

## About us

We are one of the largest of the 11 regulated water and sewerage companies in England and Wales. We provide high quality services to around 4.3 million households and businesses in the Midlands (our customers in Wales transferred to our group company Hafren Dyfrdwy from 1 July 2018). Our region stretches across the heart of the UK, from the Bristol Channel to the Humber, and from Shropshire to the East Midlands.

#### What your bills paid for

Our average household bill for water and sewerage is £348 per year, or just 95 pence per day. And we're proud to say that this is the lowest combined bill across the whole of England and Wales.

## Serving our communities

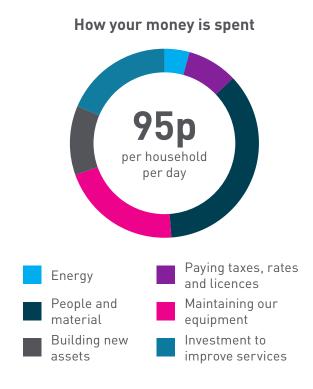
Serving our 4.3m customers and communities is at the heart of everything we do.

Every five years we work with our customers to develop new business plans which we agree with our economic regulator, Ofwat. Our plans include commitments to improve our performance. These commitments are in the areas of service that are most important to our customers.

We made 45 commitments in total in our current five year business plan (for 2015-20). Some of these apply for this year, and others are for future years.

This report summarises how we've done against the 38 commitments for this year and provides a view of performance to 2020. Fuller details, including our financial performance based on Ofwat's regulatory accounts framework, are published in our Annual Performance Report 2018.

Our Water Forum, an independent multi-stakeholder group, plays an important role in reviewing our progress throughout 2015-20. We've included the comments they've made on our delivery this year.



# About this report

## Clear and transparent reporting

We have grouped our performance commitments into eight areas - service now (water, waste water and retail), asset health, environment, resilience, community and responsible investment. This makes it easier for our customers and stakeholders to hold us to account by being able to more easily compare our performance to other companies.

We've used a simple assessment to show our progress - red, amber and green.

#### Responding to customer feedback

We've also presented our performance in a way that our customers have told us meets their needs. Our research told us:

- Customers feel the most important aspects of performance are those that have a personal or immediate impact.
- We've grouped these measures into 'service now' for water, waste water or retail.
- Customers feel it is important to provide comparative information against the average performance of the sector.
- The Discover Water website also provides a really useful way of comparing performance across the water sector.
- Customers value knowing what their bills pay for, especially if it is made to be easy to understand.
- We've retained the bill graph showing how customers' money is spent, with updated information.

## How our measures fit together

Our measures cover different time horizons:

- **Service now metrics** these provide important information on the resilience of services that have immediate impact.
- Asset health metrics these capture resilience issues that occur frequently (that is many times per year).
- **Resilience measures** these focus on resilience issues that occur far less frequently (e.g. drought), or evolve on a long timescale (e.g. flood risk).

It's only when we look at all these aspects together can we truly understand our level of overall resilience.

## Responding to Ofwat's queries

Following publication of our Annual Performance Report in July 2018, we received a number of queries from Ofwat. This process is used to ensure that Ofwat have a clear understanding of our data and performance, including asking for additional information where needed.

We received 22 queries in total, most of which related to explaining our cost assessment data and financial trends.

We've reviewed the queries and our responses to identify how we could make it easier for our customers and stakeholders to understand our performance. As a result of this review, we've providing more information on four specific areas:

 the adjustments we've applied to calculate the penalty for our 2017/18 supply interruptions performance;

- a consolidated reconciliation of the leakage position from 2015/16 to 2017/18;
- an explanation of the year-on-year increase in doubtful debts; and
- a statement about how we are delivering services for everyone who depends on them.

We have also updated the published documents on our website where inconsistencies were identified between published data and the information we submitted to Ofwat directly.

## A clear indication of how we've performed:

We've delivered the target

We're delivering performance within an expected range or have delivered a contribution to the 2020 target We're making good progress but do have more work to do

We haven't delivered the performance our customers expect

Target does not apply in the year



## Understanding and measuring resilience



# Our year in summary

## Some good improvements delivered for our customers

We've made some good improvements for customers this year - we've improved the quality of the water they receive, reduced the risk of sewer flooding to their homes and gardens and improved the environment they live and work in. We've worked with customers and stakeholders on building a greener future and helped our most vulnerable customers who were struggling to pay their bills. Overall, we're on track to deliver 80% of our targets - that would make us upper quartile based on 2017 data. And we've done all this while continuing to have the lowest average household bills in England and Wales.

## We've made progress but have more to do

Our supply interruptions performance was extremely disappointing - our worst for five years. We experienced a small number of large failures throughout the year culminating in the freeze thaw in March 2018. Although we responded well in each case, we need to get better at dealing with risks before they occur. We are developing our action plan to ensure we learn the lessons from these events and prepare for and respond to them better in future. Our leakage performance also suffered as a result of the freeze thaw - especially as we had been on track to meet our target with a matter of weeks to go.

Another area of frustration was that the number of water treatment sites where coliforms were detected rose from five to eight. While coliforms are harmless bacteria, their presence can be an indication that water quality is not as high as it should be. We know our strategy of investing in our people and our assets

is right because it has driven strong performance for the last two years - including a 38% improvement in sites with coliform detections from 2015 - and our approach is supported by the Drinking Water Inspectorate. We'll continue with our strategy and focus on our consistency of delivery. We can, and will, improve.

#### Incentives that reflect our performance

We're fully supportive of the incentive environment that Ofwat has created. A clear link between the levels of service we provide and the amount we charge our customers has encouraged us to think differently about how we work and to develop a sharper focus than ever on improving customer service. The result has been a great performance which has generated significant outperformance payments of £88 million in our waste water service. This reflects the hard work we've put in to make significant improvements to the service our customers have received. This is particularly the case on sewer flooding where we've made much more progress at a much faster rate than we thought possible. It shows the benefits of investing in people, assets and data - we're applying this learning across all areas.

This will be offset by a £23m underperformance penalty for our poor water service performance this year. This is on top of compensation paid to customers who were directly affected by an incident.

