2018-19 and the percentage each achieved in 2019-20.

Since 2015-16, the sector has achieved 66% of performance commitment levels. In 2019-20 the sector achieved 64% of performance commitment levels, a slight increase on 2018-19 when it achieved 63%. Performance commitments have become more stretching as the 2015-20 price control proceeded. Consequently, companies have had to improve their performance and deliver more to ensure they meet their commitments.

Yorkshire Water achieved the highest rate of performance commitments at 88% and improves its performance in comparison to 2018-19. **Wessex Water**, **South Staffs Water** and **SES Water** also improve or maintain their performance in 2019-20 and sit within the top 25% of companies; South Staffs Water and SES Water move up from the middle 50% of companies in 2018-19.

Southern Water and **United Utilities** achieved fewer performance commitments in 2019-20 in comparison to 2018-19 and their performance moves to the bottom 25% in 2019-20. **Southern Water** achieved the lowest percentage of performance commitment levels in 2019-20 at 33%.

South East Water's achievement of performance commitments has improved by 56% between 2018-19 and 2019-20, although it remains in the bottom 25% of performers. We note the company has multiple unique customer satisfaction performance commitments with stretching targets.

¹ A comparison with 2018-19 performance is not provided for Severn Trent Water and Hafren Dyfrdwy. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other.

² Based on company reported performance in the Annual Performance Reports.



ODI returns on regulated equity

Company	Performance	
	In 2019-20 compared to 2018-19	Actual return as % of notional regulated equity ³
Anglian Water	▼	-0.32%
Dŵr Cymru	▼	-0.17%
Hafren Dyfrdwy ¹	-	-1.85%
Northumbrian Water	▲	-0.01%
Severn Trent Water ¹	-	0.99%
South West Water	▼	0.18%
Southern Water	▼	-0.17%
Thames Water ²	▼	-2.80%
United Utilities	▼	0.45%
Wessex Water	▲	0.54%
Yorkshire Water	▲	1.26%
Affinity Water	▲	-0.44%
Bristol Water	▲	1.06%
Portsmouth Water	▼	-1.83%
South East Water	▲	0.11%
South Staffs Water	▲	0.77%
SES Water	▲	0.26%

Key

2019-20 performance compared to 2018-19	Relative performance
Improved	▲ Top 25%
Stable	◀▶ Middle 50%
Deteriorated	▼ Bottom 25%

Some performance commitments, typically those of high value to customers, have associated financial outcome delivery incentives (ODIs). Companies that deliver above and beyond for customers can earn outperformance payments, which are recovered from customers. Companies that do not meet their commitment levels can incur underperformance payments which are returned to customers. The size of the payment depends on the size of the company as well as the level of performance.

We have normalised each company's reported ODI performance by its regulated equity to allow comparison between companies. Our analysis shows whether each company has achieved a higher or lower return in 2019-20 in comparison to 2018-19 and the return each achieved in 2019-20.

Nine companies achieved net outperformance payments in 2019-20, an increase from six in 2018-19. **Wessex Water** and **Yorkshire Water** are in the top 25% of performers for a second consecutive year while also increasing the value of their returns in comparison to 2018-19. **Bristol Water's** ODI returns are in the top 25% in 2019-20 after being the worst performing company on this measure in 2018-19. In 2019-20 the company improved its performance on supply interruptions and asset health so that no underperformance was incurred; it also improved leakage which resulted in an outperformance payment.

Proportionate to their size and for the second consecutive year, **Thames Water**, **Affinity Water** and **Portsmouth Water** return the most money to customers due to lack of improvement or deterioration in services. **Anglian Water's** ODI returns were ranked in the top 25% of companies in 2018-19 but in 2019-20 the company's return ranks in the bottom 25%.

¹ A comparison with 2018-19 performance is not provided for Severn Trent Water and Hafren Dyfrdwy. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other.

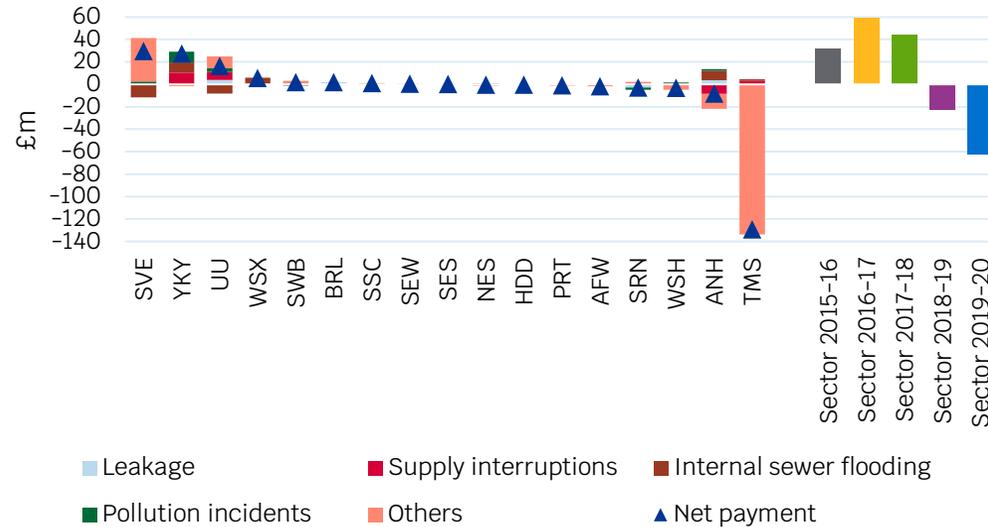
² In 2019-20 Thames Water incurs a £130 million underperformance payment for non-delivery of its Counters Creek strategic storm relief sewer. It spreads this, and other smaller payments, across multiple years and so reports return on regulated equity in its APR of -0.47%.

³ Calculated from incentive payments reported in Annual Performance Reports

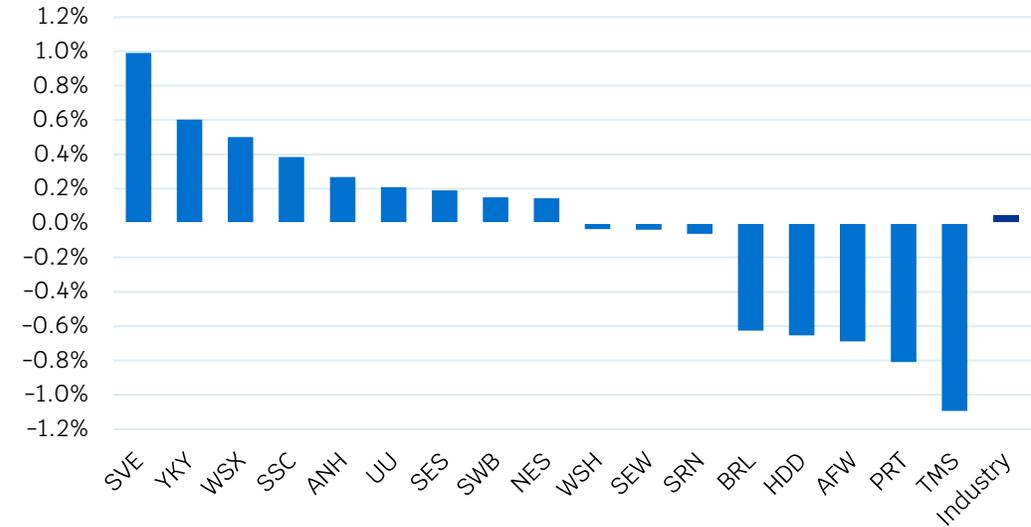


ODI returns during the 2015–20 price control period

2019–20 incentive payments (£ million)¹



2015–20 average RoRE performance on outcomes



During 2019–20 the sector incurred a net underperformance payment of £62 million, the largest to date. However, excluding the large underperformance payment incurred by Thames Water for non-delivery of its Counters Creek strategic storm relief sewer, the sector has incurred net outperformance of £67 million.

Over the five-year price control period the sector has achieved net outperformance of £50 million. This includes net outperformance on supply interruptions (£12 million); internal sewer flooding (£67 million); and pollution incidents (£61 million). However it has underperformed on leakage, incurring £40 million of net underperformance, including £35 million of underperformance incurred by Thames [in 2017–18 following our enforcement action](#), where the company’s underperformance payments were not limited to within a pre-determined range.

