

A low-angle photograph of a field of yellow flowers, possibly buttercups, against a clear blue sky. The flowers are in various stages of bloom, with some fully open and others as buds. The green stems and leaves are visible in the foreground and middle ground.

Sustainability indicators
and accounting
2017-18

wessexwater.co.uk

Wessex Water
YTL GROUP



About this report

This is one of four annual review documents which provide information on the progress we have made in 2017-18 and the challenges we face in 2020.

We first committed to becoming a sustainable water company in 1996. This means more than just 'being green'. It is about excellent customer service, strong community engagement, meeting employees' needs, sound asset management, financial responsibility and good environmental practice – all at the same time. As such, our approach to sustainability is based on the same four themes as our overall company aims, which are to:

- provide **customers** with excellent and affordable services
- protect and improve the **environment** and contribute to wider society, using catchment-based approaches where possible
- be a great place to work in which all **employees** can work safely and reach their full potential
- deliver the best possible returns to **investors**.

There are two main parts to this document:

- sustainability indicators: an at-a-glance view of our performance across the full range of activities and issues
- sustainability accounting: an overview of environmental and social expenditure and alternative valuation methods.

Each page of the indicators is devoted to one of the subjects that make up our sustainability vision, which is our statement of what would constitute a genuinely sustainable water company. In each instance, we set out the eventual outcome that we aim to achieve; the targets and commitments that we have set for 2020; an overview of the main issues involved; a summary of activities during 2017-18 and graphs showing performance over the last five years.

Some of the stated outcomes and performance commitments are agreed formally with regulators for the current investment period – these are profiled in *Delivering for our customers* our annual review summary, and described in more detail in the annual performance report that accompanies this document. We set other outcomes and commitments independently as part of our sustainability vision.

The sustainability accounts that follow the indicators have two main purposes. Firstly, they cover our major environmental impacts in monetary terms, considering a) areas where we have made expenditure as part of our environmental programme or through environmental taxation; b) alternative methods for monetising environmental impacts. Secondly, they summarise our expenditure on items relevant to sustainability in its broader sense.

All performance information included in this report has been reviewed by our external technical auditor, Mott MacDonald Ltd unless stated otherwise.

A dashed line on a graph indicates a change to reporting procedures and is therefore not directly comparable to previous years.

Sustainability indicators

Affordable bills

Outcome: Customers able to afford water and sewerage services and effectively manage their water use.

For the great majority of customers our bills are affordable, representing only 1.46% of average household expenditure. However, for some customers on low incomes this is not the case. In terms of other ways to help affordability, fitting a meter on change of ownership can reduce demand for water by as much as 15%. As part of our 25-year water resources management plan we propose increasing the rate of metering, alongside enhanced water efficiency services.

Performance commitments

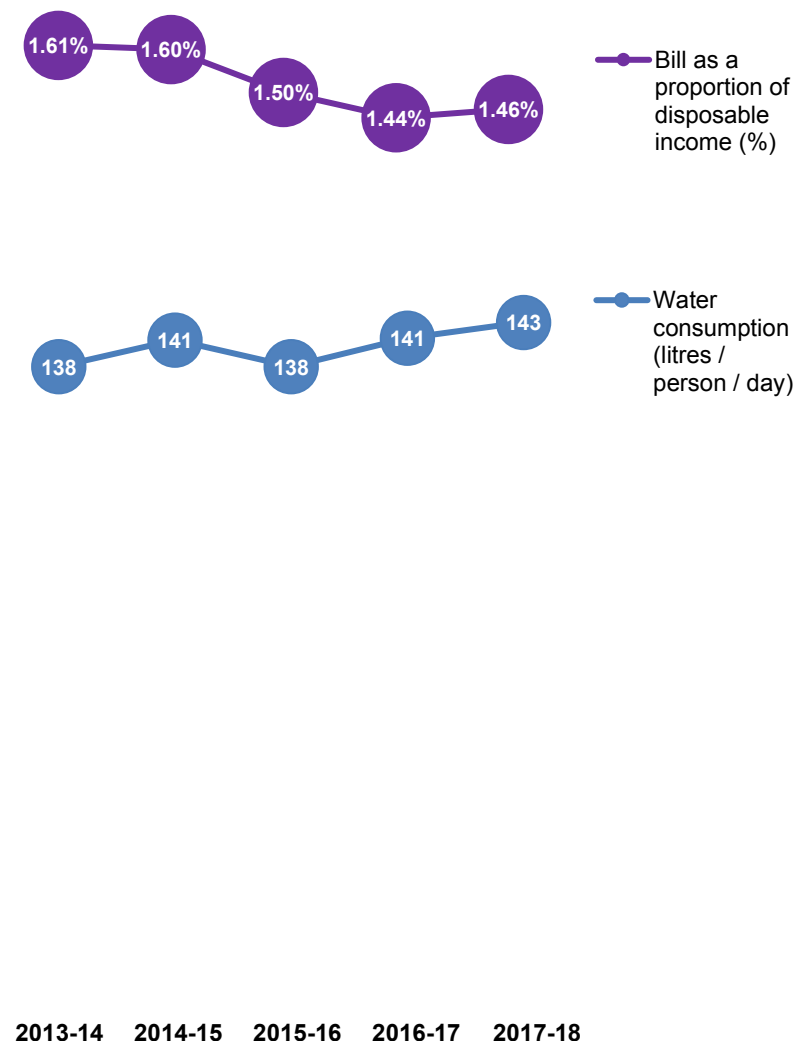
	2017-18	2019-20
• Bill as a proportion of disposable income (%)	1.46	Reducing trend
• Water saved by water efficiency promotion (litres / person / day)	0.92 (in year)	3.26 (5 year cumulative)
• Water used (litres / person / day)	143	131

Other company commitments

- Extend **tap** our affordability programme by an additional 10,000 households so it continues to be the industry’s leading package.
- Use information on each customer to tailor and segment debt recovery activity, supported by appropriate systems.

During 2017-18, we continued to support those who are financially vulnerable through our assistance programme, tap. We helped more than 37,000 customers to pay charges and repay debt, while offering practical help to reduce water and energy bills; this represents a 37% increase over the year. Around 11,500 customers are in receipt of our main social tariff, Assist, which offers discounts of up to 90% for those in the greatest financial hardship. Just under 13,000 pensioners on Pension Credit are receiving a discount of around 20% on their bills. Our partnerships with the debt advice community are thriving and we continue to believe that holistic advice is vital to help customers get back on track and into sustainable payment. We also liaise with a growing number of community based organisations outside the debt advice sector to help us engage with customers who are traditionally much harder to reach and likely to be some of the most vulnerable.

We launched our new online partner hub, designed to make engagement with us even easier. The hub will allow our partners to apply for schemes on behalf of their clients. In 2017-18, our water efficiency promotions saved customers almost a litre of water per person per day through free water saving kits, including sprinkler heads for hosepipes and more efficient showers. While we met our target for water saved through water efficiency promotion, average daily water use has increased to 143 litres per person, which is above our 2020 target of 131 litres.



2013-14 2014-15 2015-16 2016-17 2017-18

Excellent service for customers

Outcome: High levels of satisfaction by consistently meeting or exceeding expectations; being viewed as a trusted, reliable and preferred service provider.

Excellent customer service is fundamental to the success of our business so we put customers at the heart of everything we do. We aim for the highest levels of customer satisfaction, and our staff go the extra mile whenever they can. Day to day feedback shows customers are generally very satisfied with our service and see it as good value for money. But we can always do more, so we continue to improve and to compare ourselves with the best service providers across all sectors.

Performance commitments

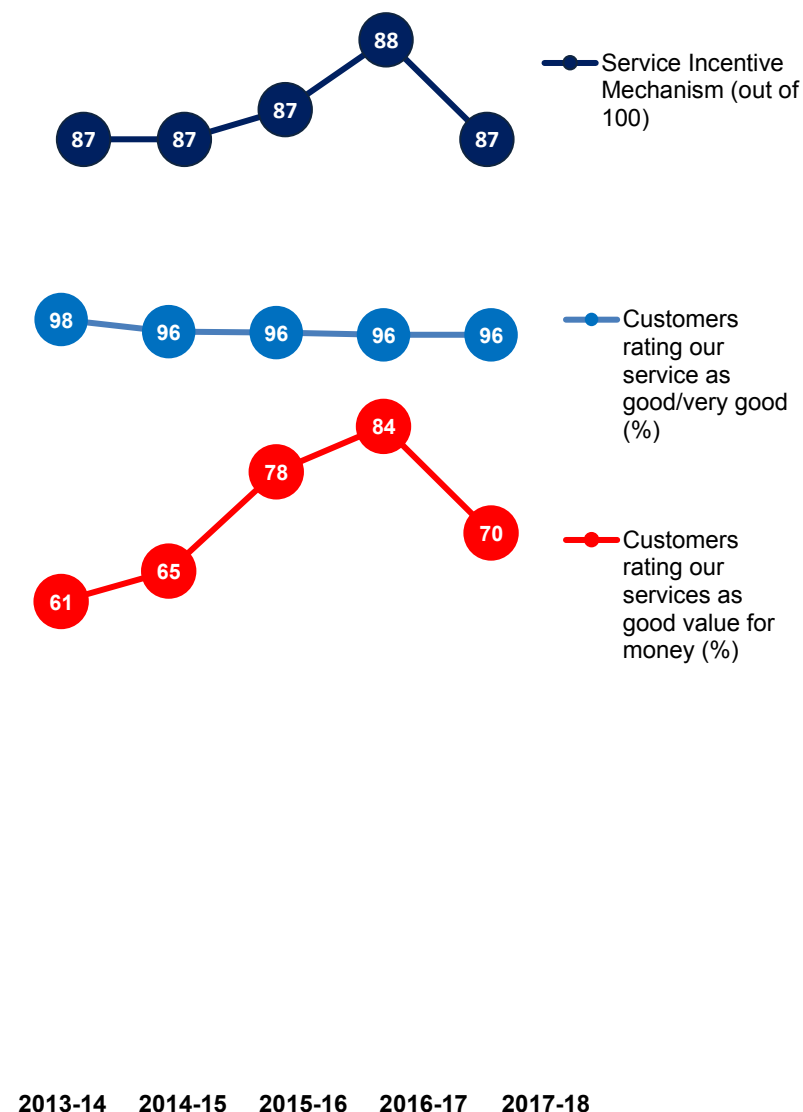
	2017-18	2019-20
• Service Incentive Mechanism score	87	>86
• Customer service rating good or very good	96%	>95%
• % rating ease of resolution	93%	Improving trend
• Customers rating service as good value for money	70%	75%
• Meet best practice for accessible communications – achieve the British Standard for inclusive service provision and the Customer Service Excellence award		

Other company commitments

- Provide a choice of wholesale tariffs and a range of affordability assistance for household customers

In 2017-18, 96% of our customers rate our service as very good or good. This is slightly below the long-term average and we are working hard to improve this. Our value for money score has dipped with 70% of customers rating our service as very good or good value for money. While this is still a strong score, it is lower than we have achieved recently. There have been no significant changes in our bills, people’s average income or the country’s overall financial situation, so we will redouble our efforts to ensure we engage our customers, over 90% of whom have told us our plans for 2020-2025 were acceptable and affordable. On customer effort, our surveys show that 93% of customers say it takes little or no effort to resolve their query. In September, the Consumer Council for Water confirmed that we continue to have the lowest number of complaints in the water industry with no investigations. Supported by our new Every Word Matters writing style, both billing and operational teams have continued to focus on reducing complaints and unwanted contacts. We’ve seen a reduction in escalated complaints and are resolving 95% of our complaints first time. We retained our government-backed Customer Service Excellence award for our approach to customer service and have the best overall package of customer guarantees in the industry. We continue to hold the best practice mark of distinction from the Keep Me Posted campaign. Our operational contact centre holds the Institute of Customer Service’s ServiceMark with distinction, one of only 10 in the UK to achieve this accolade.