80%
targets delivered or
on-track (compared to
an industry average last
year of less than 70%)



Increased investment efficiently delivered (cumulative 1.3% return on regulated equity from cost outperformance)

feet million

net outperformance

payment for

performance

# Our year in summary (continued)

#### Serving our customers and communities

We're proud of our continuing efforts to do more every year to help vulnerable customers who are struggling to make ends meet. In its third year, our Big Difference scheme helped 36,000 customers access discounts of up to 90%. This is just one part of our various schemes that enable us to meet our commitment to help at least 50,000 customers with their bills every year.

Experience tells us that when customers are struggling to pay their water bills, there are often issues in other areas of their lives. So we've now expanded our care and assistance team to give us the capacity to engage with agencies such as housing associations, the NHS, Citizens Advice and other utility companies. By working together, sharing information and adopting a holistic approach to vulnerable people, we believe we'll be able to do even more to play a key role at the heart of local communities.

We continued to perform well on the Institute of Customer Service's UK index, which measures customer satisfaction across the Utilities sector, achieving upper quartile position for customer satisfaction, equivalent to fourth position in the Utilities sector. However, our customer Service Incentive Mechanism score - which Ofwat uses to encourage good performance - is disappointing. We are working hard to improve the consistency of our customer experience. There's still more to do, but it's encouraging to see that our drive to embed customers at the centre of all we do is paying off where it matters most - in the hearts and minds of customers themselves.

## Building a resilient future to protect service and the environment

Taking a longer term view, we're pleased that our performance on environmental and resilience measures remains strong. We've reduced the number of pollution events - including the most serious incidents. Our compliance measures are stable and we're making good progress on improving our treatment works to protect our environment. It is great to see all these achievements come together and we expect to regain the mark of exceptional environmental performance in our sector, the coveted 4\* status from the Environment Agency during the year.

Taking less water out of the environment, especially from sources that are environmentally sensitive, can help protect habitats and species now and in the future. We currently don't have any sites included in the water industry's Abstraction Incentive Mechanism (AIM) because of the type of water sources we abstract from. However, our Water Framework Directive commitment does look at improving our water sources to help them move to good ecological status, as agreed with the Environment Agency. We're also working with stakeholders to develop a commitment to measure our impact on water sources for the 2020-25 plan.

And we know that real, sustainable change can only come if we work in partnership with others - we're helping farmers make small changes on their farms which could have a big impact on the quality of our water sources and we're educating customers - especially children - on how to use water more wisely and what not to put down their toilets. It's essential that our system is resilient enough to deal with shocks and stresses - and were pleased to have delivered key milestones on our Birmingham Resilience Programme which should help secure water supply for generations to come.

## **Ensuring trust and confidence**

We've include an additional £0.8m penalty this year to reflect the increase in real leakage losses in 2016/17. We're not required to do this – we were ahead of our leakage target last year – but want our customers to be confident that we will do the right thing.

## Delivering improvements to 2020 and beyond

We are looking forward to the challenge of the coming year and for the reminder of the 2015-20 period.

We've got a lot to do - our supply interruptions performance needs to improve by 77%, coliform failures by 25% and water quality complaints by 21%. We're investing responsibly to deliver success. We're aiming for all areas to be on target - accepting that there will be some aspects we'll still need to work on.

# Our year in summary (continued)

## Our 2017/18 performance

Service now - Waste

£86m outperformance payment

Service now - Water

£22m underperformance penalty

Asset health

£1m underperformance penalty

Service now -Retail Resilience

Serving our community

Environment

£2m outperformance payment

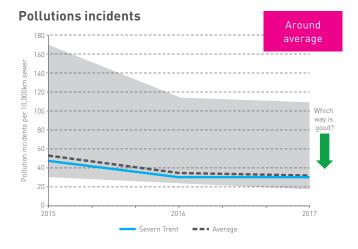
Responsible, efficient investment

We've summarised our 45 performance commitments into eight areas to make it easier for customers and stakeholders to understand our overall performance so they can hold us to account. Each area is unpacked in the next section.

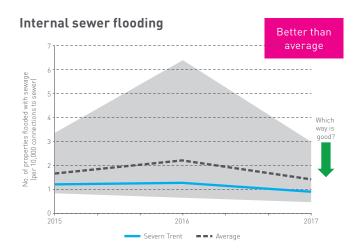
# How our service compared to other water companies

It's important that our customers have a clear view of how we're performing, both against the target levels we committed to and how we compare to other companies in the water sector.

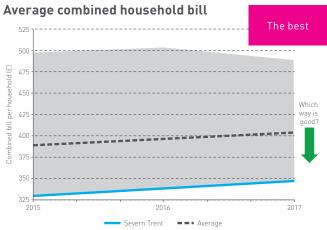
As we did last year, we've highlighted eight key areas of performance which can be compared, noting that not all of our commitments are comparable because they're tailored to the customers needs within each company area. The charts are based on comparing water and sewerage companies serving England and Wales – the shaded area shows the range of performance for each measure. Not all of our commitments are comparable because they're tailored to the customers needs within each company area.



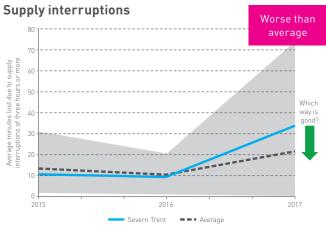
We have consistently performed better than average. We performed well on all three pollution performance commitments in 2017/18.



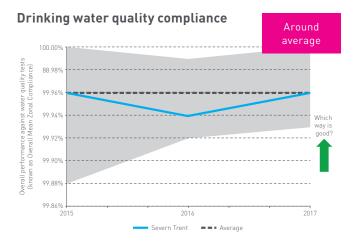
We are consistently one of the best performing companies in the sector, and have delivered year-on-year improvement.

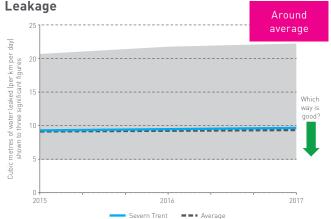


We have consistently been the best in the sector, with some customers in the England and Wales paying 40% more than our customers.



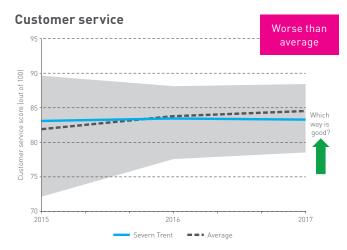
Our performance was severely impacted by the freeze/thaw and a small number of large events.