³ Using incentive payments in 2019–20 as reported in Annual Performance Reports



Leakage performance in 2019-20

Company	Performance against targets			Relative performance (2019-20)
	In 2019-20 and compared to 2018-19	2019-20 performance (ml/d)	2019-20 target (ml/d)	Total m ³ per km of main
Anglian Water	◀▶	185.00	192.00	4.71
Dŵr Cymru	◀▶	167.90	169.00	6.06
Hafren Dyfrdwy ¹	-	5.90; 6.87	6.30; 7.70	4.87
Northumbrian Water ²	◀▶	134.80; 63.20	137.00; 66.00	7.56
Severn Trent Water ¹	-	401.00; 3.50	416.30; 4.50	8.60
South West Water ³	◀▶	84.00; 18.30	84.00; 20.00	5.79
Southern Water ⁴	-	91.30	87.00	6.74
Thames Water	▲	595.00	606.00	18.81
United Utilities ⁵	◀▶	446.20	462.65	10.53
Wessex Water	◀▶	61.40	66.50	5.10
Yorkshire Water	◀▶	270.80	287.10	8.49
Affinity Water	▲	162.10	162.20	9.66
Bristol Water ⁴	▲	40.90	43.00	5.41
Portsmouth Water ⁴	◀▶	23.58	29.80	7.02
South East Water	◀▶	86.40	88.10	5.86
South Staffs Water ²	▲	68.91; 12.78	70.50; 13.50	9.52
SES Water	◀▶	23.90	24.00	6.80

Our analysis demonstrates whether each company has achieved its leakage performance commitment in 2019-20 and how this compares to 2018-19; its actual performance in 2019-20 and its associated performance commitment level (target) and a relative assessment of leakage normalised by length of water main.

Only **Southern Water** failed to achieve its leakage performance commitment level in 2019-20. The company also failed to achieve its annualised milestone in 2018-19⁴.

On relative performance, **Anglian Water**, **Hafren Dyfrdwy**, **South West Water** and **Wessex Water** are in the top 25% of performers for the second consecutive year. **Bristol Water** improves its performance and moves from the middle 50% to the top 25%.

Thames Water, **United Utilities**, **Affinity Water** and **South Staffs Water**, remain in the bottom 25% of performers for a second consecutive year and they are joined in 2019-20 by **Severn Trent Water**.

¹ A comparison with 2018-19 performance is not provided for Severn Trent Water and Hafren Dyfrdwy. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other.

² Northumbrian Water, South Staffs Water, Severn Trent Water and Hafren Dyfrdwy each have two leakage performance commitments, one for each of their operating regions. Performance in each region is separated by semi-colon.

³ The comparison of South West Water's performance with 2018-19 is for the South West operating area only; it achieved its performance commitment in 2018-19 and 2019-20. The company has a target for leakage in the Bournemouth area against which performance is assessed in 2019-20 only, this performance commitment was also achieved. Performance in each region is separated by semi-colon.

⁴ Southern Water, Bristol Water and Portsmouth Water did not have performance commitment levels in 2018-19 but all had annualised milestones.

⁵ United Utilities' leakage performance commitment is assessed as the variance from this target

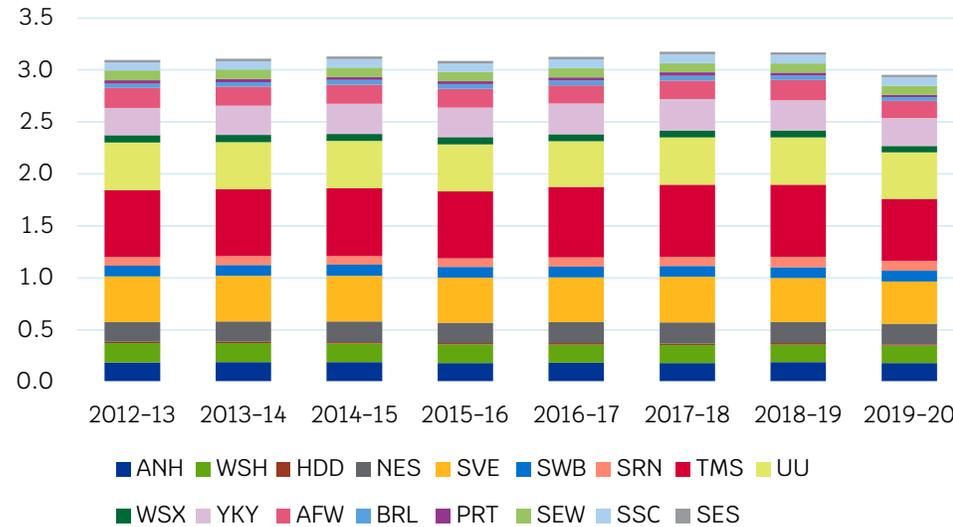
⁶ Based on company reported performance in the Annual Performance Reports.

Key				
Performance against targets ⁶			Relative performance	
Target met	■	Improved	▲	Top 25%
Target failed	■	Stable	◀▶	Middle 50%
No target in 2018-19	-	Deteriorated	▼	Bottom 25%

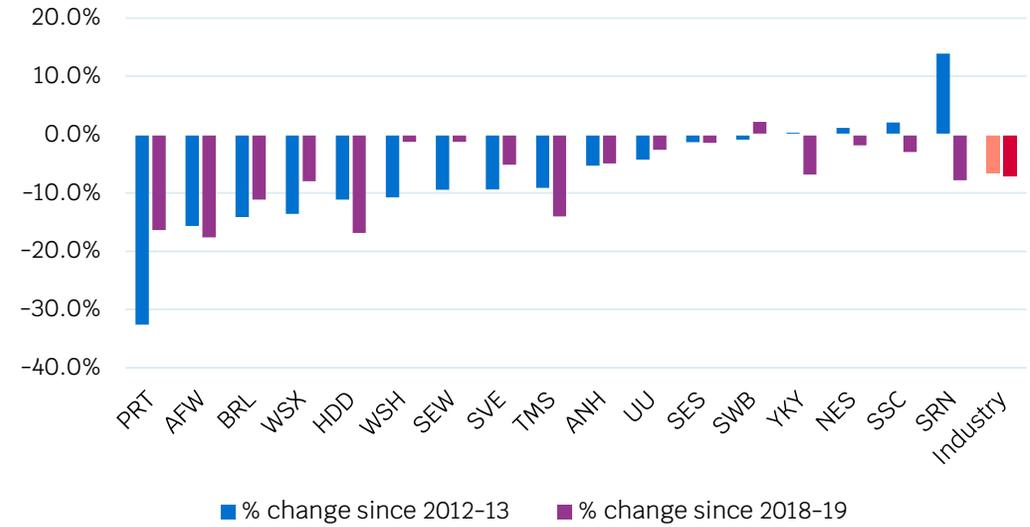


Long-term trends in leakage

Total industry leakage (megalitres per day 000s)



% change in leakage



We have examined the sector’s leakage performance in each year of the current price control and each company’s long-term delivery of leakage reductions.

During 2019-20 the sector on average delivered a 7%, or 216 Ml/d, reduction in leakage. This is in stark contrast to the lack of progress between 2012-13 and 2018-19 and since the start of the century, despite having delivered a reduction of over 30% in the decade following privatisation.

Our PR19 final determinations require companies to reduce leakage by at least 15% by 2024-25. Only **Portsmouth Water** achieved such a reduction during the 2015-20 period. The company has reduced leakage by 31%, including a 16% reduction in 2019-20. In 2019-20, **Affinity Water**, **Bristol Water**, **Hafren Dyfrdwy** and **Thames Water** all reduced by more than 10%.

SES Water, **Yorkshire Water**, **Northumbrian Water** and **South Staffs Water** delivered reductions in 2019-20 and met their performance commitments but report higher levels of leakage than in 2012-13. **Southern Water** reduced leakage compared to 2018-19 but still failed to achieve its performance commitment. The company’s overall leakage is 16% higher than in 2012-13, an increase that is three times greater than any other company.

South West Water is the only company that has not delivered a reduction in in 2019-20, and it has increased leakage since 2012-13, but the company remains in the top 25% of performers overall.



Further insights on leakage performance

Managing leakage is important for ensuring supplies that are resilient in the long term and reducing over abstraction of our water resources. In the decade following privatisation, the sector achieved a reduction in leakage in excess of 30% but little overall reduction since then, despite material technological progress. However, performance by a number of companies in 2019-20 demonstrates that large reductions are possible and many companies have reported investment in 2019-20 which is intended to deliver the reductions required to meet the sector's ambitious targets of a 15% reduction during 2020-25 and a long-term aspiration to halve leakage.

Companies must manage external factors that impact leakage performance, including changes in temperature and in ground conditions:

- In 2018-19, several companies reported that the exceptionally hot, dry weather had put their networks under stress due to higher demand and ground movements causing higher numbers of leaks.
- In 2019-20, the sector reported that the milder winter weather had contributed to lower leakage levels. In contrast, the exceptionally low temperatures in March 2018 contributed to several major mains bursts and high numbers of leaks.

All companies must maintain and improve the resilience of their operations to manage leakage despite these external factors. Optimising the operation of networks, improving leak detection and more effective repairs will form a crucial part of leakage strategies in to the future. A number of companies advise that many of these solutions deliver benefits at relatively low unit costs, less than £0.5 million/MI/d.