Day-to-day we continue to offer a full range of communication channels while remaining committed to offering personal telephone answering and, and, most importantly, choice for customers.



Excellent quality drinking water

Outcome: Safe, wholesome and pleasant drinking water that complies with mandatory standards and supports the well-being of our customers and communities.

Compliance with drinking water quality standards continues to be very high as a result of extensive investment and management systems such as water safety plans. However, rather than relying solely on engineered solutions, we believe in working with the environment through natural methods and working with others. Dealing with impacts on water quality at source is a more sustainable and economic approach than energy and chemical intensive end-of-pipe treatment.

Performance commitments

	2017-18	2019-20
• Customer contacts about drinking water quality	2,031	2,250
• Compliance with drinking water standards	99.96%	100

Other company commitments

	2017-18	2019-20
• Sources protected through catchment management	20	20
• No new water treatment works to deal with agricultural pollution		
• Completion of our integrated water supply grid scheme		
• Ensure drinking water safety plans are understood by all relevant staff involved in the water supply side of the business		

In 2017-18, our overall compliance with drinking water standards in was 99.96%, which was an improvement from 2016-17. There was a total of eight failures out of approximately 25,000 tests, of which five were due to customers’ domestic plumbing and service pipes. The other three failures were related to a single incident at a property related to an iron water main. These eight water quality failures were down from 23 in 2016-17. There was further reduction in the number of customer contacts about acceptability of water – customers have seen the benefits of our ongoing mains rehabilitation work and improved customer communications.

In 2010, we started work on our biggest ever project, a major integrated water supply grid. The final parts of this project have now been completed and the whole system is in full operation. This £228m, seven-year programme of works now enables us to move water across our entire region, greatly increasing the resilience of supplies.

It has enabled us to deal with deteriorating raw water quality, particularly rising nitrates, by allowing us to blend water, and to reduce abstraction in areas of our region where this was affecting the water flow in sensitive rivers, thus improving the environment.



2013-14 2014-15 2015-16 2016-17 2017-18

Tackling leakage

Outcome: Leakage continuously driven down and leaks treated as a service failure.

Reducing leakage is a high priority for customers. Leakage from our network is at its lowest ever level and has been reduced to ensure we are significantly lower than the ‘economic level’ defined by Ofwat. We aim to keep leakage below our target level in the normal course of events, so that we have a good chance of still meeting our target in the event of freezing winter weather when leaks are more likely to occur. Of the water that leaks, around three quarters is from our water mains and one quarter from customers’ pipes. As it is also an important area for innovation, we are reviewing the many technologies currently available and those in development, with the aim of selecting those that can help with further reductions in the future.

Performance commitments

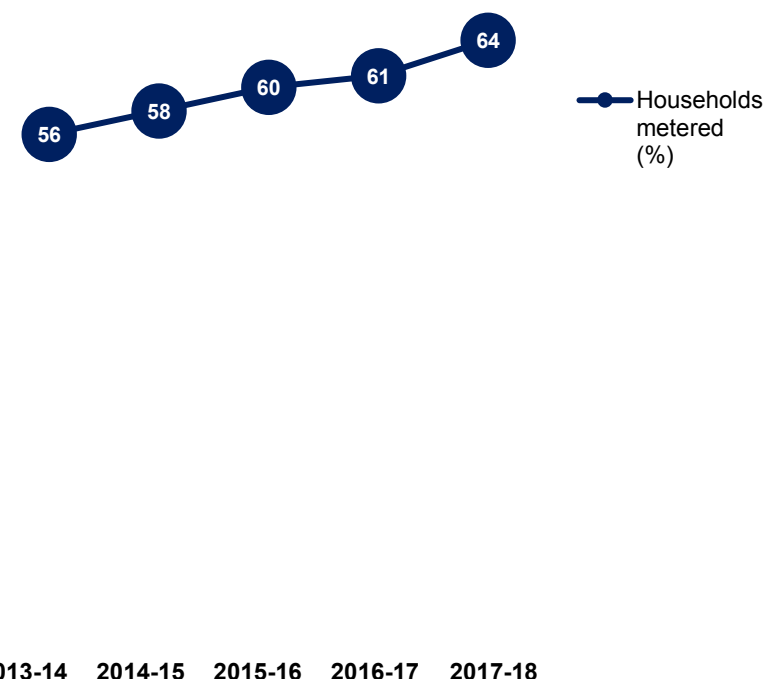
	2017-18	2019-20
• Volume of water leaked (MI/d)	67.7	<66.5
• Reported leaks fixed within a day	76%	90%

Other company commitments

- Trial provision of near real-time monitoring / in-pipe monitors on our supply network to potentially enable the proactive detection of leaks
- Meter properties on change of occupier
- Repair or replace leaky customer pipes free of charge

In 2017-18, we have reduced leakage to below 68 MI/d which meets our target for the year even despite the short-term increase in leakage during the freeze-thaw event in March. We beat our target of fixing 70% of leaks reported to us in the same day. We expanded our Home Check water efficiency programme and undertook more than 10,000 of visits to customer properties to fit water saving devices, fix simple plumbing leaks and offer tailored behavioural advice.

With the completion of our water supply grid in 2018 we will be operating well below the economic leakage level meaning that, without new ways of working, the cost of reducing leakage further will outweigh the value of the water saved. We will continue to innovate as we seek to meet our target of 66.5 MI/day by 2020.



2013-14 2014-15 2015-16 2016-17 2017-18

Improved bathing water

Outcome: Contributing to bathing water being in good or excellent condition.

Several factors can affect bathing water quality, including heavy rain, industrial discharges and agricultural runoff. For our part, we have invested heavily to reduce our impacts by improving sewage treatment work discharges and intermittent discharges such as combined sewer overflows. Prior to the revised Bathing Water Directive taking effect in 2015 we identified Burnham Jetty as the only bathing water within our region that had a high risk of not meeting the ‘satisfactory’ standard. The tightening of the standard, rather than any underlying deterioration in water quality, is the reason that we report compliance slightly below our target of 100% of beaches passing EU bathing water standards.

Performance commitments

	2017-18	2019-20
• Agreed bathing water schemes delivered	100%	100%
• Beaches passing EU bathing standards	96%	100%

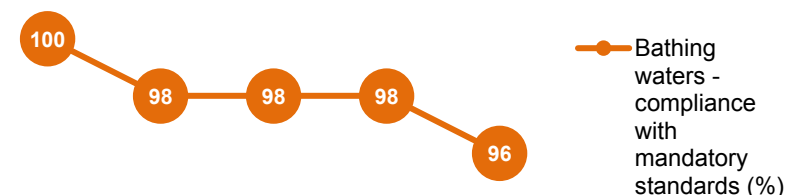
Other company commitments

- Complete three bathing and one shellfish water investigation on the performance of our assets and their potential impact on water quality
- Continue near real-time monitoring of 100% of overflows that significantly affect bathing water beaches in our region
- Provide near real-time warnings of overflow operation to beach users all year round via our Coastwatch alarm system

During 2017-18, 96% of our bathing waters passed strict environmental standards. However, two (Uphill Slipway and Burnham Jetty) were assessed as having below standard water quality which is below our aspirational 100% target. We completed 100% of our agreed National Environmental Programme schemes last year. Schemes to improve our assets that may affect Burnham Jetty were:

- Constructing a 3,000m³ underground storage tank and a new pumping station in Bridgwater
- Proactively investigating misconnections of foul flows that could end up in the River Parrett
- Providing 150m³ storage at a pumping station to transfer flow from Combwich to Cannington
- Installing a UV disinfection plant to disinfect flows from Combwich and Cannington.

The benefits to bathing water quality at Burnham from this investment should start to materialise in the coming years. We are supporting Litter Free Coast and Sea project officers in both Dorset and Somerset to develop and deliver innovative engagement and awareness campaigns to raise awareness and ownership of bathing water quality, and to promote behaviour change campaigns for residents, tourists and businesses.



2013-14 2014-15 2015-16 2016-17 2017-18

Resilient services

Outcome: Continuous delivery of high quality, reliable and secure services in the face of shocks (such as flooding or droughts) and stresses (such as population growth and climate change).

Resilience is about our ability to cope with gradual stresses (such as ageing infrastructure and climate change) and acute shocks (such as extreme weather events). Water companies are also duty bound to meet the public’s reasonable needs for water. Careful planning, targeted investment and resource management have put us in a good position to meet current and future demands and to avoid imposing any water use restrictions since 1976, although sudden problems such as water mains bursts and sewer collapses can still occur, underlining the need for ongoing investment in our physical assets. However, we are keen to promote other methods for improving resilience. Catchment management can help protect the general health of the water environment and also reduce flooding risks. Behavioural interventions can also help - customers using water wisely are likely to be more resilient in the face of drought, for example.