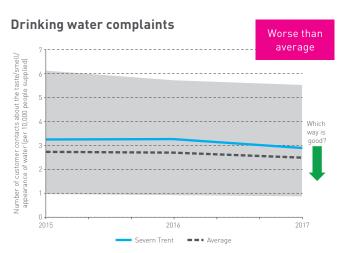




Our year-on-year improvement has seen us return to the sector average.

Our performance remains in-line with the sector average.





Our performance has remained relatively stable while others have improved, resulting in our performance on this measure now being below average.

While we remain worse than average, we've managed to make a significant improvement in our year-on-year performance.

You can find out more about how we compare to other companies at discoverwater.co.uk - where we took comparative data for this report from. The Discover Water website brings together information about water companies in England and Wales into once place. Information is provided by water companies, with oversight from our regulators, the UK and Welsh Governments and the Consumer Council for Water.

Ofwat, our economic regulator, is working with companies to make sure that in some areas there is more consistency about how we all measure our performance. This means that we'll be able to compare more areas in the future (and that some of the above comparisons could change).

You can find out more about how water companies in England and Wales are performing on the Discover Water website:



# Our customer challenge group's view of performance

Our performance commitments for 2015-20 were developed through lots of consultation with our customers and challenge from our independent multi-stakeholder group, the Water Forum. As we progress through 2015-20, the Water Forum will continue to challenge us to deliver the commitments we've made. Their view of this year's performance is:

"We welcome this report in which the company explains its performance to customers. We are impressed with the progress Severn Trent has continued to make in important areas such as reducing the number of households suffering from distressing flooding from sewers and financially supporting almost 52,000 customers who found themselves facing difficult circumstances. The Birmingham Resilience Programme is also progressing well.

We are also pleased they have worked hard to improve in areas where performance had previously not met customer expectations including to reduce pollution events which harm the environment. They've also reduced the number of complaints about drinking water quality - although there is still much more to do to meet the target in this area. We are also disappointed to see that the company has not made significant improvements in the Service Incentive Mechanism (SIM), the key customer metric for the industry.

Clearly, Severn Trent has had a very poor year on supply interruptions and leakage. They must improve the way in which they respond to problems and invest appropriately on their water service - it is important that they continue to commit investment to improve performance. We're pleased that Severn Trent has increased payments to those customers directly affected by service failures. We also note that they have chosen to increase their leakage penalty to align with Ofwat's future direction - this is vital to gain customers' trust and confidence. We recognise the comments and challenges presented in both the Ofwat and CCWater reports on the freeze/thaw event and will scrutinise Severn Trent's improvement plans carefully.

Two years remain in the 2015-20 period; we would like Severn Trent to focus on delivering a consistently better service to meet customers' expectations. This represents a challenge, but an essential one given the level of ambition we need to see in their 2020-25 plan."



# Delivering services for everyone

Our Annual Performance Report explains how we're delivering against target levels agreed across our 45 performance commitments. We've grouped these into eight areas, with each assigned a red, amber or green status to make it easier for customers and stakeholders to understand our overall performance so they can hold us to account. We have also provided information on the factors that have driven our performance and our future plans, which have been developed through our internal governance processes. In early 2018, the Strategic Leaders accountable for delivery presented their plans at our weekly Loopcells (cross company Executive level meetings to review and challenge performance and delivery plans). This approach ensured that we could be confident that the level of ambition we'd set was appropriately stretching and aligned to resources required to deliver the plans.

This process ensures the plans presented to our Board are robust. The Board is responsible to all stakeholders, including the Company's shareholders, for the approval and delivery of the Group's strategic objectives. It makes sure that the necessary financial, technical and human resources are in place for the Company to meet its objectives. The Board leads the Group within a framework of practical and effective controls which enable risk to be assessed and managed.

Responsibility for the development and implementation of the Group's strategy and overall commercial objectives is delegated to the Chief Executive who is supported by the Severn Trent Executive Committee ('STEC') – the group overseeing the development of our performance plans as described earlier. A summary of the Board's activities during the year is set out in the corporate governance report Company's Annual Report and Accounts. This includes a discussion of the Board's consideration of key stakeholders whose interests are taken into account in its decision making, and a summary of the processes by which the Board assesses and manages conflicts of interest.

The Annual Report and Accounts contains a review of the company's performance during the year, including an assessment of progress against the Company's strategic objectives. The Board has overall accountability for ensuring that risk is effectively managed across the Group. The Board's mandate includes defining risk appetite and monitoring risk exposure to ensure significant risks are aligned with the overall strategy. The Annual Report and Accounts contains a summary of the Board's approach to risk management, and sets out a detailed summary of the process by which the Board has assessed the long term prospects of the Company, taking into account the Company's ongoing review of its strategy, future funding needs, and the likelihood of risks and uncertainties which could affect the Company's future viability materialising.

The remuneration of directors and senior managers of the Company is overseen by the Remuneration Committee of Severn Trent Plc. The Committee addresses the need to balance risk and reward, and monitors the variable pay arrangements to take account of risk levels, ensuring an emphasis on long term and sustainable performance. The Committee believes that the Company's incentive schemes are appropriately managed, and that the choice of performance measures and targets does not encourage undue risk taking by the Executives. so that the long term performance of the business is not compromised by the pursuit of short term value. The schemes incorporate a range of internal and external performance metrics, measuring both operational and financial performance over differing and overlapping performance periods, providing a rounded assessment of overall Company performance. These are explained in detail in the Remuneration Report in the Severn Trent Plc Annual Report and Accounts.

# Performance summaries for each area

## Service now - Waste

We've delivered another year of improvement on sewer flooding - one of the worst service failures that our customers could ever experience. We have exceeded both targets and expect to be ranked as one of the top performing companies - a performance which has earned an outperformance payment of £85.6m. There is room for improvement - we will continue to innovate, using leading edge technology and high quality data to identify areas at risk which we then address through targeted action. We've developed a range of solutions to use - from major investment schemes, quick to deploy mitigation measures and cost effective bespoke solutions for hard to resolve issues.

## Internal sewer flooding

We've continued to improve in this critical area, one of the worst service failures that can be experienced by our customers. Our performance for 2017/18 is 31% ahead of target generating an outperformance payment of £12.8m. We are on-track to be ahead of target throughout the remainder of the 2015-20 period.