Since 2018-19, several thousand acoustic loggers have been installed across networks to enable companies to detect leaks more quickly and with greater accuracy. Nearly all of the companies that achieved substantial leakage reductions in 2019-20 reported significant programmes to enhance network monitoring:

- **Affinity Water** reported investments in new technology to improve leakage detection. This includes installation of 20,000 acoustic loggers in 2018-19 covering around a third of district metered areas (DMAs).
- In 2019-20 **Severn Trent Water** installed a further 15,500 acoustic loggers across its network. **Yorkshire Water** also installed 40,000 acoustic loggers in the worst performing leakage areas, which has helped with the speed of leak identification.
- **Thames Water** reported that its 27,000 acoustic loggers helped detect over 65 MI/d of leakage, which represents more than 10% of its current leakage level.
- **Anglian Water** and **Affinity water** are implementing data strategies informed by their network monitoring to improve performance using their data, for example by increasing the speed of leak detection and targeting repairs on the largest leaks. The sector also continues to explore ways of optimising network pumping operations to reduce system shocks from pressure changes, which can cause leaks and mains bursts.

Several companies report a growth in the number of leakage technicians to support find and fix activities. **Affinity Water**, **Bristol Water**, **Hafren Dyfrdwy** and **Severn Trent Water** have adopted new operating models to strengthen ownership of and accountability for leakage performance. **Portsmouth Water** has adopted a combination of these measures which has contributed towards the significant reductions it has delivered.



Per capita consumption performance in 2019-20

Company	Performance against targets			Relative performance (2019-20)
	In 2019-20 and compared to 2018-19	2019-20 performance (l/h/d)	2019-20 target (l/head/d)	Total litres per head per day
Anglian Water ^{1, 5}	-	134.82	130.17	134.82
Dŵr Cymru ²	-	-	-	159.67
Hafren Dyfrdwy ³	-	141.25	127.28	141.71
Northumbrian Water ²	-	-	-	148.86
Severn Trent Water ³	-	136.53	127.28	128.52
South West Water ^{4, 5}	-	153.63	140.00	152.65
Southern Water ⁵	-	129.30	133.70	126.55
Thames Water ²	-	-	-	144.72
United Utilities	◀▶	141.20	130.20	141.25
Wessex Water	◀▶	145.00	131.00	145.81
Yorkshire Water	◀▶	135.00	138.30	134.96
Affinity Water	▼	153.00	147.40	154.97
Bristol Water	◀▶	144.60	142.00	146.55
Portsmouth Water	◀▶	153.60	143.93	153.12
South East Water ²	-	-	-	149.50
South Staffs Water	◀▶	128.57	128.31	128.57
SES Water	▲	153.10	156.90	153.10

Water efficiency is a key priority for customers. Lower per capita consumption means less water is taken from the environment and fewer resources are required to extract, treat and distribute it. Most companies had per capita consumption (PCC) performance commitments for the 2015-20 price control period². Our analysis demonstrates whether those companies have achieved their performance commitments in 2019-20 and how this compares to 2018-19; their actual performance in 2019-20 and associated performance commitment level (target) and a relative assessment of normalised performance.

Companies' achievement of PCC performance commitments is poor. Only **Southern Water**, **Yorkshire Water** and **SES Water** achieve their performance commitments in 2019-20. **Southern Water** and **Yorkshire Water** do so while also achieving PCC in the top 25% of companies.

South West Water fails to achieve its performance commitment target by more than 10% and is in the bottom 25% of companies in our relative assessment. **Dŵr Cymru**, **Affinity Water**, **Portsmouth Water** and **SES Water** also sit in the bottom 25% of companies on this measure.

¹ Anglian Water's performance commitment is assessed as a reduction from the 2014-15 figure. A comparison with 2018-19 is not provided because performance is only assessed against the target in 2019-20.

² Dŵr Cymru, Northumbrian Water, Thames Water and South East Water do not have PR14 consumption performance.

³ A comparison with 2018-19 performance is not provided for Severn Trent Water and Hafren Dyfrdwy. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other.

⁴ South West Water's performance against its target is for its Bournemouth area only. The South West area does not have a consumption target.

⁵ A comparison with 2018-19 is not provided for Anglian Water, South West Water or Southern Water because performance is only assessed against the target in 2019-20.

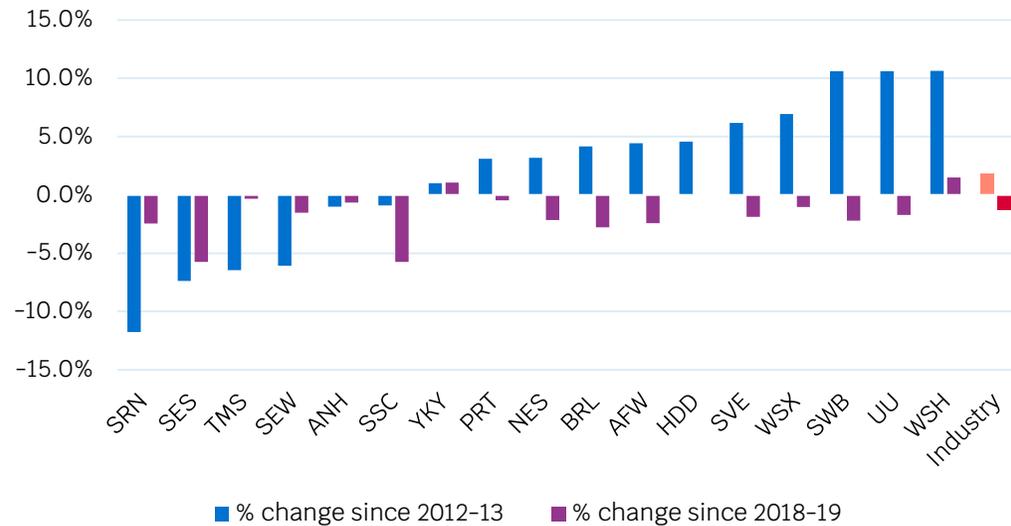
⁶ Based on company reported performance in the Annual Performance Reports.

Key				
Performance against targets ⁶			Relative performance	
Target met	▲	Improved	▲	Top 25%
Target failed	▼	Stable	◀▶	Middle 50%
Targets met & failed	◀▶	Deteriorated	▼	Bottom 25%
No target in 2018-19	-			



Long-term trends in per capita consumption

% change in per capita consumption since 2012-13



The Welsh government considers that water consumption reductions are needed to ensure long-term water resources sustainability¹. The UK government has set out its expectations for ambitious reductions in consumption in its strategic policy statement².

We have examined the sector’s net improvement or deterioration in per capita consumption since 2012-13 and the improvement between 2018-19 and 2019-20. We use per capita consumption reported in each company’s annual performance report. The volume of water consumed by household customers is strongly influenced by population numbers; as the population served grows so will consumption and so – unlike other outcomes measures in this report – we do not analyse total consumption.

Although most companies delivered some reductions in per capita consumption in 2019-20, **Yorkshire Water** and **Dŵr Cymru** have increased.

Since 2012-13, six companies have delivered reductions in per capita consumption and, overall, the sector’s performance has deteriorated by 2%. In comparison to 2012-13, **Southern Water** has decreased per capita consumption by 12% and **SES Water**, **Thames Water** and **South East Water** have each decreased by more than 6%. **Anglian Water** and **South Staffs Water** have reduced per capita consumption by less than 1% each.

The reductions made by those six companies are more than offset by the performance of the remaining companies. In particular, **South West Water**, **United Utilities** and **Dŵr Cymru** have all increased per capita consumption by over 10% since 2012-13 and **Severn Trent Water** and **Wessex Water** have increased by more than 5%.

Every company has a per capita consumption performance commitment for the 2020-25 period and is required to deliver reductions in comparison to its current performance. Companies will use a range of measures to support customers to reduce water use, for example through installing smart meters to help them understand their use and helping customers to identify wasted water.

¹ [Water strategy for Wales](#) and [Welsh government strategic priorities and objectives statement to Ofwat](#)

² [UK government strategic priorities and objectives for Ofwat](#)



Supply interruptions performance

Company	Performance against targets			Relative performance (2019-20)
	In 2019-20 and compared to 2018-19	2019-20 performance (mins/ property)	2019-20 target (mins/ property)	Minutes per property
Anglian Water	▼	18.65	12.00	18.65
Dŵr Cymru	◀▶	14.70	12.00	14.70
Hafren Dyfrdwy ¹	◀▶	11.40; 31.60	12.00; 8.00	16.89
Northumbrian Water	◀▶	6.13	5.00	6.13
Severn Trent Water ¹	▲	7.30; 3.60	8.00; 12.00	7.25
South West Water ²	◀▶	11.40; 3.20	12.00; 4.40	9.78
Southern Water	▼	11.27	9.00	11.27
Thames Water	▲	7.20	7.80	22.05
United Utilities	◀▶	10.18	12.00	10.18
Wessex Water	◀▶	7.60	12.00	7.60
Yorkshire Water	◀▶	7.56	12.00	7.56
Affinity Water ³	-	-	-	13.60
Bristol Water	▲	11.10	12.20	9.28
Portsmouth Water	◀▶	3.37	5.00	3.37
South East Water	▲	10.00	12.00	10.00
South Staffs Water	◀▶	3.35	10.00	3.35
SES Water	▲	1.20	12.00	1.20

All companies have a performance commitment on supply interruptions for 2015-20. The commitments of all companies, except Affinity Water, Bristol Water and Thames Water are for interruptions that exceed three hours³. Our analysis demonstrates whether each company has achieved its performance commitment in 2019-20 and how this compares to 2018-19; its actual performance in 2019-20 and its associated performance commitment level (target) and; a relative assessment of supply interruptions greater than three hours.