Performance commitments

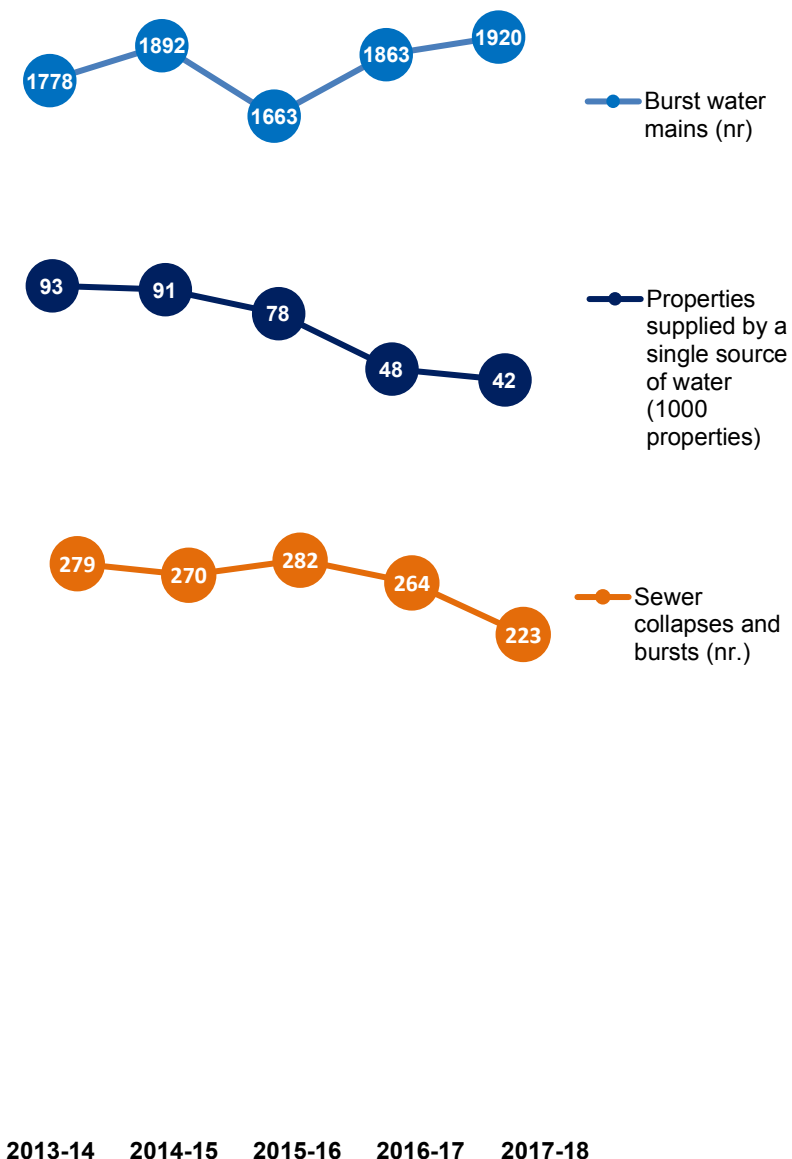
	2017-18	2019-20
• Restrictions on water use (hosepipe bans)	0	0
• Water mains bursts / year	1,920	<2,000
• Collapses/ bursts on sewerage network / year	223	<300
• Number of properties supplied by a single source of water	42,000	42,000
• Reduce planned, unplanned and third-party water supply interruptions lasting >3 hours (average minutes / property / year)	12.3	12

Other company commitment

- Have business continuity plans for service during unforeseen disruptive events
- Trial providing in-sewer monitors to potentially enable the proactive prevention of partial blockages
- Continued use of climate and population forecasts and scenarios in asset planning
- Public reporting on climate risk and adaptation work

During 2017-18 the final parts of our water supply grid were completed and the whole system is now in full operation. We reduced the number of properties supplied by a single source by a further 6,000, and achieved our final target of 42,000 one year early. In March, the water supply grid proved how much additional resilience it has created. It enabled us to continue to provide water to all properties in our region even after the rapid thaw event which saw so many supplies interrupted elsewhere in the country.

We also reduced the average duration of supply interruptions longer than 3 hours over the entire year from 12.9 minutes in 2016/17 to 12.3 minutes per household last year.



Sewer flooding

Outcome: The risk of sewer flooding kept to a minimum, with sewerage services that support customers, communities and the environment.

Sewage flooding is caused when sewers become overloaded as a result of severe weather, equipment failure, blockages or sewer collapses. While sewer flooding is a rare occurrence its consequences can be devastating, so tackling it remains a key task. We have introduced a new measure which measures the overall flood risk due to inadequate capacity (both internal and external flooding). More widely, the responsibility for flooding is often complex and we work with local authorities as they produce surface water management plans and strategies to review flood management.

Performance commitments

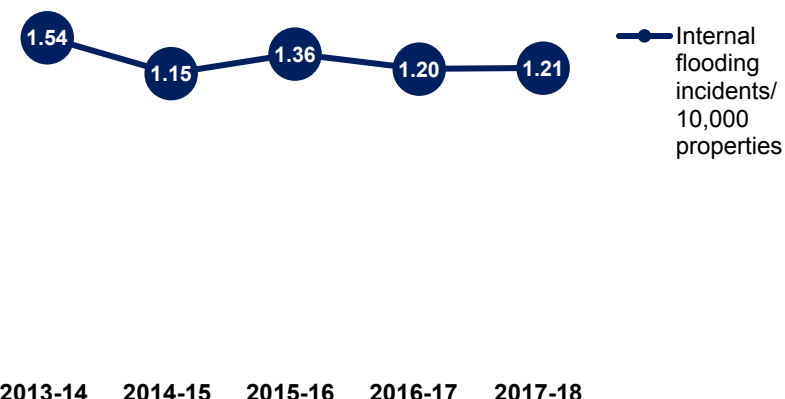
	2017-18	2019-20
• Internal flooding incidents (number /10,000 properties)	1.21	1.66
• Risk score – flooding (due to hydraulic incapacity) compared to 2015	49,796	50,651
• Deliver the Bristol Frome Valley sewer growth scheme		

Other company commitments

• Partnership schemes to which we contribute	6	At least 10
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In 2017-18, a large project at Brent Knoll was delivered, which reduced the risk of flooding to 46 locations and have met our target. In 2016/17 we invested £9m to reduce this risk at 87 locations. The responsibility for flooding is often complex and we work closely with other flood risk management authorities. Last year we were consulted more than ever before, attending more than 120 liaison meetings. We contributed over £100k towards the partnership schemes to reduce flood risk, including £50k towards a scheme in Wrington, Somerset.

As a result of our campaigns about the problems caused by flushing wet wipes down toilets and pouring fat down sinks, optimising operational maintenance and the generally dry weather conditions in the region last year, the number of flooding incidents caused by blockages in public sewers remained low, at 1.21 incidents per 10,000 properties, beating our 2020 target of 1.66. We continue to work closely with the national 21st Century Drainage Programme to try to bring about change in what customers flush into the sewers because this factor has the biggest impact on flooding and pollution levels.



Stakeholder engagement

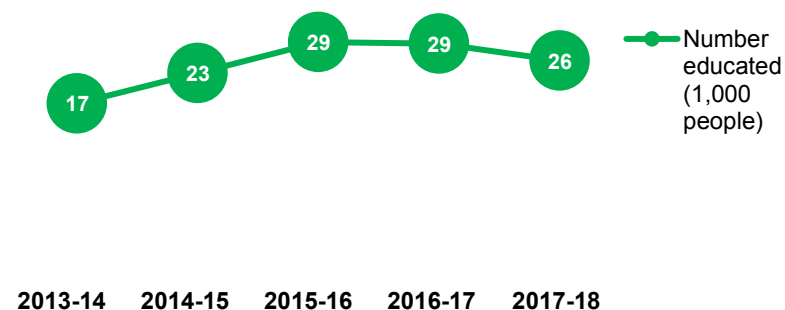
Outcome: Customers, local communities, economic interests, environmental organisations and other stakeholders in our region who are fully engaged in our activities.

Dialogue with the public and other outside interests (including suppliers and contractors, technology developers, researchers, politicians, investors, NGOs and opinion formers) is central to our work. We communicate widely on water efficiency and the causes of sewer blockages and meet local people living near to our capital schemes. Twenty years ago, we started our free education service to schools and in addition, we introduced education centres at some of our sites around our region. Our advisory panels offer scrutiny of our work for customers and the environment, and look at emerging trends in society. All this is critical for ensuring that we understand stakeholders' priorities, are able to convey our own work and are aware of new risks and opportunities. The Wessex Watermark environmental grant scheme supports environmental projects across our region led by schools, parish councils, youth groups and community organisations.

Company commitments

- Establish new strategic panels and review stakeholder engagement plan and arrangements
- Continuously review our forms of customer engagement and remain receptive to new forms of communication
- Ensure communities are informed on high profile schemes that may affect them
- Continue to review the suitability of our communications, including use of emerging technology
- Regularly report on our performance and respond to all environmental information requests
- Provide annual updates on our progress against company commitments.

In 2017-18, through our innovative and multi-channel engagement strategy – Your say, your future – we sought customers' views on bill profiles, the balance between service and price, future-proofing services, leakage, our offering for customers in vulnerable circumstances, and the acceptability of our draft Business Plan for 2020-2025. Our successful Young People's Panel involves sixth formers recruited from across our region. Over its first two years the Panel has helped us design a new cash back guarantee for meter options, a digital job tracker and ways to encourage younger people to care about the waste system. We also sought the views of our 'Have Your Say' online customer panel on the amenity value of our reservoirs and attitudes to water use. After each survey we explain the results and what we are doing in response. Our education team delivered topics ranging from water conservation to what happens to waste once it has been flushed down the toilet. Data in the graph is based on headcount numbers collected by education advisers, 89% of those educated were children or students in full time education. Projects supported by our Watermark Scheme included Saltford Brass Mill and development of a reliable water source for Stoke St Gregory Allotments Association.



Asset management – social aspects

Outcome: Assets operated, maintained and managed responsibly, with sustainability principles and practice fully integrated into the capital programme and scheme choices. Also, operating or contributing to more sustainable alternatives to conventional water management and treatment.

The basic function of our physical assets is to serve the needs of society and the environment. So, we invest for the long term and maintain our assets for future generations. As well as conventional investment, we consider alternatives that may be less expensive and potentially less intrusive, even if there are sometimes extra complexities and uncertainties involved. We are also conscious of the need to be a ‘good neighbour’; for this reason, we have detailed management plans concerning odour, noise, visual impacts and vehicle movements and we liaise closely with local people about such matters.

Company commitments

- Maintain the capacity and effectiveness of our assets to enable continued provision of service to our customers
- Maintain accreditation to the asset management standard ISO55001
- Meet asset related performance commitments
- Manage our assets to minimise potential causes of nuisance to our customers and meet our SIM performance commitment
- Improve coverage of issues within appraisal methods
- Prioritise solutions separating foul and surface water sewers where possible, as well as providing storage within the sewerage network
- Deliver surface water separation schemes in Bridgwater and Weston-Super-Mare

In 2017-18, our asset management framework continues to help us maintain a truly integrated approach to risk and investment decision making. Following an annual surveillance audit our asset management processes were again certified to the international standard for asset management (ISO55001:2014).

The final parts of our water supply grid project have now been completed and the whole system is in full operation. In March, the water supply grid proved how much additional resilience it has created. It enabled us to continue to provide water to all [check] properties in our region even after the rapid thaw event which saw so many supplies interrupted elsewhere in the country.