We've made major improvements - with better quality data and improved analysis being core to our success. We've hydraulically modelled our network extensively over many years and use this to understand which homes are at risk from flooding, some of which will never have been flooded before. Our toolkit then enables us to design and deliver a range of interventions, from multi-year improvement schemes - the £60m, 3-year project to address flooding for 400 homes in Newark is a good example - to quick to install mitigation measures. One area we're increasingly looking at is super-mitigation, cost effective bespoke solutions for 'hard to resolve' problems. And of course, we're mindful that engineering solutions are not the only answer - a more sustainable outcome involves preventing sewer misuse in the first place and working in partnership to create more sustainable solutions. The good news is that we're making great progress on these as well (covered in Community).



#### External sewer flooding

Our performance for 2017/18 is 49% ahead of target generating an outperformance payment of £72.9m. We are on-track to be ahead of target throughout the remainder of the 2015-20 period.

The steps we've taken to reduce internal sewer flooding - described above - have also reduced external sewer flooding as the causes are often linked. Our progress on external sewer flooding demonstrates the benefits of having strong and focussed performance measures. Our data analysis is becoming more sophisticated - we're able to use geospatial analysis to create clusters of flooding incidents caused by debris, foreign objects or accumulation of fats, oils and greases in our system (often called 'fatbergs'). We'll work to remove these fatbergs and we'll also tackle customer behaviour where this has contributed to the problem. One of the great areas of success has been with targeting known repeat locations. As with internal sewer flooding, we are working on developing a truly predictive programme - one that puts in place solutions where problems have never occurred.



## Service now - Water

Customers expect water to be there when they need it. It's important to them that they can trust a lean, healthy supply of water that will always be there when they turn on the tap. We've improved our water quality compliance and delivered another strong year on low water pressure - an area increasingly of concern to our customers. We've also delivered sector leading improvement on water quality complaints, though we know there is much more to do to achieve target levels.

We have a strong track record and have shown great improvements in supply interruptions over the last five years, whilst we've met our leakage target for the last seven years. Disappointingly, the 'Beast from the East' in March 2018 resulted in us missing our leakage target and contributed to an already poor year on supply interruptions. And, whilst we respond to all customer reported leaks, we are struggling to do so within 24 hours in a way that is balanced and fair for all our customers.

Our performance across these measures has not been at the level our customers expect and, as such, we have incurred a significant penalty of £22.7m.

#### Water quality complaints

Last year we were optimistically cautious that our improvement activity and sustained investment would deliver results and reverse a deteriorating trend. We are pleased to report that this has been the case; we've delivered a 12% year-on-year improvement, the largest in the sector in recent times. We've still got more to do to meet our targets - our performance this year has generated a £2.4m penalty as we are 27% below target - but we are confident that our triple-track strategy of mains flushing and cleaning, proactive customer communications and clamping down on illegal usage will allow us to meet target levels by the end of the 2015-20 period.



## Water quality compliance

We've delivered strong improvement this year, with 25% less failures in iron, turbidity and taste and odour. This has helped us return to expected levels of performance (within the deadband range where neither outperformance payment or penalty applies), and we expect to remain there based on our investment commitment. No new legal instruments were issued by the Drinking Water Inspectorate, showing their trust in our actions. We expect to remain within the agreed performance range for the remainder of the 2015-20 period.



#### Speed of response to visible leaks

Whilst we respond to all customer reported leaks, we've found this specific measure extremely difficult to deliver. Our intention was to have a measure which improved customer experience but we've found that the design of the measure could adversely impact levels of service for all customers because it doesn't take consequence of failure into account. We're working with the Water Forum to develop a better measure for 2020-25 and will continue to focus on overall improvements in leakage response times for the remainder of the 2015-20 period. Our penalty for this year is £1.4m.



## Service now - Water (continued)

#### Low pressure

We've successfully delivered this measure for three years in succession, deploying innovative solutions to ensure our customers receive improved water pressure. Our performance this year is 18% better than target, earning an outperformance payment of £36k. We're looking to improve service even more by - dealing with homes at risk before they become an issue - important as this appears from our research to be the most experienced service failure. Looking forward, we're looking for a more sophisticated measure, one which more properly takes into account the impact (extent and duration) of low pressure on our customers.



#### Water supply interruptions

We've experienced an exceptionally bad year - the worst since this measure was introduced in 2012/13 - with the performance attributable to a very small number of large scale events throughout the year and culminating in the 'Beast from the East' in March 2018. We know how much even a short interruptions can inconvenience our customers - we decided immediately to pay £30 compensation to any who were without water for more than 12 continuous hours, or experienced intermittent supply for more than 15 hours. We also worked with business customers and their retailers who were affected.



Our resilience approach meant that we were able to respond effectively with tankering, network reconfiguration, providing bottled water and clear communication across a number of channels. Our performance of 34 minutes was against a target of 10 minutes, generating a penalty of £16.8m. We're taking action and stepping up our analytical capability by installing one of the most extensive real-time monitoring systems in the sector. We expect to be back on target next year and for the remainder of the 2015-20 period.

## Leakage

The March 2018 freeze-thaw event also meant we missed our leakage target - particularly disappointing as we were on track for most of the year. We're investing in a wide range of tools and techniques to drive down leakage in a cost effective way, including developing leakage detector robots, trialling a number of tools to identify which provide the most effective intelligence on our network and learning from world leaders. We are working hard to be back on target next year and for the remainder of the 2015-20 period.

Our performance was 2% (9 Ml/d) above target, within which real losses increased by 7 Ml/d. In-line with the approach used in previous years, this would have generated a penalty of just under £1m. However, we have decided to increase the penalty to £1.7m because we want to be fair, transparent and support Ofwat's drive to increase consistency of leakage reporting. The PR19 methodology is clear - reported performance and associated incentive payments from 2020 should relate to actual performance changes only - we see no reason not to introduce this now. This penalty this year brings our the 2015-20 period performance fully in line with Ofwat's vision.



# Supply interruptions

We recognise that our explanation of the supply interruptions penalty could have been clearer in our initial Annual Performance Report, and so we have updated this section of the report. We discussed our position with Ofwat prior to our 2017/18 results, with the adjustments we've applied explained in detail below.