In 2019-20, eleven companies met their supply interruptions performance commitment, compared to eight in 2018-19. **Portsmouth Water** and **South Staffs Water** have achieved their performance commitment levels in all five years of the 2015-20 price control period and have also consistently been in the top 25% of performers on our assessments of relative performance.

Severn Trent Water and **SES Water** move from the bottom 25% of performers in 2018-19 to the top 25% in 2019-20. **Dŵr Cymru**, **Hafren Dyfrdwy** and **Thames Water** remain in the bottom 25% for a second consecutive year.

Our PR19 final determinations challenge companies to achieve forward looking upper quartile performance; this is 6.5 minutes per property in 2020-21. Four companies have delivered this performance in 2019-20 while **SES Water** delivers performance in 2019-20 which exceeds the 2024-25 performance commitment level of five minutes.

¹ A comparison with 2018-19 performance is not provided for Severn Trent Water and Hafren Dyfrdwy. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other. Figures for, and performance against, multiple targets are presented because following the boundary realignment each company adopted the performance commitments of the legacy companies.

² South West Water has supply interruptions targets for each of its operating regions, ie the South West area and the Bournemouth area. The performance and target figures for each area are presented and the Bournemouth figures are separated by semicolon. In 2017-18 targets were achieved in the Bournemouth region only whereas targets were met in both regions in 2018-19.

³ Affinity Water's supply interruptions performance commitment definition is for interruptions greater than 12 hours; Bristol Water's definition includes all supply interruptions; and Thames Water's definition includes unplanned interruptions. Data on interruptions greater than three hours are obtained from [Discover Water](#).

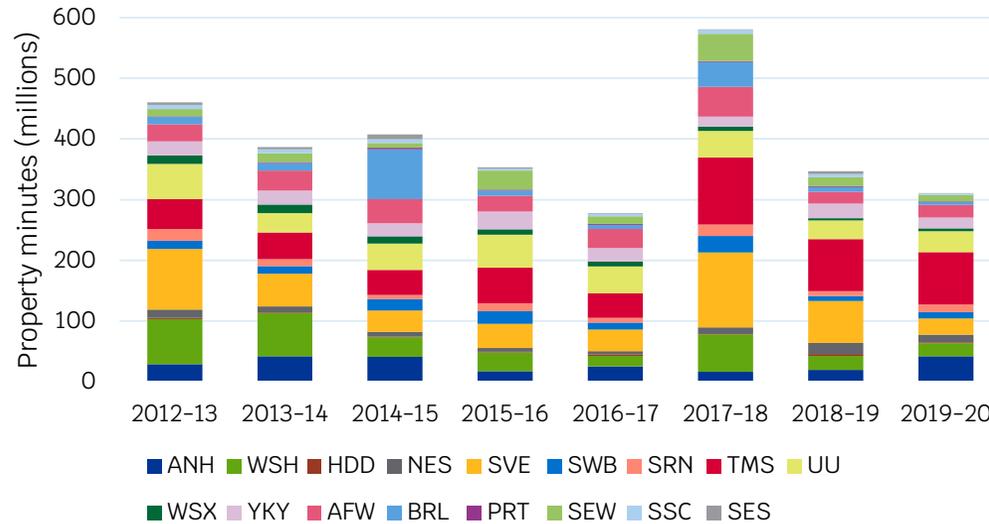
⁴ Based on company reported performance in the Annual Performance Reports.

Key				
Performance against targets ⁴			Relative performance	
Target met	▲	Improved	▲	Top 25%
Target failed	◀▶	Stable	◀▶	Middle 50%
Targets met & failed	▼	Deteriorated	▼	Bottom 25%
No target in 2018-19	-			

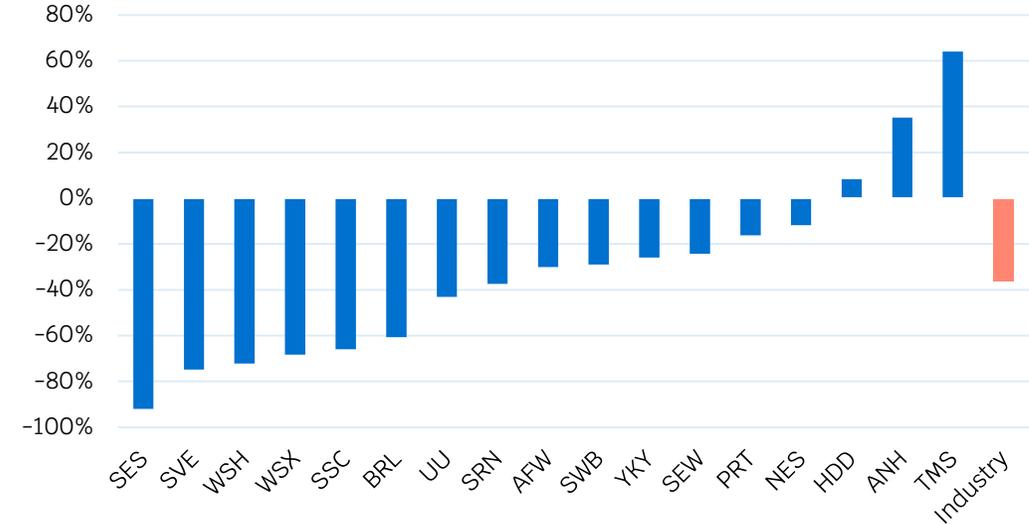


Long-term trends in supply interruptions performance

Total industry supply interruption minutes (millions)



% change in supply interruption minutes per property since 2012-13



We have examined the sector’s supply interruptions performance since 2012-13 and each company’s net improvement or deterioration during this period. We use supply interruptions minutes per property reported in each company’s annual performance report or Discover Water¹ (for Affinity Water, Thames Water and Bristol Water) which we have converted to minutes using associated connected property numbers.

Since 2012-13, the sector has reduced the total supply interruption minutes experienced by customers by 36%, which is 145 million minutes or 6.7 minutes per property in England and Wales. This performance represents an improvement on all years except 2016-17.

SES Water has delivered a 92% reduction; its performance in 2019-20 is the best of any company since 2012-13. **Severn Trent Water** and **Dŵr Cymru** have delivered reductions of over 70% and; **Wessex Water**, **South Staffs Water** and **Bristol Water** have delivered reductions in excess of 60%.

In comparison to 2012-13, customers of **Thames Water** and **Anglian Water** have experienced considerable increases in supply interruption minutes per property: 65% and 35% respectively.

¹ [Discover Water loss of supply data.](#)



Water quality contacts performance

Company	Performance against targets			Relative performance (2019-20)
	In 2019-20 and compared to 2017-18	2019-20 performance (per 1,000 population)	2019-20 target (per 1,000 population)	Rate per 1,000 population
Anglian Water	◀▶	1.15	1.23	1.15
Dŵr Cymru	◀▶	2.80	1.23	2.96
Hafren Dyfrdwy ⁴	-	1.32; 2.24	1.01; 1.26	2.45
Northumbrian Water	▲	0.19; 0.55	0.22; 0.65	1.06
Severn Trent Water ⁴	-	1.31; 1.17	1.28; 1.01	1.40
South West Water	◀▶	1.90; 1.01	3.00; 1.23	2.09
Southern Water	◀▶	0.67	0.82	1.21
Thames Water	-	-	-	0.62
United Utilities	◀▶	1.44	0.95	1.93
Wessex Water	◀▶	1.59	1.23	1.59
Yorkshire Water	◀▶	1.26	1.20	1.31
Affinity Water	◀▶	0.25	0.66	0.81
Bristol Water	◀▶	1.42	1.84	1.46
Portsmouth Water	▲	0.39	0.41	0.39
South East Water	▲	0.53	0.58	1.37
South Staffs Water	▲	1.19	1.23	1.18
SES Water	▲	0.46	0.48	0.49

Water quality is a top customer priority. Most companies have a performance commitment on the number of times customers have contacted them (complained) about water quality. Complaints are categorised as being about either discolouration (appearance), or taste and odour¹. Our analysis demonstrates whether each company has achieved its performance commitment in 2019-20 and how this compares to 2018-19; its actual performance in 2019-20 and its associated performance commitment level (target). We also include a relative assessment of water quality contacts using the number of customer contacts reported by the Drinking Water Inspectorate in its annual report².