Sustainable regulation

Outcome: Regulation that contributes to sustainability as well as delivering high standards for customer service and water and effluent quality.

Regulation guides almost every area of our work, providing the impetus for our investment and shaping the ways in which we operate day to day. While precaution is necessary, it is also important that regulation is proportionate to the risks that we manage and that standards are set in ways that don’t drive excessive or unsustainable responses. We encourage the use of sound science and evidence as the basis for regulation; and we raise awareness of the full cost of meeting standards and the environmental costs passed from other sectors to the water industry.

Company commitments

- Maintain discussion with relevant interests on investment needs and methods for achieving desired outcomes, emphasising more sustainable options
- Investigate problems in detail to establish their root cause and implement the most appropriate solution
- Carry out work to look at whole life cost and social and environmental costs as preparation for our next five-year business plan

In 2017-18, we continued to work with regulators and others to promote longer term investment and more sustainable standards, solutions and technologies

Our current investment programme includes innovative projects such as the first catchment permitting trial in the UK. Our Bristol Avon catchment permitting trial, a UK first, took a catchment approach to limit phosphorus discharges from our assets and manages the discharges from 66 sewage treatment works/water recycling centres in combination, rather than individually. During 2017/18, we removed 37 tonnes of phosphorus, against a target of 25 tonnes. By optimising our existing assets, and only constructing new phosphorus removal treatment we are delivering the same phosphorus reduction at a cost to customers £24m lower than a traditional single site based approach.

We are now taking catchment-based approaches to reducing nitrate run-off into Poole Harbour rather than installing nitrate removal at a sewage treatment works and finding innovative ways to maximise the benefits achieved at the lowest cost to customers.

Global society

Outcome: A positive contribution to global society through our activities.

While the vast majority of our work is focused on the region we serve, it is directly linked to activity elsewhere in the world. This is especially true for the goods and services that we buy and there is growing interest in the social impact of companies' supply chains. We are also very conscious of the billions worldwide who lack adequate clean water or sanitation and work closely with NGOs that are addressing this problem. Since WaterAid was established by the UK water industry in 1981, it has had an effective, long-term partnership with Wessex Water through its extensive and varied employee and stakeholder engagement as well as strong corporate support. The partnership covers a wide range of fundraising and awareness-raising activities.

Company commitments

- Maintain an understanding of our full supply chain, apply sustainability criteria across all frameworks and develop additional selection criteria appropriate to any risks identified
- Continue our work with WaterAid and other relevant organisations

In 2017-18, we performed a thorough gap analysis against the sustainable procurement standard ISO20400:2017 which was verified by an independent expert. Taking recommendations forward, we will enhance our supplier sustainability risk and opportunity assessment and develop our pre-qualification question bank for use during the supplier tender process. We will also ensure that internal sustainable procurement work is recognised and communicated more consistently.

Staff and contractors raised £201,021 for WaterAid throughout 2017-18, of which £100,000 is dedicated to a three-year project in Faratsiho, central Madagascar, to help provide 2,614 individuals with access to clean water, 1,049 with access to sanitation and to deliver some hygiene education. Three members of staff visited the area in September 2016 to understand WaterAid's work and the future technical support required throughout the project. Fundraising activities have included a WaterAid lottery, a Golf Day, a Race Night, Give an hour and much more. The Business4Life initiative raised approximately £12,000 (excluding match funding and Gift Aid) of their £45,000 target in 2017-18, with the remainder due in 2018-19. Activities that contributed to this total included: a stall at the Bath Christmas Market, a food and drink festival called FermentFest, a World Chocolate Day Bake-Off, and several individual fundraising exploits such as running seven marathons in seven days, a coast to coast cycle and hosting an afternoon tea.

Awareness raising has increased including a quarterly internal newsletter on recent volunteer activities and WaterAid campaigns. The WaterAid winter appeal was called Untapped; the UK government pledged to match pound-by-pound all donations to WaterAid's Untapped campaign until 31 January up to a total of £5 million. The campaign, including match funding, raised £8.18m for WaterAid.

Rivers, lakes and estuaries protected: water supply impacts

Outcome: Watercourses in good ecological and chemical condition with abstractions, effluent and land run off sustainably accommodated by the environment.

Our region has many of the country’s finest rivers and streams, with improvements driven largely by European directives. We work closely with regulators to assess where investment is needed to comply with European regulation and assure them that the current investment programme is proceeding as agreed.

The water we put into supply comes from boreholes, springs, rivers and reservoirs across our region, with most coming from groundwater. We acknowledge that in some locations our water abstractions can affect the quantity of water in streams and rivers, increase the risk of low flows during dry weather. Consequently, we have reduced water abstraction where the risk is greatest, and work with communities in places where there is concern about local impacts of abstraction. Other interventions in the wider water system, such as reducing leakage and encouraging more efficient water use by customers, have led to a reduction in the amount of water we supply overall compared with the last twenty years.

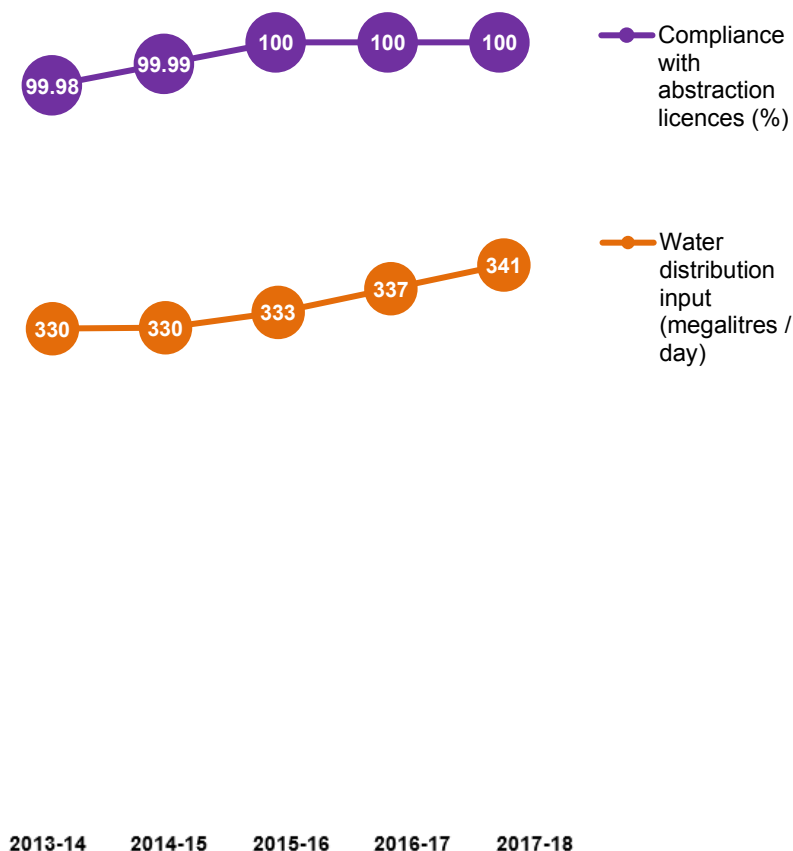
Performance commitments

	2017-18	2019-20
• Compliance with abstraction licences	100%	100%
• Abstractions at Mere exported (MI/year)	30	100
• Distance of river with improved flow (km)	78	99

2017-18 was a varied year in terms of rainfall – a wetter than average summer was followed by a particularly dry autumn which delayed the start of reservoir and groundwater refill. However, the year ended with a very wet March, taking rainfall over the full year to 101% of average. The improvement in resource availability arising from the wet March put us into a good position for starting 2018-19.

We successfully met our performance commitment regarding the abstraction incentive mechanism at Mere in 2017-18. During the time the groundwater level was below the trigger level we exported only 30 MI of water from the local catchment against a target maximum level of 100 MI.

Last year was the 42nd since we imposed any customer restrictions on water use, such as hosepipe bans. In November we submitted a new draft water resources management plan to Defra which set out how we will maintain a balance between supply and demand while protecting the environment for the next 25 years.



Rivers, lakes and estuaries protected: waste water impacts

Outcome: Watercourses in good ecological and chemical condition with abstractions, effluent and land run off sustainably accommodated by the environment.

Our waste water assets are carefully managed regarding their impacts on the water environment. We have widely upgraded sewage treatment and reduced the number of pollution incidents from our sewers, usually caused by blockages, and work with the Environment Agency and local councils to address water pollution caused by misconnected domestic appliances. We work closely with regulators to assess where further investment is needed to comply with European regulation, which is now being extended to deal with persistent compounds, particularly those listed in the EU Priority Substances Directive. We use catchment-based strategies to deal with the source of the problems not the symptoms.

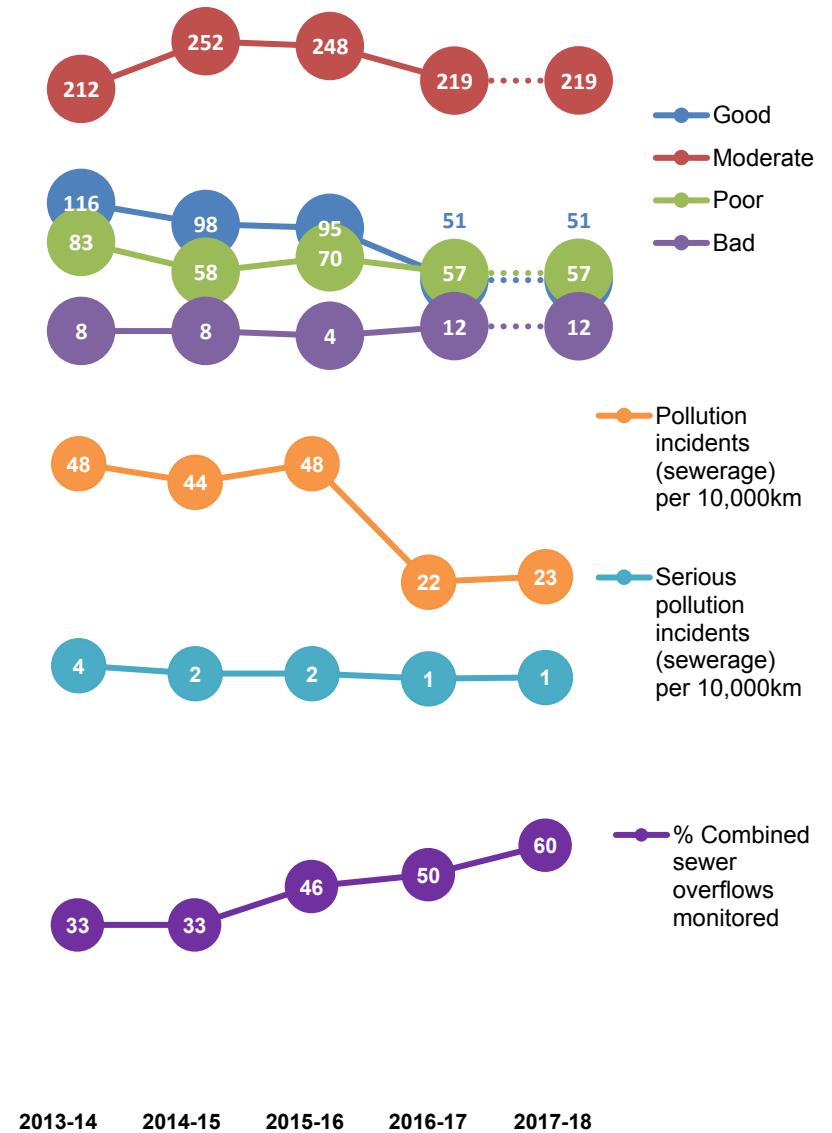
Performance commitments

	2017-18	2019-20
• Install event duration monitoring on combined sewer overflows which present a risk to environment	60%	100%
• Improved water bodies through sewage treatment investment, to improve river water quality (nr)	23	70
• Be industry leading in Environment Agency’s Environmental Performance Assessment	Industry Leading	Industry Leading