Our supply interruptions penalty is calculated based on the number of minutes above 3 hours each property on average is interrupted. We do not apply an overall limit (or cap) to our performance but do cap the penalty relating to individual incidents to 5 minutes (or £5.5m). These events are very rare but do occasionally happen. We did not have any events of this size during 2015/16 or 2016/17. However, during the 2017/18 report year there were two supply interruptions incidents which individually exceeded five minutes as shown in the table below:

Incident	Date	Total incident minutes	Adjusted penalty value	Adjustment
Gloucester incident	December 2017	5.73	(£6.303m)	£0.803m
Freeze/thaw	March 2018	11.33	(£12.463m)	£6.963m
Total		17.06	(£18.776m)	£7.766m

In table 3A (page 43) of our Annual Performance Report 2018 we reported a supply interruptions performance level of 34.29 minutes with a penalty of £24.5190m. This value represented the uncapped underperformance penalty (i.e. we did not take in to account the five minute limit for the two events above). On page 48, we've shown the penalty after applying these adjustments which reduce the penalty by £7.766m to £16.753m.

We also report the total penalty on page 7 of our Annual Performance Report where we included a table that showed the pre-tax values for our ODIs as well. This is because the values calculated above are after we have paid the relevant tax on them. To demonstrate this we assumed a tax rate of 19% and worked out the pre-tax value of -£20.683m; this value is of particular use to some of our stakeholders such as our investors.

# Leakage

During 2017/18 we believe that Ofwat provided greater clarity on their position in relation to leakage incentives. It is now clear that financial incentives for leakage should relate only to changes in *real* loses and not changes in data and methodology updates. This was in response to the comment in the 2017 In-period ODI Determination and subsequent industry workshops.

In table 3A (page 43) of our Annual Performance Report 2018 we reported a leakage performance of 443 Ml/day compared to our target of 434 ml/day. This gives a penalty of £1.107m based on the incentive rate of £0.123m per Ml/day. But on page 8 we stated that we have made an adjustment of -£0.8m to reflect the change in real loses for leakage in 2016/17. In order to calculate the appropriate adjustment we reviewed performance based on real loses alone, the position in each year of the AMP would be:

	Actual performance	Change in <i>real</i> losses	ODI value based on <i>actual</i> performance
2017/18	+9 Ml/day	+7 Ml/day	(£0.861m)
2016/17	-7 Ml/day	+7 Ml/day	(£0.861m)
2015/16	-10 Ml/day	-9 Ml/day	£1.107m
Total		+5 Ml/day	(£0.615m)

We also have to take in to account adjustments we have already made to the ODI value claimed in 2015/16 and 2016/17.

	Mechanistic ODI	Adjustment made in report year	Value claimed
2016/17	£0.861m	(£0.861m)	£0.000m
2015/16	£1.230m	(£0.123m)	£1.107m
Net position			£1.107m

This resulted in a positive £1.107m claimed for years one and two of the AMP. However, in total for years one to three our analysis above shows we should be in a negative £0.615m position based on real loses alone. We reconciled this position by:

- Net position following 2016/17 = £1.107m
- Adjustment for 2017/18 real loses (+7 Ml/day) = -f0.861m
- Further adjustment to reconcile to cumulative position, -£0.861m

2017/18 mechanistic value (+9 Ml/day)	(1.107m)
2017/18 adjustment to reflect real losses (-2 ml/day)	£0.246m
Adjustment for cumulative position	(£0.861m)
Total	(£1.772m)

## Service now - Retail

Our customers tell us they want low bills, less sewer flooding and high quality water at the turn of a tap. Our upper quartile positioning in the UK Customer Service Index shows that we're making good progress here. We're disappointed by our SIM score though - static for the third year running. We've taken action to improve and will keep going until we make progress. We look forward to the introduction of Ofwat's new C-MeX measure. Currently in development, we believe that this measure will provide a truer reflection of our relative performance.

#### **Customer satisfaction with their services**

We continued to perform well on the Institute of Customer Service's UK index, which measures customer satisfaction across the utilities sector. This year, we've moved from median to upper quartile position for customer satisfaction, equivalent to fourth position in the Utilities sector.

We've worked hard to deliver in this area. It's important that customers can get in touch with us how they want, when they want. We now maintain nine different customer communication channels, including webchat which saw a 47% increase in traffic during the year. We had already extended our opening hours for billing enquiries to include evenings, weekends and bank holidays but now we've gone further by providing a 24/7 service for non-emergencies - a first for the sector. Written complaints have fallen by 17%, within which billing complaints have come down 30%. The improvements we've made provide confidence that we can continue delivering great customer satisfaction.



#### **Service Incentive Mechanism**

This is the mechanism Ofwat uses to encourage good performance. We're disappointed by our SIM score which has remained static for the last three years. This doesn't reflect the changes we've made or our progress based on the Institute of Customer Service's UK index. We anticipate receiving a penalty for our performance at the end of the 2015-20 period (the value will be determined by our relative position).

We will continue to work hard to improve the quality and consistency of our customer experience. Learning from others, we've created a specialist team to actively case manage issues for customers that don't follow a standard process. Looking forward, we've got more activities planned - from website design to increase payment options - these should improve our overall customer experience.



## Percentage of customers who do not pay

We need to ensure those customers who can pay do so as this benefits all of our customers. We remain 19% ahead of our bad debt target, albeit with a year-on-year increase. Future debt improvement will be driven by transformational projects bringing new tools to the credit team, such as the automated dialler, an upgrade to the debt collection platform and improved tools for customers to manage their accounts online. These new tools, coupled with updated operational processes for customer journeys and debt strategies, aim to further improve on cash collection performance in 2017/18 and beyond.



## Service now - Retail (continued)

#### Customers rating our services as good value for money

A strong performance on value for money is, in part, indicative of a brand that is seen by customers as delivering what matters and being good corporate citizens. The biggest influence on perception is that customers know we are using their money wisely, although there are of course external influences. Our customers' perception has risen again this year, meeting the target. We're confident that, through our brand messaging and our behaviours we will be able to continue to meet the expected target.



## Doubtful debt

Doubtful debt records the total amount of debt owed by our customers in unpaid bills. We reported doubtful debts of £25.0m in 2017/18 which was an increase of 21.4% compared to the previous year.

One of the key reasons underpinning the increase what a change in the accounting practices we have to follow from IFRS to UK GAAP. In addition to this, we have worked harder to understand the levels of debt across our business as we develop new customer measures on vulnerability and affordability for the future, this has led to a more prudent estimate of bad debt being taken by the management team.

## Asset health

As a company we extract water from one of our 126 sources before treating it at 140 water treatment works. We then transport it through 47,055km of mains using over 675 pumping stations to get it to our customers' taps. Once it returns to our 93,727km of sewer we need another 4,350 pumping stations to move the sewage to our 1,013 sewage treatment works.