In 2018-19, eleven companies failed to achieve one of their water quality contacts performance commitment levels. In 2019-20 this has reduced to seven. **Affinity Water**, **Portsmouth Water** and **SES Water** remain in the top 25% of performers for a second consecutive year. Of the five companies in the bottom 25% of performers - **Dŵr Cymru**, **Hafren Dyfrdwy**, **South West Water** and **United Utilities** are in the bottom 25% for a second consecutive year.

Customer contacts measure the acceptability of water to customers. Compliance with legal requirements (the EU Drinking Water Directive) is measured separately and has been high (~99%) since 2004. From 2020, common performance commitments will measure Compliance Risk Index (CRI). CRI illustrates the risk arising from treated water compliance failures³.

¹ Affinity Water, South East Water and Southern Water have performance commitments on appearance only. Northumbrian Water has separate performance commitments for discolouration and taste and odour. Hafren Dyfrdwy and Severn Trent Water have performance commitments on appearance for complaints from customers in the areas of their regions previously served by Dee Valley Water and the legacy company (see footnote 4) Severn Trent Water, respectively. Thames Water does not have a performance commitment on water quality, it reports complaints about discolouration, chlorine and hardness. United Utilities include complaints about appearance, taste, odour and colour as one of six sub-measures within a bespoke water quality index performance commitment. The remaining companies each have a single performance commitment for appearance, taste and odour.

² [Summary of the Chief Inspector's report for drinking water in England](#) and [Summary of the Chief Inspector's report for drinking water in Wales](#) in 2019

³ [Summary of the Chief Inspector's report for drinking water in England in 2018](#)

⁴ A comparison with 2018-19 performance is not provided for Severn Trent Water and Hafren Dyfrdwy. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other. Figures for, and performance against, multiple targets are presented because, following the boundary realignment, each company adopted the performance commitments of the legacy companies.

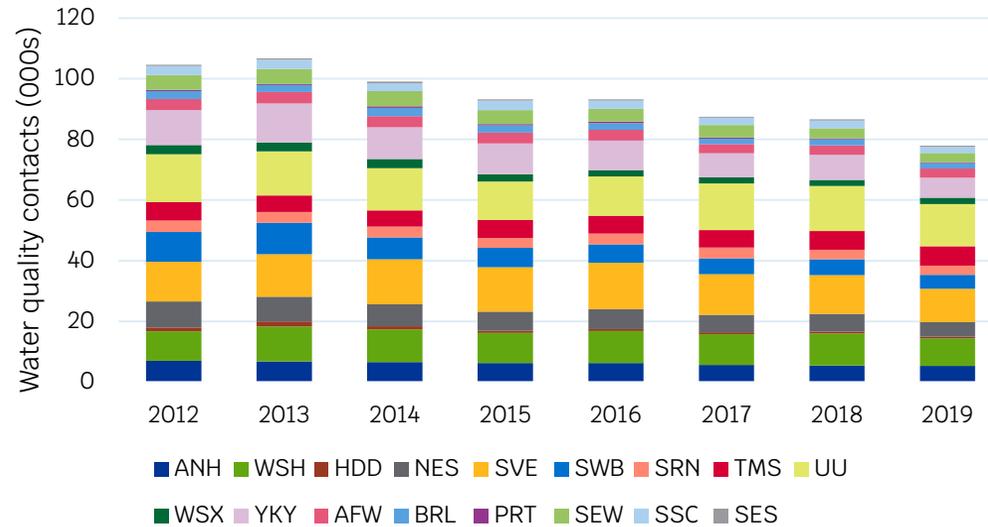
⁵ Based on company reported performance in the Annual Performance Reports.

Key			
Performance against targets ⁵			Relative performance
Target met	Improved	▲	Top 25%
Target failed	Stable	◀▶	Middle 50%
Targets met & failed	Deteriorated	▼	Bottom 25%

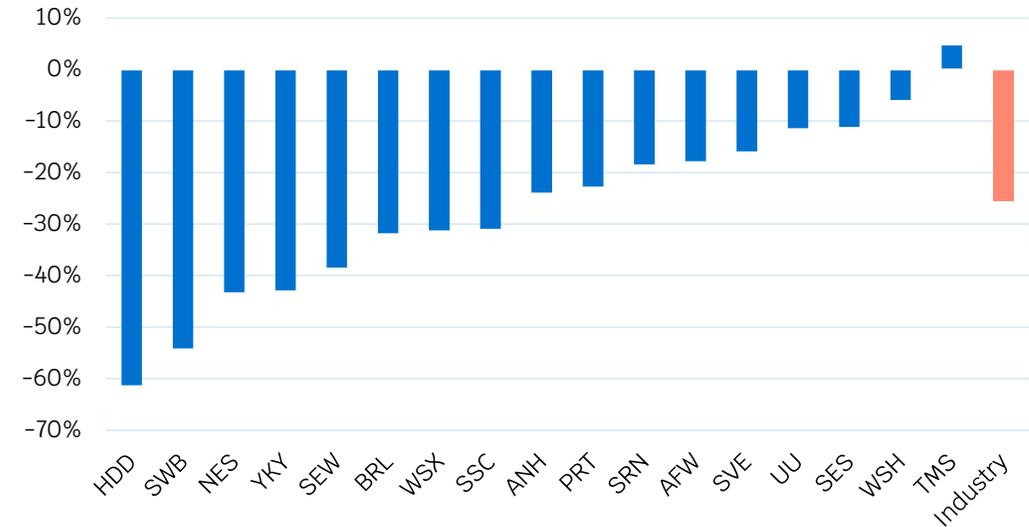


Long-term trends in water quality contacts performance

Total number of water quality contacts (thousands)



% change in water quality contacts since 2012



The number of water quality contacts made to water companies are reported by the Drinking Water Inspectorate in its annual report on a calendar year basis. We have examined the sector’s water quality contacts performance since 2012-13, and each company’s net improvement or deterioration during this period. Since 2012 the sector has made progress in reducing water quality contacts – by around 27,000 contacts per year: a 26% reduction. In 2019-20 the sector delivered a 10% reduction, which is the greatest year-on-year reduction in the period from 2012-13.

With the exception of Thames Water, every company has delivered a reduction in water quality contacts in comparison to 2012-13. **Hafren Dyfrdwy**¹ and **South West Water** have made the greatest progress in reducing the number of contacts they receive, by 61% and 54% respectively. **Northumbrian Water** and **Yorkshire Water** have each reduced contacts by more than 40%.

Although its performance is in the top 25% of companies, **Thames Water’s** performance has deteriorated by 5% in 2019-20 compared to 2012-13. This is equivalent to 280 more contacts.

¹ The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other. The figures presented for these companies are representative of the legacy companies Dee Valley Water and Severn Trent Water.



Internal sewer flooding performance

Company	Performance against targets			Relative performance (2019-20)
	In 2019-20 & compared to 2018-19	2019-20 performance (incidents)	2019-20 target (incidents)	Incidents per 10,000 properties
Anglian Water ¹	-	296	448	1.05
Dŵr Cymru	◀▶	216	269	1.48
Hafren Dyfrdwy ²	▼	10	7	4.78
Northumbrian Water ³	▲	139; 205	186; 228	2.99
Severn Trent Water ²	▼	926	657	2.20
South West Water	▼	160	135	2.09
Southern Water	▼	453	382	2.27
Thames Water	◀▶	1,058	1,085	1.77
United Utilities ⁴	▼	611; 163	375; 55	2.29
Wessex Water	◀▶	146	209	1.16
Yorkshire Water	◀▶	1,602	1,919	6.93

Key			
Performance against targets ⁵			Relative performance
Target met	Improved	▲	Top 25%
Target failed	Stable	◀▶	Middle 50%
Targets met & failed	Deteriorated	▼	Bottom 25%

Sewer flooding is one of the most unpleasant and distressing service failures for customers and reducing it is a high priority. Customers are now eight times less likely to suffer sewer flooding than they were in the 1990s. Each company providing wastewater services has an internal sewer flooding performance commitment during the 2015-20 price control. Our analysis demonstrates whether each company has achieved its performance commitment in 2019-20 and how this compares to 2018-19; its actual performance in 2019-20 and its associated performance commitment level (target); and an assessment of sewer flooding incidents normalised by property numbers.

The number of companies achieving their performance commitment levels on internal sewer flooding has deteriorated in 2019-20; in 2018-19 most companies achieved their targets. Many companies refer to the wet winter with consecutive winter storms and flooding as contributing to their poorer performance in 2019-20. Despite this, a number of companies improved their performance. For example, Anglian Water delivered reductions, achieves its performance commitment level and remains the highest performing company in the sector.

Although **Severn Trent Water**, **Southern Water** and **United Utilities** sit in the middle 50% of performers in 2019-20, their performance has deteriorated since 2018-19 and all three companies perform below the standard of the highest performing company in the bottom 25% of performers in 2018-19 (at 1.96 incidents per 10,000 properties). **Northumbrian Water** and **Yorkshire Water** are in the bottom 25% of performers for a second consecutive year, joined by **Hafren Dyfrdwy**.