Other company commitments

- Production of catchment biodiversity opportunities maps within Poole Harbour and our Somerset reservoir drinking water catchments
- Have a robust river water quality models for our area to show nutrient sources
- Continue our work to understand the prevalence and impacts of persistent chemicals that appear in sewage, and work with industry to avoid our treatment works or the environment being harmed by these substances

In 2017-18, we are continuing to develop our own system called EnTrade, which was initially developed for buying reductions in nutrient leaching linked to farming practices through an online auction platform. Our programme for this asset management plan period includes the reduction of phosphorus concentration in discharges at 47 sewage treatment works (STW) and improvements to the ammonia discharges at eight STWs. Phosphorus is a nutrient that can contribute to excessive weed growth whereas ammonia, at high concentrations, can be toxic to animal life. During the year, we have completed improvements at 4 STWs for further phosphorus removal and 6 STWs for reductions in ammonia. Our catchment-based approaches avoid costly treatment plants and enable innovative ways to improve the water environment at the lowest cost to customers as well as achieving wider benefits, such as reduced soil erosion, reductions in other pollutants, improved biodiversity.



Note: River water quality information at the top of right side of the page is from Environment Agency data, this is now updated three-yearly rather than annually.

Positive impacts on land

Outcome: Responsible management of our own land and neutral or beneficial impacts on other land that is influenced by our activities.

We aim to be responsible stewards of our landholding. This encompasses land under tenancy to farmers and other users, redundant sites that need ongoing management, and land with redevelopment potential. Promoting responsible land use can also help protect drinking water sources and improve the quality of streams, rivers and coastal waters. Our reservoirs and lakes, in some of the most beautiful surroundings in the West Country, provide opportunities for walking, water skiing, sailing and birdwatching. They offer some of the finest and most affordable coarse and trout fishing in the region and we pride ourselves on our Tucking Mill facility which provides free fishing for anglers with disabilities. We also have wheelchair accessible boats at Sutton Bingham and Clatworthy reservoirs.

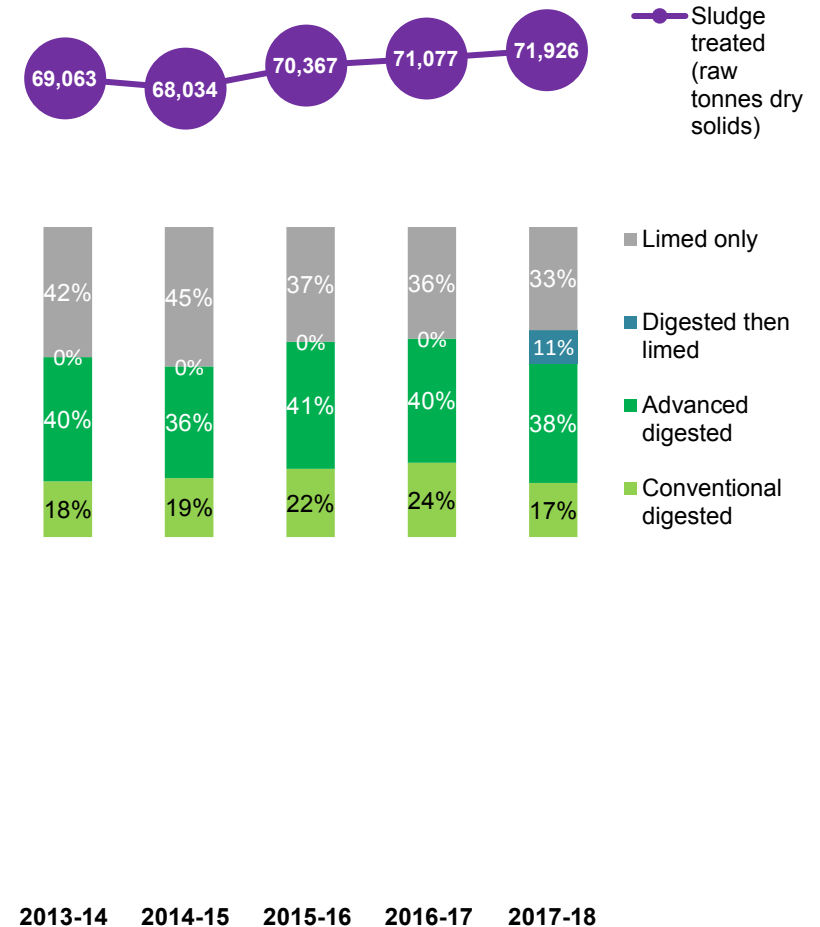
We have some wider influence of land use in our region. One example is the reuse of sewage sludge - a valuable by-product of sewage treatment. It is treated to meet regulated standards by anaerobic digestion or the addition of lime, both of which reduce odours and remove pathogens. All the sludge is reused on farmland in line with a code of practice agreed with others who have an interest in the food chain, notably supermarkets. We are conscious of emerging concerns related to waste water that could affect sludge reuse in future, such as persistent organic compounds and microplastics, and are involved in joint research to understand potential impacts. We also influence land use through our catchment management work. Initially focused on protecting drinking water sources, it is now improving the wider water environment through partnerships described on previous pages.

Company commitments

- | Company commitments | 2017-18 | 2019-20 |
|---|---------|---------|
| • Satisfactory sludge disposal | 100% | 100% |
| • To understand whether or not CIP2 (Chemical Investigation Programme 2) substances are partitioned into the sludge stream and if so their extent | | |
| • Continue to carry out and report on our duties for conservation, access and recreation | | |

In 2017-18, under our Conservation, Access and Recreation project, 16 new schemes were initiated. Our drop-in National Meadows Day celebration event at Sutton Bingham reservoir was a great success, engaging with more than 20 people, including six children. Activities included a meadow iSpot, a meadow trail and quiz, sow your own wild flower and a 'meadow mayhem' giant board game.

Sludge figures shown based on calendar year.



Biodiversity protected and enhanced

Outcome: A biodiversity-rich landholding and contributor to the wider region’s biodiversity.

The Wessex Water area is rich in wildlife and has a large number of areas protected by international and national designations. There are also significant areas of important habitat prioritised for preservation under the UK biodiversity action plan. We are duty bound to manage our landholding in accordance with UK wildlife designation and the code of practice on conservation, access and recreation. Some of our own land lies within environmentally sensitive areas, including nearly 300 hectares of land designated as Sites of Special Scientific interest (SSSIs). Beyond our own land we carry out environmental screening of all construction schemes in order to address impacts on biodiversity – we are aiming in future to deliver net gains for biodiversity in relation to our Engineering & Construction capital schemes. We also work closely with wildlife organisations in the region through our biodiversity action plan partners programme.

Performance commitments

- | | 2017-18 | 2019-20 |
|--|---------|---------|
| • Land assessed and managed appropriately for biodiversity | 85% | 100% |

Other company commitments

- | | | |
|---|-------|-----|
| • Maintain Sites of Special Scientific Interest (SSSIs) in favourable/recovering condition as assessed by Natural England | 99.5% | 95% |
| • Investment of £80k per year into the Biodiversity Action Plan Partners Programme | | |
| • Set in place systems to monitor biodiversity gain and loss | | |
| • Develop an assessment tool to understand natural capital value of our landholding | | |

In 2017-18, we have made great progress towards fulfilling a company performance commitment to assess 100% of our landholding for biodiversity by 2020, with a view to bringing as much as feasible into appropriate management. By the end of 2017-8 we had:

- assessed 85% of nearly 2,300 ha of eligible land
- mapped more than 1,500 ha terrestrial habitats
- found 270 ha of UK priority habitats at 85 locations, all mapped and given a condition rating where appropriate.

Our proactive conservation programme is set out in our Biodiversity Action Plan (BAP), through which we aim to halt or reverse biodiversity loss on our land. Our compliance with the national Site of Special Scientific Interest (SSSI) target is now at 99.5% of 293 hectares of SSSI-designated land in favourable or recovering condition – of which 62.5% is in favourable condition. This exceeds the national target of 95% in favourable or recovering condition, with at least 50% in favourable condition.



Reduced carbon footprint

Outcome: Achieving carbon neutrality in the long term and generating more of our own renewable energy.

One of our long-term sustainability goals is to be carbon neutral in our operations. While electricity use increased between 1990 and 2010, mainly due to tighter sewage treatment standards, we have now halted this trend, largely through concerted energy efficiency work. This is supported by detailed consumption information, analysed through our energy data hub, that reveals sites using too much electricity and in turn helps focus corrective measures. We are also generating more renewable electricity and gas from digested sewage and food waste and have increased solar and hydro electricity generation.