It's a huge operation and many of our customers are unaware of the scale of our business. But our customer insight also tells us that customers expect us to maintain and replace our treatment works, pumping stations and underground assets in a timely manner. They want us to ensure our assets are fit for purpose so that the quality of their service isn't impacted. In short, it's our 'day job.'

#### **Mains bursts**

We've continued to meet the target this year, despite the challenging conditions - particularly the freeze/thaw that affected many parts of the country in March 2018.

Given our performance on mains bursts - considered to be the strongest indicator of the health of our water network - and our risk based approach to investment, we're confident we can continue to deliver a stable service. Our focus for the remainder of the 2015-20 period will be on eruptive bursts as these are the failures that directly impact on supply interruptions.



## Sewer blockages

We've continued to deliver a strong performance on blockages, critically underpinning our ability to drive down internal and external sewer flooding, and pollutions. This inter-relationship between activities, interventions and outcomes allows us to work out the most cost-effective way to improve performance. For example, 75% of blockages are caused by sewer misuse rather than asset failure which requires us to put a multi-channel response in place - customer education, prosecution for deliberate misuse, improved maintenance and targeted asset repair or replacement.



We've come a long way in this area, especially considering that we received a £10m penalty for our performance 5 years ago. We're confident we can continue delivering stable service on blockages.

#### Coliform failures at treatment works

Having delivered two successive years of improvement, we were disappointed to see deterioration this year. We detected coliforms at eight sites this year (the target being less than eight) and incurred a penalty of £0.5m.

We chose to invest significantly more than set out in our 2015-20 plan in this area, knowing that only sustained investment in our assets and people would deliver results. We have recently committed to improving our sampling facilities, including replacing lines copper and using flaming of sample taps as the standard method of disinfection. We believe the actions we've taken will enable us to meet our targets consistently for the remainder of the 2015-20 period.



## Asset health (continued)

## **Environmental compliance**

We have maintained our performance this year and remain in line with expected levels of performance (within the deadband – no company has managed to achieve 100% compliance across all four sub-measures in the last four years).

Our compliance on waste water numeric consents remains strong. The focus for the remainder of the 2015-20 period is on non-numeric consents and flow permits. Given our track record and the actions we are taking to continuously improve, we expect to deliver stable asset health for the rest of the 2015-20 period and beyond.



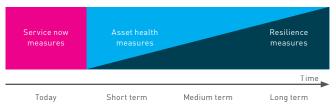


## What is asset health?

It covers the state, performance and condition of our assets, which together with other information such as failure history and age gives us the ability to predict the likelihood of an asset failing. Combined with consequence of failure, this gives us an understanding of risk. Analysing trends over time and across a range of metrics allows us to reliably predict future performance and make required interventions.

Asset health is one of the building blocks of resilience, measuring issues that occur more frequently (i.e. many times a year).

## Understanding and measuring resilience



## Resilience

Our ability to cope with unexpected stresses and strains and remain capable of delivering service for the long term is fundamental to our business. We take a systems approach to resilience which includes our workforce and skillsets - training our workforce for the future and investing in the next generation through apprenticeships. Our corporate leadership also considers how the company is resilient in its financial structure, our operational performance and the regulatory risks we face both today and for the future.

Our commitments focus on the resilience of our water resources and asset base to ensure we continue to meet the needs of our customers today and tomorrow.

## **Birmingham Resilience**

Last year saw the successful delivery of the first of three elements of the programme - the Elan Valley aqueduct maintenance project. This year, we've met the milestones for the remaining elements - the main scheme which creates an alternative source of supply for Birmingham and the three community risk schemes. The main scheme will deliver a new pumping station and pipeline capable of abstracting up to 237 million litres of water a day - 50% more than our commitment - at no more cost to customers. We're also on track with upgrading our largest water treatment works at Frankley to ensure it has the capacity to treat the additional water. The programme will deliver much needed resilience to the UK's second city. But we know that changes of water supply - particularly where they are unexplained or unexpected - can cause dissatisfaction for our customers and lead them to question the safety of the water they are receiving. We want our customers to be part of this journey - our innovative communications with all customers likely to be impacted is designed to do exactly that.



## % customers with resilient supplies

We are on track to meet the 2020 target by delivering resilience to around 58,000 customers (0.7% improvement). This year we've completed the first element to provide a second source by connecting a borehole to our integrated grid capable of supplying up to 8 million litres a day. This is ahead of target.



#### Restrictions on water use

Our drought plan includes clear triggers that need to be passed before we need to consider imposing restrictions on our customers' use of water. None of the metrics we measure have passed the relevant triggers this year. We are confident that our planning and resilience will help to ensure this success continues.



## Resilience (continued)

## Partnership working

The Environment Agency have now confirmed that we've successfully delivered eight partnership schemes - three years earlier than targeted. We're particularly pleased to make progress in this area. Working with others to provide a more sustainable solution to sewer flooding requires collaboration and co-ordination across many stakeholders but offers more opportunity for us to improve the environment our customers live and work in. Our progress on partnership schemes also demonstrates our confidence in our flood risk modelling - traditional solutions expose us to less risk but often at more cost to our customers. We will continue working with our partners to deliver all 21 schemes in the 2015-20 period.



#### Sustainable sewage treatment

We're working hard to identify opportunities to deliver a more sustainable approach to sewage treatment (the incentive is based on avoided future investment). We have not yet delivered a solution to meet the strict definition, but have reduced capacity pressures at our works through increased collaboration and installation of alternative solutions. We'll continue looking for opportunities in the remainder of the 2015-20 period.



## Environment

Our customers are placing an increasingly high value on the natural environment. We share this view. We are committed to protecting and improving our environment and so we're particularly delighted with our performance in this area which has earned an outperformance payment of £2.5m. We're on-track not only to meet compliance standards but deliver sustainable improvements through investment and through changing the way we all interact with our environment. Regaining the Environment Agency's 4\* status - awarded for exceptional environmental performance - is testament to the progress we're making.

#### **Pollutions**

We're pleased to report we've met all three of our pollutions targets this year - an important improvement and vital in our efforts to protect the environment. We'll need to work harder to keep meeting the targets as they get progressively tighter as we move towards to 2020. Data and technology is at the core of our approach - we've installed over 1,000 network monitors in the most high-risk areas and flow monitors at 90% of our combined sewer overflows to provide real time performance data on our waste water network. The data enables us to better target interventions, such as sewer cleansing, and create synergies with other improvements. Progress is rigorously tracked with key measures visible to keep everyone aligned and focussed on minimising pollution incidents. Every pollution event is investigated to better understand why it happened, learning lessons to prevent it happening again. We believe this approach will enable us to continue delivering successfully into the future.