There are considerable differences in the ways that companies have defined sewer flooding for inclusion in their current performance commitments. For example, Yorkshire Water counts the number of times a property is flooded, as opposed to the number of properties flooded, and it does not exclude incidents caused by sewers overloaded with rainfall. From 2020-21 we introduced a performance commitment on internal sewer flooding that has a common definition for all companies. A comparison of our relative assessment with performance reported using the common definition results in a minor revision to the categorisation of companies' relative performance – **Northumbrian Water's** performance moves to the middle 50% and **United Utilities'** performance moves to the bottom 25%.

¹ A comparison with 2018-19 is not provided for Anglian Water as performance against its target is assessed in 2019-20 only.

² A comparison with 2018-19 performance is not provided for Severn Trent Water and Hafren Dyfrdwy. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other.

³ Northumbrian water has two internal sewer flooding performance commitments. The company reports incidents caused by transferred (adopted) sewers separately and this performance is presented after the semicolon.

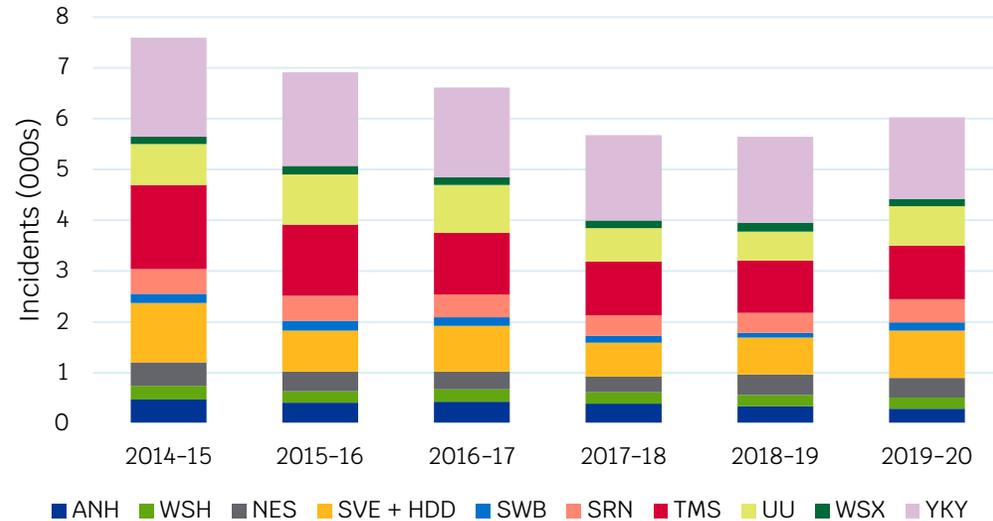
⁴ United Utilities' sewer flooding commitments are sub-measures of its asset health performance. Incidents due to hydraulic overload are reported separately to other causes, the former is presented after the semicolon.

⁵ Based on company reported performance in the Annual Performance Reports.

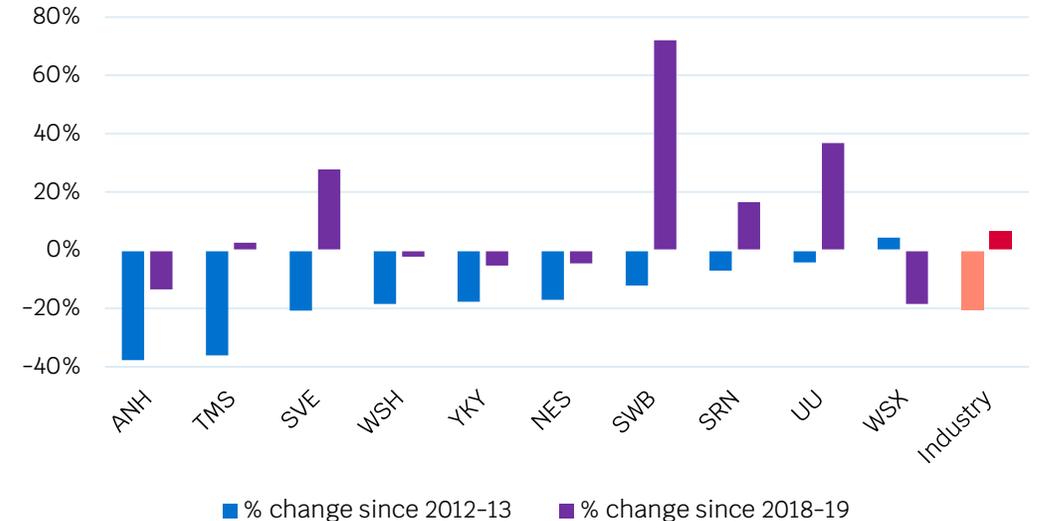


Long-term trends in internal sewer flooding performance

Total number of sewer flooding incidents (000s)



% change in sewer flooding incidents since 2014-15



We have examined the sector’s sewer flooding incidents performance since 2014-15, and each company’s net improvement or deterioration during this period¹. There are considerable differences in the ways that companies have defined sewer flooding for inclusion in their current performance commitments and so the total numbers of incidents reported by each company should not be compared directly.

Customers experienced 372 more incidents in 2019-20 than they did in 2018-19. This reduces the progress the sector has made in reducing incidents since 2014-15; last year we reported that the sector had reduced incidents by 26% since 2014-15 but in 2019-20 this has deteriorated to 21%.

Only **Anglian Water**, **Dŵr Cymru**, **Yorkshire Water** and **Northumbrian Water** have reduced incidents in the period since 2014-15 while also delivering a reduction in 2019-20.

Although it improved its year-on-year performance in 2019-20, **Wessex Water’s** customers experienced a 4% increase in sewer flooding incidents in comparison to 2014-15. This is equivalent to six more incidents in 2019-20, but it remains in the top 25% of performers.

¹ The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other. All figures presented are representative of the legacy company Severn Trent Water.



Pollution incidents performance

Company	Performance against targets			Relative performance (2018-19)
	In 2018-19 and compared to 2017-18	2018-19 performance (incidents)	2018-19 target (incidents)	Category 1-3 pollution incidents per 10,000 km of sewer
Anglian Water	◀▶	254	298	35
Dŵr Cymru	◀▶	120	131	25
Hafren Dyfrdwy	-	4; 0	10; 0	68
Northumbrian Water	◀▶	60	115	15
Severn Trent Water ^{1, 2}	-	288; 4	318; 0	26
South West Water ⁴	◀▶	286; 1	198; 0	105
Southern Water ¹	▼	427; 7	158; 0	110
Thames Water	◀▶	321	340	30
United Utilities ¹	◀▶	162; 0	191; 0	28
Wessex Water ³	-	-	-	22
Yorkshire Water ⁴	◀▶	159; 7	211; 0	35

Key			
Performance against targets ⁵		Relative performance	
Target met	Improved	▲	Top 25%
Target failed	Stable	◀▶	Middle 50%
Targets met & failed	Deteriorated	▼	Bottom 25%

Customers and other stakeholders expect companies to prevent serious pollution incidents. Incidents lead to the release of harmful substances into air, land or water, and some can cause significant harm to the environment. The Environment Agency categorises incidents based on their impact. A category 1 incident has a serious, extensive or persistent impact. Category 2 incidents have a lesser, yet significant, impact. Category 3 incidents have a minor or minimal impact.

Our analysis demonstrates whether each company has achieved its performance commitment in 2019-20 and how this compares to 2018-19; its actual performance in 2019-20 and its associated performance commitment level (target); an assessment of sewer flooding incidents normalised by property numbers and; normalised performance using the number of category 1-3 pollution incidents per 10,000 km of sewer as reported to the Environment Agency.

The number of companies achieving their performance commitment levels on pollution incidents has deteriorated in 2019-20 in comparison 2018-19. However, **Northumbrian Water** has achieved its performance commitment in every year of the 2015-20 price control period and has been consistently in the top 25% of companies in our relative assessment of performance.

South West Water has two pollution incidents performance commitments⁴ it has only achieved one of the ten associated performance commitment levels in the five years of the 2015-20 price control period. Along with **Southern Water**, **South West Water** demonstrates extremely poor performance relative to other companies. Both companies performed significantly worse than the pollution incidents target set for them by the Environment Agency.

¹ Southern Water, Severn Trent Water, United Utilities and Yorkshire Water each have two performance commitments on pollution incidents, one for category 3 incidents and another for category 1 and 2 incidents. The figures relating to category 1 and 2 incidents are presented after the semicolon.

² A comparison with 2018-19 performance is not provided for Severn Trent Water and Hafren Dyfrdwy. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other.

³ Wessex Water does not have a performance commitment based solely on pollution incidents. Its commitment is to achieve industry leading status in the Environment Agency's environmental performance assessment, a component of which is based on pollution incidents.