Performance commitments	2017-18	2019-20
• Annual greenhouse gas emissions from operational services (kilotonnes CO ₂ e/year)	122	119
• Electricity demand generated from our own renewable sources	26%	24%

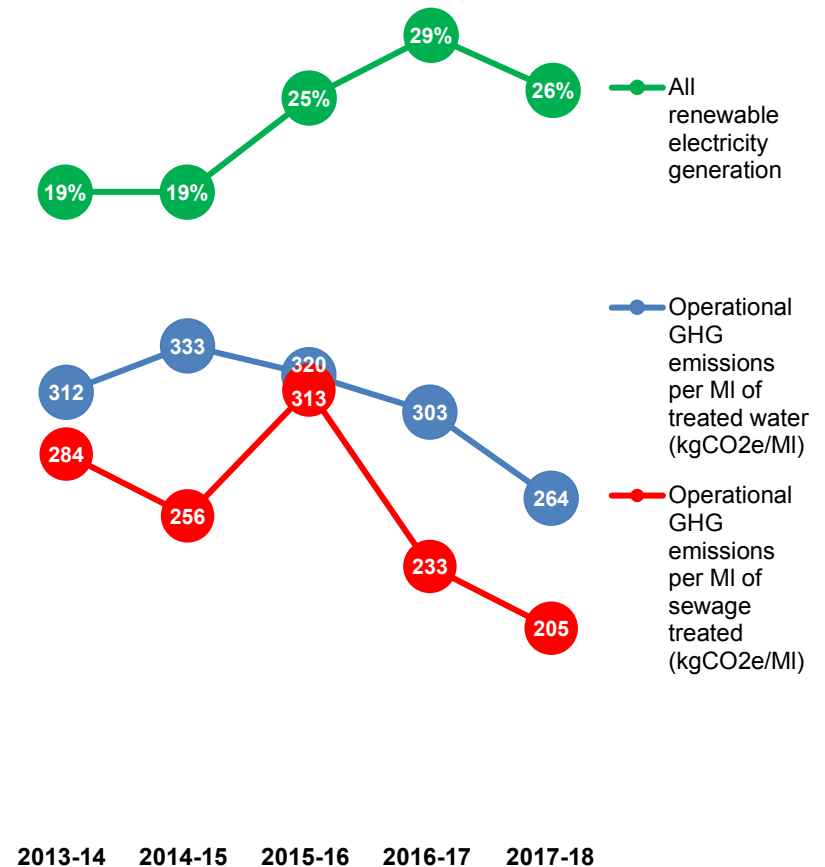
Other company commitments

- Maintain an active energy efficiency programme fully integrated into asset operation and capital investment
- Continued investigation of options to reduce other emissions, including carbon sequestration and off-setting

In 2017-18, our net greenhouse gas emissions fell to 122 kilotonnes carbon dioxide equivalent. This was our lowest since 1999-2000 and meant we met our performance commitment for the year. As in previous years it was achieved through a combination of energy efficiency improvements, renewable energy generation and the falling carbon dioxide intensity of UK grid electricity. Our renewable energy is generated from, in descending order, sewage sludge, food waste digestion, hydro-power and solar power.

While our electricity use increased slightly from 2016-17 due to wetter conditions, it remained in line with the downward trend from its peak in 2007-08; this is largely through concerted energy efficiency work which is delivering around four gigawatt hours of savings each year.

Our operating division GENeco continues to export biomethane to the local gas grid, and struck an agreement with Bristol Energy, in addition to the sale of green gas certificates to Unilever. In 2017/18 these certificates amounted to 9 kilotonnes CO₂e. The net emissions figure including this biomethane generation is 113 kilotonnes (deducting the CO₂e saved through biomethane generated) but we do not include the biomethane credits in our reported net emissions figure of 122 kilotonnes.



Resource efficiency

Outcome: Waste generation minimised, with zero waste to landfill; environmental sustainability embedded within our supply chain.

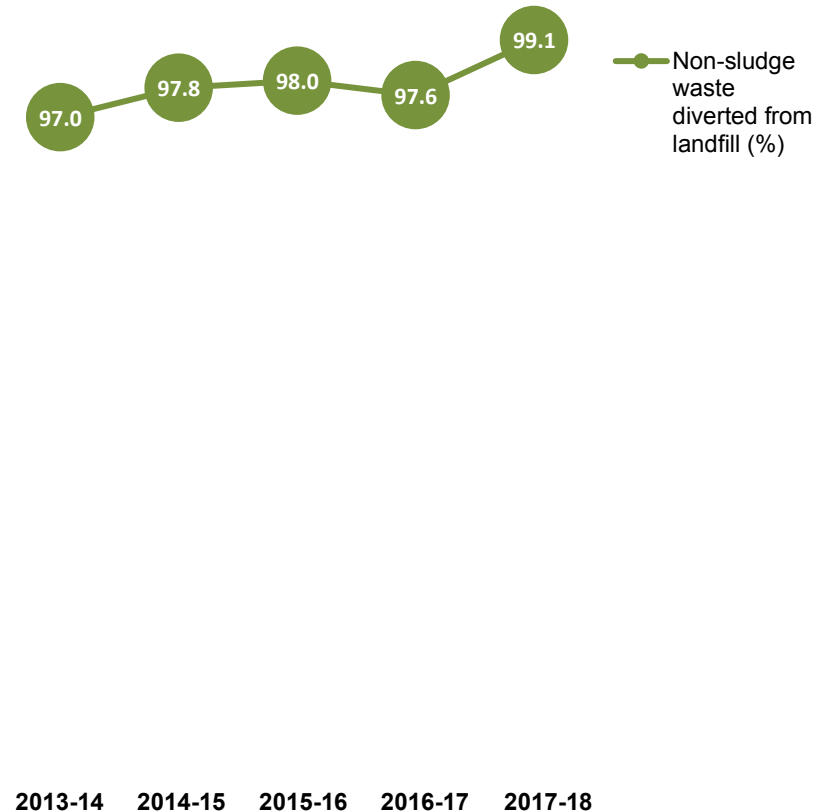
Whilst we already recycle 100% of sludge to farmland, our business operations also generate other forms of waste. The biggest waste streams include soil and stone from construction projects and grit and screenings from sewage treatment. We have set a challenging target of sending no waste to landfill by 2020 and through concerted efforts are consistently diverting more than 95% of our non-sludge waste from landfill. We are aware of the need to also understand the environmental footprint of our supply chain and positively engage with suppliers and contractors.

Company commitments

- | | 2017-18 | 2019-20 |
|---|---------|---------|
| • Non-sludge waste diverted from landfill | 99.1% | 100% |
| • Apply sustainability criteria across all supply chain frameworks and develop additional selection criteria as appropriate | | |

In 2017-18, we have continued to achieve zero waste to landfill from all our office facilities and our zero to waste soil and stone contract covers 99% of construction waste. We are in the process of rolling out a new zero to waste contract for skip waste & general waste which should allow us to reach our goal of zero waste to landfill by 2020.

The performance data is collated from landfill diversion figures by contractors and waste management companies.



Asset management – environmental aspects

Outcome: Sustainability principles and practice integrated into the capital programme; environmental and resource footprints of sites and projects minimised; and operation or promotion of more sustainable alternatives to conventional water management and treatment.

Water industry assets can be highly resource intensive in their construction and operation. By investigating and promoting less conventional options and better understanding the whole life environmental impact of our assets, there is potential to reduce our overall footprint.

Company commitments

- Improve coverage of issues within appraisal methods
- Continue to work with academia and industry partners to identify and trial alternative, more sustainable, forms of treatment
- Prioritise surface water solutions with separation options over solutions involving increased attenuation or enhancement of capacity
- Develop a catchment resilience plan for the Bristol Avon to identify, assess and, where relevant, promote upstream options

In 2017-18, we continue to look for suitable opportunities to trial new technologies and products, which commonly originate from contacts with technology developers or intermediaries.

Trials offer a relatively quick and low risk way to understand the suitability of more innovative technologies and we have achieved some significant savings in recent years in areas such as trenchless sewer rehabilitation. Our partnership with the University of Bath was founded on an initial research programme (for which reporting of findings and actions is concluding) and the creation of the Water Innovation Research Centre (WIRC), which is now the main vehicle for our collaboration. Other joint projects include work in Bath to explore alternatives to pharmaceutical prescribing and efforts to control reservoir water quality.

The National Environment Programme also included a series of technology trials designed to test the performance of new processes to meet future, more stringent targets for phosphorus levels in sewage discharges required by the EU Water Framework Directive. These were completed last year and we have used the results to assist us in the next investment period 2020-25 where we are planning for a further 64 potential phosphorus improvement schemes.

Wellbeing

Outcome: Staff who are helped and supported in maintaining their physical and psychological well-being, with protection for our workforce and anyone who may be affected by our daily operations.

Protecting the health, safety and welfare of our staff, contractors and customers is an established and shared responsibility that is essential to our reputation as a leading and trusted employer. We continue to develop and embed a strong health, safety and welfare culture in our day-to-day operations - based around Safety, Quality, Time and Cost - that targets zero accidents. This does not mean there won't be another accident, but we aim to work for as long as possible without an injury. We monitor all accidents and incidents reported by employees to evaluate where resources should be allocated to effectively address any problem areas.

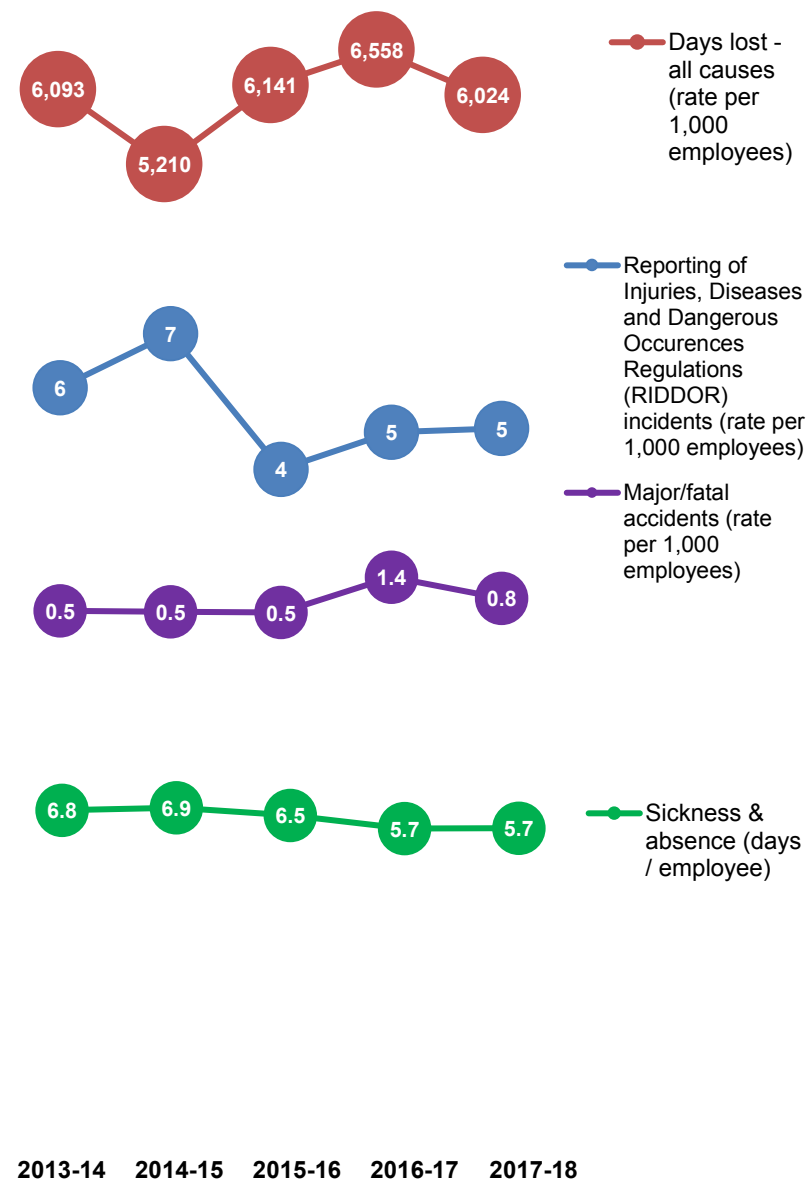
Company commitments

- Deliver our health, safety and welfare strategy
- Monitor psychological health and wellbeing trends and proactively support and inform staff to support themselves
- To maintain and improve on staff satisfaction with health and safety in the workplace

In 2017-18, an enterprise-wide Wessex Water health and safety incident, near-miss and observation reporting app has been introduced and will replace existing paper based systems used for reporting incidents, near misses etc. Any report that raises significant concerns is subject to additional investigation and where appropriate the situation is rectified or procedures improved. The app is now in use within operations, engineering and construction and GENeco. It will be rolled out to the rest of the company in 2018. In 2017-18 there was an overall reduction in lost time incidents of 32% from 2016-17. The principal causes of lost time in 2017 were slips, trips and falls and manual handling.