### Improvements in river water quality (WFD)

We've already started delivering on our Water Framework Directive programme, both to improve water and waste water environmental impacts. The target date is 2020, and we making good progress with much of the programme in feasibility and design. We've adapted our programme to include changes agreed with the Environment Agency after we had submitted our 2015-20 plan to Ofwat - this proves our innovative incentive works. We've taken the opportunity to align environmental improvements to longer term maintenance. This has resulted in a short delay to the programme but the synergy benefits and lower cost over time do give a better overall outcome. We've already delivered some schemes - almost half of the programme relating to river water flow has been delivered along with improvements at 24 waste water sites. There is still much to do - most of the programme will be delivered in the next two years - but we remain confident of delivery.



## Environment (continued)

## **Eels protection**

We're on track with this measure design to help protect the critically endangered European eel. We've worked with the Environment Agency and have progressed feasibility and design for the sites needing improvement. We're confident of delivering the agreed improvements.



#### Statutory first time sewerage schemes (s101A)

We're on track to connect over 300 rural properties to our network. We're finding that the cost of connection is rising as more and more communities join our network so we're working hard to ensure we find the most cost-effective solutions. We've already connected 81 properties and we're confident of delivering the 2020 target.



### **Biodiversity**

We've made real improvements in this area over the last year, notably securing 15 hectares improvement to an area of a Special Area of Conversation on the River Clun as well as working closely with Natural England to confirm previously reported deterioration was, in fact, due to a third party. Looking forward, we're established site specific action plans detailing the activities we need to complete to improve biodiversity. These plans cover an area of more than 200 hectares, and all have been reviewed and agreed with Natural England.



#### **Catchment management**

We've had outstanding success with our catchment management programme - we've just won the top prize for the Best Environmental or Sustainable Programme at the Corporate Engagement Awards 2018 - and are well on our way to delivering the target. We've significantly increased the size of our expert team who've worked with farmers in our priority areas to reduce the risk of pollution into the watercourses we use - and so delay or avoid the need for us to install costly treatment. One critical feature of our approach is the flexibility. The grants we offer to farmers can be used for farm management (for example, moving livestock from high-risk fields) or infrastructure (from fencing to buying precision farming equipment) - and we give farmers the opportunity to propose their own innovative ideas. Natural England have been invaluable to our success - they've provided local, expert knowledge and contacts. Results are looking positive - we're now able to see a reduction in pesticide levels which gives us the confidence we need to make further progress.



## Environment (continued)

## Resource efficiency

We've managed to improve our position for the third year running, but have not achieved our target. We developed this measure to help us manage water efficiency and leakage to enable us to take less from the environment. Our improvement this year was delivered despite our leakage performance. We'll continue pushing our water efficiency programme - we're now using demographic data to identify customers who we believe stand to gain most from our water efficiency activities. This, together with improved leakage, should drive improvements on this measure but we do not expect it to be enough to achieve the 2020 target.



## Overall environmental compliance

We're confident that our performance on the four areas covered - water framework directive improvements, biodiversity, environmental compliance and pollution incidents - will remain on-track.



## **Carbon footprint**

We've held the Carbon Trust Standard since 2009 for successfully measuring, managing and reducing carbon emissions. This is most strongly seen in our waste water performance where our renewable energy programme and energy initiatives have driven strong improvement over many years. We expect this to remain positive. We've also invested to reduce energy consumption used to treat and distribute water but this has been more than offset by increased volumes needed to meet commercial demand and keep customers supplied with water. We know we can improve - reducing leakage, reducing the distance driven by our people, balancing energy use across our assets - will all help but are unlikely to recover the position on water by 2020.



# Serving our community

We're increasingly being seen as having a key role in the everyday lives of local communities. - We need to be socially responsible, work alongside our customers and communities and work with a spirit that improves their lives. Education gives our customers a better appreciation of our, and their, role in achieving societal and environmental goals. Supporting our financially vulnerable customers is also important to provide a greater sense of community. We're proud of our achievements and will aim to do more alongside delivering our core water and waste water services.

## Improved understanding of our services through education

We've maintained our strong performance and educated over 485,000 customers since 2015. Our experience over the last three years has proven that helping people save water and prevent blockages in our sewers and drains is essential to support the long-term integrity of the network and protect water supplies for future generations. And it is to future generations that we will increasingly focus - we know we can inspire a generation, not just about water conservation and environmental protection, but also by emphasising the importance of health and hydration. That's why we used experts - teachers - to help us shape our approach. Alongside our education programmes, we'll further develop our education sites and visitors centres - they're becoming increasing popular as people are seeking opportunities to improve their health and wellbeing. We're confident we'll be able to maintain our progress to 2020.



## Number of struggling customers helped with their bills

For the 8th consecutive year, Severn Trent Water's customers paid the lowest bills in England and Wales. We're proud of this record - but we're even more proud of our continuing efforts to do more every year to help vulnerable customers who are struggling to make ends meet. In its third year, our Big Difference scheme helped 36,000 customers access discounts of between 10% and 90%, enabling us to exceed our commitment to help at least 50,000 customers with bills every year. Experience tells us that financial difficulties can often indicate issues in other areas of a customer's life, so we've expanded our care and assistance team to give us the capacity to engage with agencies such as housing associations, the NHS, Citizens Advice and other utility companies. By working together, sharing information and adopting a holistic approach to vulnerable people, we believe we'll be able to do even more to play a key role at the heart of local communities.



# Responsible efficient investment

## We're incentivised to deliver great service efficiently

Our total expenditure includes operating costs (running costs such as employee pay, power and rates as well as innovative solutions such as catchment management) and capital investment to maintain or improve our assets. As a responsible business, we need to make sure our assets continue to provide service now and into the future. At the same time, we're incentivised to become more efficient - any amount we save is shared with customers through lower bills (spending more is also shared with customers). The Final Determination reflects the amount Ofwat assumed we would need to spend in 2015-20, and used this to calculate bills.