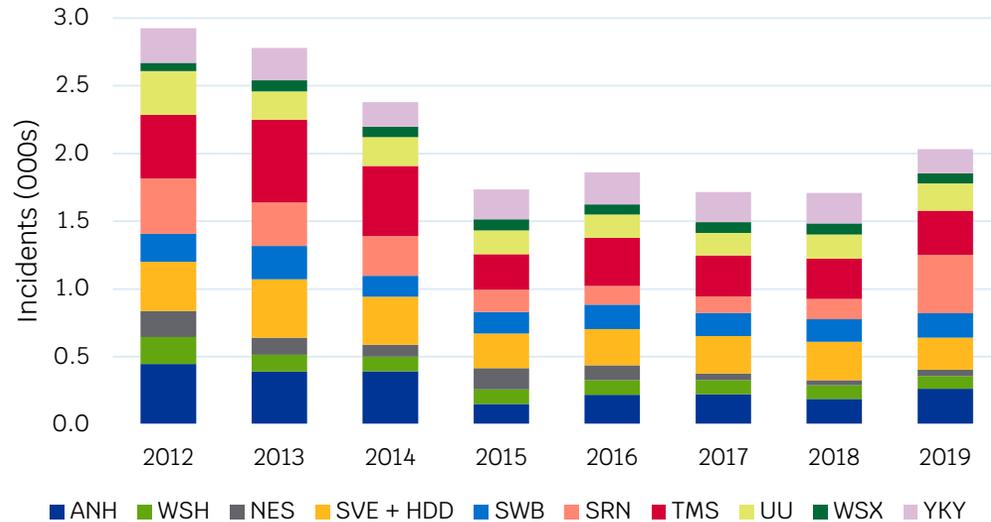
⁴ South West Water has two performance commitments on pollution incidents, one for category 3 and 4 incidents and another for category 1 and 2 incidents. The figures relating to category 1 and 2 incidents are presented after the semicolon.

⁵ Based on company reported performance in the Annual Performance Reports.



Long-term pollution incidents performance

Total number of pollution incidents (data from EA and NRW)



% change in pollution incidents since 2012-13



The Environment Agency set the expectation that the nine wastewater companies operating in England would reduce total pollution incidents caused by water and wastewater assets by at least a third in comparison to 2012. The sector did not quite achieve this expectation in 2018 (32.9%) and in 2019 total pollution incidents have deteriorated, falling even shorter of this target (21%). Alongside a deterioration in total incidents, the number of serious incidents from water company sewerage and clean water assets has plateaued. Stakeholders expect more from the sector and the Environment Agency has required each company to develop, publish and implement Pollution Reduction plans during 2020¹.

Our analysis considers the number of category 1-3 pollution incidents caused by wastewater assets per 10,000 km of sewer in England and Wales.

Companies providing wastewater services have increased pollution incidents by 19% in 2019 in comparison to 2018. Last year we reported that the sector had decreased pollution incidents by 41% since 2012, but this year that has roughly halved to 21% (unlike the Environment Agency's assessment we only include incidents caused by wastewater assets and we include incidents occurring in Wales which are monitored by Natural Resources Wales).

Only **Dŵr Cymru**, **Severn Trent Water**, and **Yorkshire Water** have each delivered a reduction in pollution incidents in 2019 in comparison to 2018 and have decreased incidents by more than 30% since 2012. Although **Northumbrian Water** was responsible for more incidents in 2019 in comparison to 2018 it has reduced incidents by 76% since 2012 and exceeded the target set for it by the Environment Agency¹. We note that although **Wessex Water** was responsible for 38% more pollution incidents in 2019 in comparison to 2012, equivalent to 23 more incidents, it remains in the top 25% of performers and exceeds its Environment Agency target¹. **Southern Water's** performance has deteriorated considerably in 2019. It was responsible for 281 more incidents in comparison to 2018 and a 5% increase on incidents since 2012. The company performed significantly below the Environment Agency's target¹.

By 2025 the Environment Agency expects a 40% reduction in pollution incidents in comparison to 2016¹. During the 2020-25 price control period, each company has a pollution incidents performance commitment with associated outcome delivery incentives.

¹ [Water and sewerage companies in England: environmental performance for 2019](#)

² Environment Agency and Natural England's water industry strategic environment obligations requirements (WISER) document. Available for on request from the Environment Agency or Natural England.

³ We combine Hafren Dyfrdwy and Severn Trent Water in our analysis of long-term trends. The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other. There were 9, 8, 6, 4 and 2 category 1-3 incidents in each year between 2015 and 2019 respectively in the area now served by Hafren Dyfrdwy.



Water companies' performance in protecting and enhancing the environment (1)

Assessment of company performance on the environment

The **Environment Agency** recently published its 2019 [annual report on the environmental performance of England's water and sewerage companies](#), demonstrating that four out of the nine water and sewerage companies in England are falling short of expected standards. The annual report rates each company in England from 1 star to 4 star, based on a range of measures including: serious pollution incidents; pollution per km of sewer; and compliance of water and sewerage treatment works with discharge permits. It found that:

- **Severn Trent Water** and **Wessex Water** achieved the highest level of performance, achieving 4 star status (industry leading).
- **Thames Water**, **United Utilities** and **Yorkshire Water** are rated as 3 star (good).
- **Anglian Water**, **Northumbrian Water** and **South West Water** are rated as 2 star (requiring improvement).
- **Southern Water** is the first company to be rated as 1 star (poor) since 2015.

Natural Resources Wales monitors the activities of companies wholly or largely in Wales^{1,2}. In 2019 it assessed **Dŵr Cymru's** performance as 3 star (good) against the environmental performance assessment criteria.

We expect companies to deliver for customers, society and the environment. While there has been significant progress in delivering environmental improvements since privatisation (with reduction in pollution incidents and positive impacts on bathing water quality for example), progress has levelled off during 2015–2020.

In its latest published annual report, the **Environment Agency** noted that the performance of four of the nine companies in England was falling short of expectations (see box). While **Natural Resources Wales** considered companies in Wales had generally met expectations (see box). We will work with the Environment Agency, Natural Resources Wales, the sector and other stakeholders to ensure that the sector as a whole can step up and leave the environment in a better place than we find it now.

The 2019 price review required companies to invest to enhance and protect the natural environment. All companies have incentives to improve key aspects of their environmental performance - such as reducing pollution incidents. Companies also included bespoke performance commitments for 2020–25 covering aspects of the environment that were a priority to their customers.

During 2015–20 companies committed to a range of performance commitments intended to incentivise them to maintain and improve the environment. **The following slides demonstrate how companies are protecting and enhancing the environment in the areas of bathing water quality and river improvements; biodiversity and; carbon emissions** but are not intended to be exhaustive.

¹ Natural Resources Wales annual performance reports for [Dŵr Cymru](#) and [Hafren Dyfrdwy](#)

² The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. In order to maintain year-on-year comparisons, Natural Resources Wales has not assessed Hafren Dyfrdwy's performance against the environmental performance assessment criteria in 2019. It published year-on-year comparisons using a combination of performance data from the areas now served by Severn Trent Water and Hafren Dyfrdwy.

Water companies' performance in protecting and enhancing bathing waters and rivers

Bathing water	Commitment	2019-20	2019-20 commitment level
Anglian Water	Percentage of bathing waters attaining excellent status	61	67
Northumbrian Water	Bathing water compliance	33	34
South West Water	Non-compliant bathing waters	0	0
Southern Water	Number of bathing water with excellent quality (part 2)	56	54
	Number of bathing water with excellent quality (part 1)	6	7
	bathing water part 3 (£ million scheme)	26.8	32
United Utilities	Contribution to bathing waters improved (includes NEP phase 3&4 bathing water intermittent discharge projects)	6.56	6.56
Wessex Water	Agreed schemes delivered (named outputs with bathing water drivers in the NEP)	100	100
Wessex Water	Beaches passing EU standards	96	100
Yorkshire Water	Number of designated bathing waters that exceed the required quality standard	17	16

River improvements	Commitment	2019-20	2019-20 commitment level
Severn Trent Water	The number of improvements in river water quality against WFD criteria	33	31
	The number of improvements in river water quality against WFD criteria	246	202
South West Water	Kilometres (km) of river water quality improved	659	650
United Utilities	Length of rivers improved through the water programme (cumulative)	160	160
	Length of rivers protected from deterioration	365	347
	Length of rivers improved through the wastewater programme	339	355
Thames Water	Reduce the amount of phosphorus entering rivers to help improve aquatic plant and wildlife (Kilograms of phosphorus removed per day)	59	59
Wessex Water	No. water bodies improved through WwTW investments	70	70
	Length of rivers with improved flows (cumulative)	111	99
Yorkshire Water	Length of river improved (against WFD component measures) (wastewater)	352	340
	Length of river improved (water)	107	100

In addition to supplying drinking water, the water environment contributes to recreation and tourism. It also supports the adaptability of communities and ecosystems to climate change risks; thriving and resilient aquatic biodiversity contributes to carbon sequestration.