Our commitment to safety and performance has again been recognised by RoSPA. Engineering and construction were awarded the 2017 Construction Engineering sector award. These awards are presented annually for the most outstanding performance in health and safety by a company or organisation within a particular industry or sector. Winners must demonstrate a robust and high-quality safety management system together with a minimum of four years' consistently excellent or continuously improving health and safety performance.

The company was also recognised in the Utility Week awards with the Health and Safety Initiative of the Year award for collaborative work in the utility sector. The winning roadworks safety campaign is in collaboration with the charity SafeWise and includes a hard-hitting video designed to influence driver behaviour near roadworks.



Diversity and inclusion

Outcome: Equality, diversity and inclusion in the workplace – everyone being treated with dignity and respect; and the same opportunity to succeed for all current and potential employees.

We are committed to creating a fair, responsible and inclusive workplace for all employees and those who work with the company as suppliers, contractors, consultants or customers. We must also adapt to the changing expectations of our workforce and society around us. Different personal characteristics bring richness to our work environment, and attracting, developing and retaining employees who reflect the diversity of our customers is essential to our continued success. We emphasise the promotion of diversity and inclusion within the company, ensuring everyone has an equal chance to progress their career with us regardless of age, gender, sexual orientation, ethnicity, disability, cultural background and carer responsibilities.

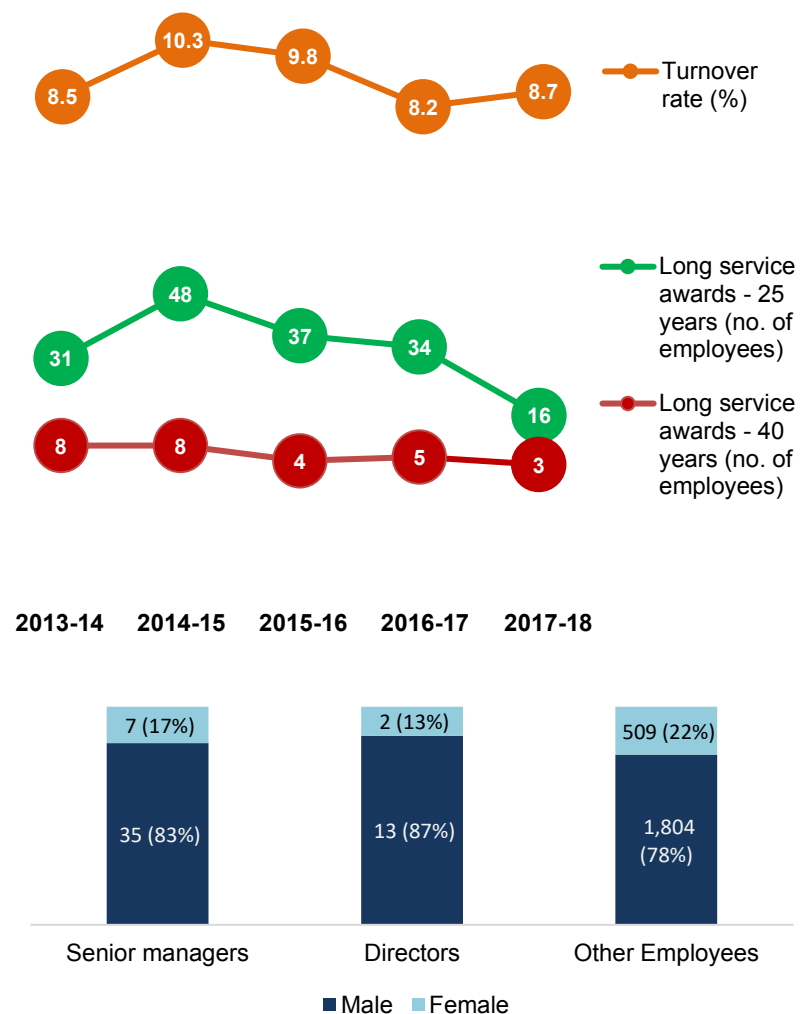
Company commitments

- Maintain employment law training for managers to keep up to date and compliant with employment law developments
- Identify and review rates of staff satisfaction regarding fair and equal treatment irrespective of protected characteristics
- Publish diversity scorecard externally and deliver diversity action plan
- Improve mix of employment - full time, part time and flexible working including job share

In March 2018, there were 2,370 employees. Last year, the number of female employees in our workforce was 22%, while in leadership roles the number of female managers increased by 1% to 19%. In January 2018, Wessex Water published its first gender pay gap report; our mean gender pay gap was 7%. Our gender pay gap is significantly lower than the UK average and reflects gender distribution in job roles across our workforce rather than any equal pay issues. We have clear areas of focus which we believe will contribute to reducing our gender pay gap: reflecting the community we serve; community education; apprentices and graduates; flexible working; reviewing our recruitment process; developing role models; and improving all forms of diversity.

We are proud that 17% of our apprentices last year were female reflecting the work we do to engage young women in our sector. To ensure the best use of the government apprenticeship levy, we introduced career development apprenticeships for existing members of staff, to enable them to reach their potential and progress their careers within the company. We continued to promote diversity into this year and we are an active member of the Business Disability Forum. We promoted our volunteering policy and encouraged staff to volunteer in our community and we continue to promote flexible and remote working.

All data on the facing page is collated from our HR management system.



Resourcing and talent management

Outcome: Staff with the appropriate skills, knowledge and competencies and their potential being realised.

We pride ourselves on the standard and level of learning and development opportunities provided to staff to ensure they have the skills they need to perform their jobs to the highest standards. We promote and encourage progression and ensure that all those looking to build a career with us have the opportunity to do so at a level and pace that suits both them and the company.

Company commitments

- Continue to offer and deliver staff training needs submitted on an annual basis
- Assess the success of existing staff development schemes and use the findings to improve schemes in place as part of the wider succession plan
- Continue to offer our new Aspiring Leader and other leadership development courses to support employees in developing their careers
- Continue to refine and evolve our succession plan that builds on our talent pool
- Retain 90% of apprentices at the end of their apprenticeship
- Review best practice for internal communication of sustainability and adapt our approach accordingly

In 2017-18, training and development continued to be of the utmost importance and we delivered more than 800 courses with an average of 3.4 days' development training per employee. We continue to work in partnership with selected local colleges and universities to enhance our management development programmes. In partnership with the University of the West of England, we delivered our third cohort of Institute of Leadership and Management (ILM) Level 5 programmes and one cohort of ILM Level 7 programme in Strategic Leadership. We continue to invest in two-day development centres for nominated high potential employees as part of our talent and succession planning. This has led to secondment and development opportunities, providing our people with identified career development. We continue to deliver in-house development programmes for new and experienced managers as well as a full soft skills training programme. Our new e-learning system, iLearn, has been developed to complement, reinforce, and further embed a culture of learning

Aiming to ensure the best use of the government apprenticeship levy, last year we introduced career development apprenticeships for existing members of staff. These apprenticeships are open to staff within the business to enable them to reach their potential and progress their careers within the company.

Data on the facing page is collated from our internal management accounts system.



2013-14 2014-15 2015-16 2016-17 2017-18

Working better together

Outcome: A company culture that reflects our values and individuals who are fully engaged in the company's work and its aims.

All companies have their own culture – the atmosphere at work, the way people behave and the way things are done. The culture of our business shapes the quality of the service we provide, our ability to work successfully with other interests, and the engagement of our own employees.

We have a strong, friendly and positive culture and staff enjoy working for the company and with each other.

Company commitments

- A positive shift to employees consistently demonstrating BEST (Behaviours, Excellence, Service, Teamwork) values and behaviours
- See an improving trend on behaviours, values and culture within our staff survey
- Continue to review and promote flexible and new ways of working

In 2017-18, we held a staff survey; 84% of employees rated us a good company to work for and 76% rated us a great place to work. Our staff engagement was 80%, consistent with last year and an increase of 3% on the year before. Our employees are important to us and we listen to their feedback and put action plans in place to address key areas of this.

Our workforce is highly motivated and engaged and consistently provides outstanding and industry leading levels of customer service. Our people are important to us and we have listened to their feedback. We want to ensure they continue to feel valued and to make a positive difference to their day-to-day lives.

Last year we launched a People Programme, a five-year plan to oversee and invest in a series of activities to benefit our employees, to attract and retain highly skilled staff and to build a sustainable workforce for the future. It is now in full swing and has already started delivering initiatives to improve the way we look after our people, enhance our diversity and ensure we have a pipeline of talent flowing through the business to create the leaders of tomorrow. One of our proudest achievements of the year is that apprentices and graduates on formal training now represent more than 8% of our total workforce.

Outcome: Clear communication to and between staff, resulting in a well-informed workforce

We stand a better chance of achieving our aims if all employees fully understand what we are trying to achieve. There also needs to be good flow of information from employees to the company's senior management team in order to identify issues that need addressing and perceptions of Wessex Water as an employer. Effective internal communication helps ensure that all employees are working collaboratively towards a common goal. It develops a cohesive culture and empowers employees to make the right decisions in line with the company aims and objectives. This in turn leads to greater efficiency and productivity and improves customer service.