## Combining data, design and innovation to drive efficiency

We're delivering efficiency using our established risk based investment approach, implementing innovative techniques and working with our supply chain to implement better ways of working - from using pre-fabricated construction material to reducing construction time. Our approach does not focus on cost alone - quality plays an important part in our supply chain incentives. We are also investing in research and development and also encouraging all our people to come forward with novel ideas we want to do things safer, better and faster. Our planning is also becoming more systems based we're looking for solutions which solve more than one problem, enabled by the quality of our data and modelling. We're confident we can continue delivering efficiency, driving the frontier on waste, continuing to deliver our retail services efficiently and ensuring we make appropriate, balanced decisions on water.

## Benefitting from investment in waste water processes and assets

We've spent around £1,360 million totex on collecting and treating waste water over the last three years, which is around 16% less than the totex Ofwat assumed in the Final Determination.

Within this we've increased activity on water framework directive - our innovative incentive has allowed us flexibility to work with the Environment Agency to do our fair share in 2015-20 rather than delaying improvements. The changes have led to us being a little behind on the programme but we're confident we can catch up over the next two years with the added benefit that we've aligned the improvements with our maintenance work to secure more efficient costs.

## Increasing activity to improve water quality and security

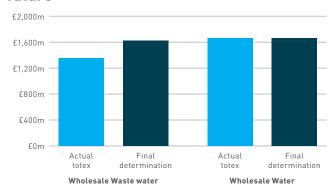
We've spent around £1,660 million totex on abstracting, treating and distributing clean water over the last three years, which is in-line with the totex Ofwat assumed in the Final Determination.

Within this, we've increased the level of activity on water quality and security into 2015-18 because we knew we needed to do more to meet customers expectations. Given our performance, we believe this has been the right course of action - we do not want to store up problems for the future. Our focus has however resulted in a slight timing delay to other programmes.

## Investing more now to secure future benefits for customers

Looking forward, we know we'll need to do more to meet our customers' expectations in 2020-25. We'll only be able to do this if we invest to improve now. We're confident enough in our delivery and efficiency plans to earmark an additional £100 million to be reinvested back into our water business. We're excited to be investing in things like robotics, extra loggers across our network, and a new training academy - all designed to help improve our water performance and set ourselves up responsibly for the future.

# We're investing now to ensure we can continue to provide great service into the future



## How we compare:

**On waste water:** Last year, we had spent 15% less than our Final Determination - around average for the sector. This year we've spent 16% less than the Final Determination.

**On water:** Last year, we were broadly in line with our Final Determination. This placed amongst the companies that had spent the most totex. We've remain in line with our Final Determination this year.





	ter services commitment	Unit	This year's target	Actual performance	Did we reach our target?	Better same of worse than last year?
1	Number of complaints about drinking water quality	Number	9,992	12,687		Better
2	Compliance with drinking water quality standards	%	100%	99.96%	Within expected range	Better
3	Asset stewardship - number of sites with coliform failures (WTWs)	Number	<8	8		Worse
4	Number of successful catchment management schemes	Number		0		
5	Resource efficiency (distribution input per customer)	Million litres per day	219	235		Better
6	Leakage levels	Million litres per day	434	443		Worse
7	Speed of response in repairing leaks (% fixed within 24 hours)	%	90	23		Worse
8	Number of minutes customers go without supply each year	Minutes	10.80	34.29		Worse
9	% of customers with resilient supplies	Number	-	77.4	Contribution delivered	Better
10	Asset stewardship - mains bursts	Number	<6,905	5825		Worse
11	Customers at risk of low pressure	Number	250	204		Worse
12	Restrictions on water use	Number	0	0		Same
13	Timing delays on Birmingham resilience scheme	Milestone		On track		Better
14	Non-delivery of the outcome of the Birmingham resilience scheme	Milestone	3 milestones	On track	Progress milestone	Better
15	Timing delays on the community risk schemes	Milestone	3 milestones	On track	Progress milestone	Better
16	Non-delivery of the community risk schemes	Milestone	3 milestones	On track	Progress milestone	Better
17	Timing delays on Elan Valley Aqueduct (EVA) maintenance	Milestone		Milestone complete	Delivered 2016/17	Same
18	Non-delivery of the Elan Valley Aqueduct (EVA) maintenance	Milestone		Milestone complete	Delivered 2016/17	Same
19	Customers rating our services as good value for money	%	52	59		Better
20	Improvements in river water quality against WFD criteria	Number	0	3	Contribution delivered	Better
21	Asset stewardship - environmental compliance	%	100	97.7	Within expected range	Worse
22	Biodiversity	Hectares	0	337	Contribution delivered	Better
23	Sites with eel protection at intakes	Number	0	0		
24	Size of our carbon footprint	Tonnes	222	256		Worse
25	Improved understanding of our services through education	Number	140,000	200,536		Better

Waste water services Our commitment		Unit	This year's target	Actual performance	Did we reach our target?	Better same of worse than last year?
1	Number of internal sewer flooding incidents	Number	960	662		Better
2	Number of external sewer flooding incidents	Number	7,447	3,763		Better
3	Partnership working	Number		8	Contribution delivered	Better
4	Asset stewardship - blockages	Number	<49,685	45,401		Worse
5	Statutory obligations (Section 101A schemes)	Number	0	32	Contribution delivered	Better
6	Customers rating our services as good value for money	%	52	59		Better
7	Improvements in river water quality against WFD criteria	Number	0	16	Contribution delivered	Better
8	The number of category 3 pollution incidents	Number	374	327		Worse
9	Asset stewardship - environmental compliance	%	100	97.67	Within expected range	Worse
10	Biodiversity	Hectares	0	337	Contribution delivered	Better
11	Sustainable sewage treatment	Number	0	0		
12	Serious pollution incidents	Number	4	2		Better
13	Overall environmental performance	%	0	0		
14	The number of category 4 pollution incidents	Number	182	157		Better
15	Size of our carbon footprint	Tonnes	209	206		Better
16	Improved understanding of our services through education	Number	140,000	200,536		Better

Retail Our commitment		Unit This year's target	This year's target	Actual performance	Did we reach our target?	Better same of worse than last year?
1	Customer satisfaction with their services (based on a survey)	%	UQ	Upper quartile		Better
2	Customers' experience of dealing with us (based on Ofwat's SIM)	Score	UQ	TBC		Worse (expected)
3	Number of struggling customers helped with their bills	Number	50,000	51,652		Better
4	% of customers who do not pay (household bad debt / total household revenue)	%	2.70	2.2		Worse

**WONDER**FUL ON TAP