In the early 1990s, just 28% of **bathing waters** met the highest standards. In 2019, 98% of bathing waters met or exceeded the minimum standard to protect health and more than 70% achieved the excellent standard¹.

Seven companies had specific performance commitments during the 2015-20 price control period related to bathing water quality. Most companies met their performance commitments levels during the period.

Companies have generally achieved the performance commitments they set to **improve rivers**. The Water Framework directive includes a legal target that 75% of surface water bodies should meet the 'Good Ecological Status' standard by 2027. However, in the latest assessment only 16% of water bodies met that standard¹ and, whilst recognising that water quality is not the sole responsibility of the companies, we consider the sector has more work to do; in particular reducing pollution incidents alongside proactive environmental improvements.

¹ [Water and sewerage companies in England: environmental performance for 2019](#)

Water companies' performance in protecting and enhancing biodiversity

Biodiversity	Commitment	2019-20	2019-20 commitment level
South Staffs Water	Cumulative total hectares of land under management per year (combined company)	169	116
Severn Trent Water	Number of hectares improved	567	409
South West Water	Kilometres (km) of river water quality improved	659	650
Wessex Water	% WSX landholding assessed & managed for biodiversity	100	100
Yorkshire Water	Amount of land conserved and enhanced (total cumulative area – hectares)	11,806	11,736
	Proportion of waste diverted from landfill (re-used and recycled)	100	95
Bristol Water	'Biodiversity index'	17,670	17,653
Portsmouth Water	% (completion of agreed actions)	98	90

Biodiversity provides wider benefits for customers and society, for example by contributing to climate change mitigation and adaptation by sequestering carbon and mitigating flooding; and providing recreation. The UK government's 25 year environment plan includes a target to create or restore half a million hectares of wildlife-rich habitat by 2042¹.

Water companies have an important role to play in managing and protecting the environment. This may be through investment; by their actions as land owners or; through collaboration with other stakeholders.

During 2015-20, some companies set specific performance commitments for how well they were achieving this. All companies met the targets they set.

For 2020-25, companies continue to set commitments to make improvements. For example:

- **United Utilities** will improve 1,585 km of river;
- **Severn Trent Water** will improve 1,090 hectares of land
- **Yorkshire Water** will enhance 30% more land and;
- **South Staffs Water** is seeking to manage up to four times more land to protect nature.

¹ [HM Government 25 Year Environment Plan Progress Report 2019-20](#)



Water companies' performance in reducing carbon emissions (1)

Emissions	Commitment	2019-20	2019-20 target
Anglian Water ¹	Across company % reduction in gross operational GHG emissions against a 2014-15 baseline	34	7
	Across company % reduction in capital carbon against a 2010 baseline	61	60
Hafren Dyfrdwy	Size of our carbon footprint (ktCO ₂ e) – water	3	2
	Size of our carbon footprint (ktCO ₂ e) – wastewater	2	2
	Gross operational greenhouse gas emissions (tCO ₂ e)	3,950	7,535
Severn Trent Water	Size of our carbon footprint (ktCO ₂ e) – water	213	214
	Size of our carbon footprint (ktCO ₂ e) – wastewater	211	210
	Gross operational greenhouse gas emissions (tCO ₂ e)	1,285	2,192
Northumbrian Water ¹	Across company greenhouse gas emissions (ktCO ₂ e)	139	150
South West Water	Reduce energy use in water delivery (kilowatt hours per megalitre)	616	530
	Operational carbon emissions (ktCO ₂ e) – water	46	48
	Operational carbon emissions (ktCO ₂ e) – wastewater	72	102
Thames Water	Greenhouse gas emissions (ktCO ₂ e) – water	41	151
	Greenhouse gas emissions (ktCO ₂ e) – wastewater	217	270
Wessex Water	Greenhouse gas emissions (annual greenhouse gas emissions from operational services; ktCO ₂ e)	117	119
Bristol Water	Total carbon emissions (kgCO ₂ e per person)	19	20
South East Water	Kg of carbon emissions per customer per year	36	38
South Staffs Water	Carbon emissions from power consumption (tonnes CO ₂ e in real savings)	716	5,210
SES Water	Greenhouse gas emissions (kgCO ₂ e) per million litres of water supplied	56	525

Operational **carbon emissions** from water companies account for nearly 1% of the UK's total carbon emissions. We expect companies to understand their emissions and play their part in the UK's effort to reduce them. We are committed to helping to mitigate climate change through our approach to regulation.

During 2015-20, most companies had reputational performance commitments related either to levels of **emissions** or **renewable energy**. The table demonstrates whether each company has achieved its emissions target in 2019-20 and its associated performance commitment level. Generally, companies met the commitments they set.

For 2020-25 most companies have bespoke performance commitments relating to carbon reductions. For example:

- **Wessex Water** commits to reducing greenhouse gas emissions by 14%.
- **South East Water** commits to reducing carbon emissions by 68%.

¹ Anglian Water's and Northumbrian Water's emissions performance commitments are aggregated from the performance commitments for each price control.



Water companies' performance in reducing carbon emissions (2)

Renewable	Commitment	2019-20	2019-20 target
Dŵr Cymru	Gigawatt-hours (GWh) of renewable energy generated – water	45	18
	Gigawatt-hours (GWh) of renewable energy generated – wastewater	77	82
South West Water	% energy from renewable sources – water	16	12
	% energy from renewable sources – wastewater	9	8
Southern Water	% of energy from renewable sources	16	17
Thames Water	Energy imported less energy exported – water (GWh)	506	476
	Energy imported less energy exported – wastewater (GWh)	383	295
Wessex Water	Proportion of energy self-generated	25	24
Yorkshire Water ¹	Proportion of energy used generated by renewable technology across the company	15	12
Portsmouth Water	% increase in energy sourced from renewables	> 95%	10

The table demonstrates whether each company has achieved its emissions target in 2019-20 and its associated performance commitment level. Most commitments were met.

For 2020-25 companies have made further commitments to increase use of renewable energy. For example:

- **Thames Water** commit to 9% more renewable energy.
- **Yorkshire Water** will increase the amount of renewable energy it generates from biogas by 15%.

In 2019 the companies committed to achieving net zero carbon emissions by 2030 as part of the sector's [Public Interest Commitment](#). In 2020 Water UK published its [Routemap](#), setting out the sector's plan for achieving this. We welcome this and consider the targets set by the bespoke performance commitments on emissions and renewable energy will support the range of measures the sector will require to meet its carbon neutral aim.

¹Yorkshire Water's renewables performance commitment is aggregated from the performance commitments for each price control.



Appendix 1

2018-19 Overall assessment of efficiency and effectiveness of service delivery

	Total expenditure		Outcomes							
	Wholesale	Retail	Customer service	Meeting performance commitments	Earning financial incentives	Leakage	Supply interruptions	Water quality contacts	Internal sewer flooding	Pollution incidents
Better performance										
Anglian Water	▼	▼	▲		▼	▼	▼	▲	▲	▲
Wessex Water	▼	▼			▼	▲	▲	▲	▼	▼
Portsmouth Water	▼	▲	▲	▲	▼	▲	▲	▲	-	-
Marginal – better/average										
South West Water	▼	▲	▲		▲		▲		▲	▲
Average performance										
Dŵr Cymru	▼	▼	▲	▼	▲	▲	▲	▼		
Northumbrian Water	▼	▼		▼	▼	▲	▼		▼	▲
Severn Trent Water ¹										²
Southern Water	▼	▲	▲	▲	▼	▼	▲	▲	▲	▼
United Utilities	▲	▼		▲	▲		▲	▲	▲	▼
Yorkshire Water	▼	▼		▲	▼	▲	▼	▼		▼
Affinity Water	▼	▲		▲	▼	▼	▲	▲	-	-
Bristol Water	▼	▼	▲		▼	▲	▲	▼	-	-
South East Water	▼	▲		▼	▲	▲	▲	▲	-	-
South Staffs Water	▼	▲		▲	▲	▲	▲	▼	-	-
SES Water	▼	▼	▲	▼	▼		▼	▼	-	-
Poorer performance										
Hafren Dyfrdwy ¹										- ²
Thames Water	▼	▼	▼	▼	▼		▲	▼	▲	▲

Key	
Top 25%	▲
Middle 50%	▲
Bottom 25%	▼
Improved performance	▲
Deteriorated performance	▼

¹ The area boundaries of Severn Trent Water and Dee Valley Water were modified on 1 July 2018, on which date, Dee Valley Water was also rebranded as Hafren Dyfrdwy and became a water and sewerage appointee. The modification also had the effect of transferring certain customers of each company to the other. A comparison with 2018-19 performance on each measure is therefore not provided for these companies.

² All pollution incidents figures presented are representative of the legacy company Severn Trent Water.