Company commitments

- Ensure company aims and objectives are made available to all staff
- Improve trend in staff survey on staff understanding company aims and objectives
- Regularly update staff through our internal communication channels
- Develop and roll out improved systems for smarter ways of working, with benefits to include increased mobility and accessibility
- Improve participation rates within our staff survey and the number of staff satisfied that action plans will be put in place.

In 2017-18, we saw the benefits from launching the suite Office 365 systems (including Office Online, OneDrive for Business, Sharepoint, Skype for Business and Yammer) and installing Microsoft Surface Hubs in meeting rooms across our sites. We have seen improvements to flexible working, document management and communication with colleagues and other organisations. Lunchtime talks are now broadcast via Skype conferencing across the business to other sites or employees' homes. The Surface Hubs were also used to great effect during our innovation day in November.

Reward, recognition and working arrangements

Outcome: Remuneration that fairly rewards all staff on the basis of their contribution to the business, and help for staff to support themselves in retirement.

We aim for the pay and benefits that we offer to be competitive within our sector and the local marketplace. And also for rewards to drive high levels of performance that help maintain our leading position.

Company commitments

- Continuous review of flexible benefits to ensure we remain competitive with other businesses
- Maintain a strong link between performance, behaviours and total reward at all levels within the business
- Maintain ongoing rewards for employees developing good ideas
- Access for all relevant staff to retirement information to enable them to make the right choices
- Enable effective transitional retirement through flexible retirement options
- Help staff identify which of the company's sustainability objectives are most relevant to their day to day work

During 2017-18, we continued to develop and implement a range of diversity initiatives and to promote flexible and remote working, together with flexible retirement aimed at easing people into retirement gradually. Protecting the health, safety and welfare of our staff, contractors and customers remains the highest priority.

Our Eureka programme rewards staff who have proposed projects that save money, improve service to customers, reduce risk and improve the ways we work. In 2017/18 there were 62 suggestions overall, of which eight were rewarded and four deemed suitable for wider roll-out.

Investor relations

Outcome: To be considered prudent and well-managed by financial interests.

The company promotes an open and transparent relationship with HM Revenue and Customs (HMRC), engaging in an early dialogue with them when there is any uncertainty as to the correct tax treatment of any significant transaction. It thereby ensures that issues are resolved before tax returns are filed, where possible.

Company commitments

- Achieve upper quartile Ofwat wholesale expenditure allowance at PR14.
- Operate below industry average retail cost to serve
- Maintain dialogue with our financial stakeholders
- Maintenance of an appropriate amount of equity in the business

In 2017-18 we again outperformed Ofwat's wholesale expenditure allowance which was set by-reference to an independent assessment of the upper quartile efficiency position.

We were assessed by Ofwat as one of the most efficient retailers in its PR14 determination. Our household retail expenditure has remained below Ofwat's allowance and below the average industry cost to serve.

Stable finances and risk management

Outcome: Stable finances that ensure long-term viability with risks well managed.

Company commitments

- Maintenance and close monitoring of adequate financial and other resources
- Maintenance of a solid investment grade credit rating
- All key risks identified by executives and agreed with the board.

2017/18

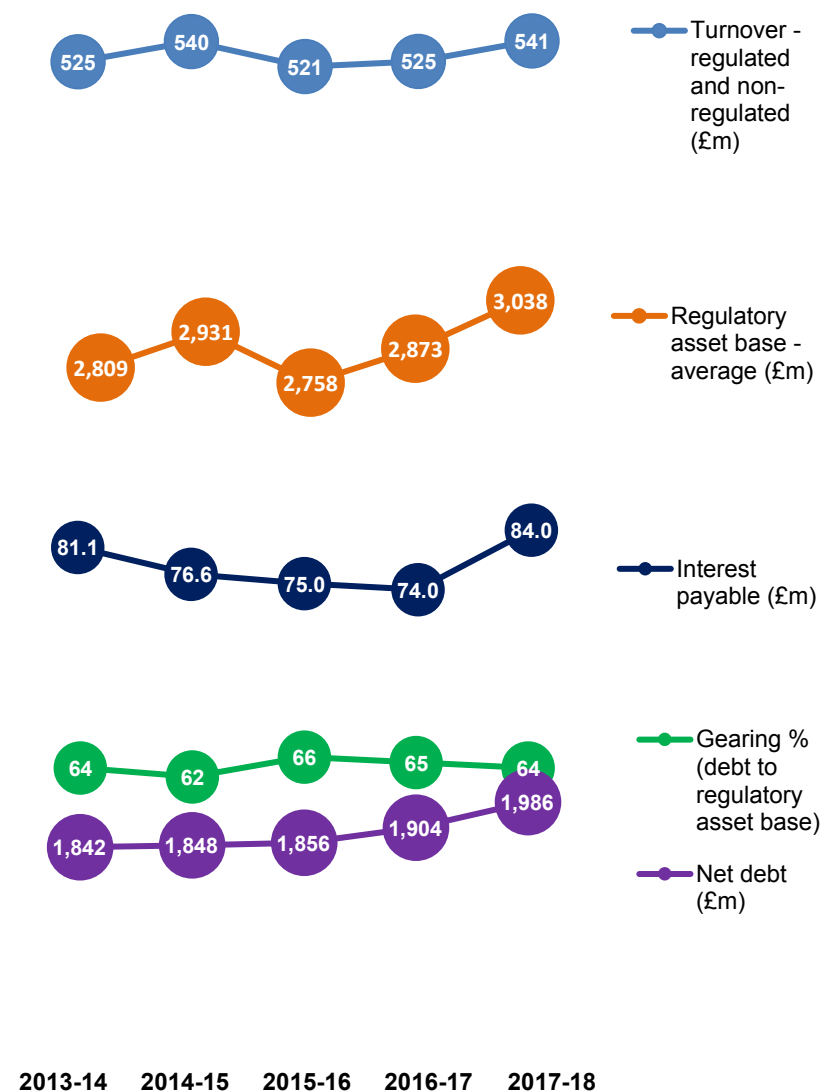
Turnover increased by £15.3m or 2.9% from £525.3m to £540.6m. Our operating profit rose £41m to £267.6m. Turnover increased by £15m and operational costs reduced by £26m.

Gearing, as measured by net debt to regulatory capital value, has fallen from 64.7% at 2016/17 year-end to 63.9% this past year-end. During the year the board has continued to pay particular attention to the projected level of the company’s gearing ratio with a view, when declaring dividends, to protect the company’s existing credit ratings. The board remains committed to maintaining good investment grade credit ratings for the company at all times.

Under YTL’s stewardship we have always been structured and financed in a simple and transparent way that ensures we are financially resilient. Our gearing will continue at under 70% and we will continue to maintain a straightforward corporate structure. We pay our taxes, contributing more than £20m last year, and are classed by HMRC as low risk.

The company has an adequate liquidity position comprising cash and cash equivalents held on the balance sheet along with undrawn bank facilities, giving the company instant access to funding if needed.

A risk group meets through the year and submits the current risk register and summary report every six months to the Risk Management Advisory Group made up of the executive directors. This group scrutinises and challenges the risks included in the register and identifies any additional work it thinks is necessary to better classify the risk or explore other mitigation methods which may be available. Any significant new risks are reported to the advisory group and to the board as they arise.



Accountability

Outcome: Accountable and transparent operations, policy and strategy, without jeopardising commercial confidentiality.

The data and information we provide is a key part of ensuring we do the right thing by our customers and stakeholders. Customers' service expectations continue to grow as the world around them changes, and the priorities of younger generations are becoming more distinct from our longer-term customers. Similarly, the information we provide to residents of coastal towns needs to be different to the information we provide to farmers or brewers or city dwellers.

Company commitments

- Regular stakeholder engagement on and publication of long-term strategy and business plans, plus publication of annual updates on progress
- Consultation on and publication of annual assurance statement and assurance plan covering all stakeholder facing performance metrics. Compliance with UK Corporate Governance Code

For 2017-18, as part of Ofwat's company monitoring framework methodology we have published details of our information assurance processes, including in October 2017 an information assurance statement, and in June 2018 an information assurance plan, both of which can be found on our website. Our customer challenge group, the Wessex Water Partnership, reviewed and challenged the performance commitment information provided in this Annual Performance Report and reported their conclusions to the board having separately had access to the work undertaken by the technical auditor. Our internal assurance processes include the identification of a data originator, information compiler and a senior manager owner for all information tables provided as part of this Annual Performance Report. Each of the above is required to certify that the information has been produced with the intention of presenting a true and fair view of the business transactions and performance and that reasonable steps have been taken to ensure that the content is not false. All of these certifications were received without qualification.

The information assurance statement and the resulting plan did identify a number of detailed areas where improvements were proposed including an updated bill design, improvements to our website and the way we communicate on our performance and our market information. We will be reporting progress on the information assurance plan when we publish our next information assurance statement in the autumn of 2017.

Governance

Outcome: Governance structures and processes complementary to our sustainability goals.

Wessex Water is committed to high standards of corporate governance. We are required to conduct our water and sewerage business as if it were the company's sole business as a public limited company. Our licence also requires us to have particular regard to the UK Corporate Governance Code as approved for the purposes of the Listings Rules of the Financial Services Authority. Our performance is regularly reported to the board. We apply strict assurance processes to the information reported. We also take a forward-looking view of the market to identify risks and uncertainties that could affect our performance.

The affairs of Wessex Water are ultimately the responsibility of the board, which controls and directs the undertaking of the regulated water and sewerage business, meeting a minimum of six times a year. There are four formal committees (Audit Committee, Remuneration Committee, Nominations Committee and Corporate Responsibility Committee). The board also receives reports from the Wessex Water Partnership (our customer panel) and our catchment panel, both of which are focused on our work during 2015-20; also, our futures panel, which considers emerging trends, opportunities and threats that will have a bigger influence post-2020.

Company commitments

- Any externally published information will be subject to formal internal sign-off procedures appropriate to the content provided
- Ensure continued alignment of stated goals
- Company, directorate, departmental and team targets that align with sustainability goals

In 2017-18, we updated our strategic direction statement to reflect a greater focus on how we engage with our communities. As part of our strategic direction statement, Water – the way ahead 2015-2040, published in support of our last business plan we defined eight priority themes derived through our customer engagement. Along with our sustainability vision our strategic direction statement is designed to inform both our water resources plan which runs into 2045, and our business plan proposals for service and environmental improvements to 2025.

Adding value

Outcome: Stakeholders convinced that the company adds value to society, the environment and the economy.

Expenditure made in the last 12 months that benefits our customers, the environment in our region and our employees, while helping our general movement towards being a sustainable business, is shown in the graph.

In each category, mandatory expenditure driven by legislation makes up the majority. Examples include relining water mains to meet drinking water quality standards, capital investment to meet European environmental directives and regulations, standard pay and conditions for employees, and maintenance of our physical assets such as water mains, sewers, pumping stations and treatment works.

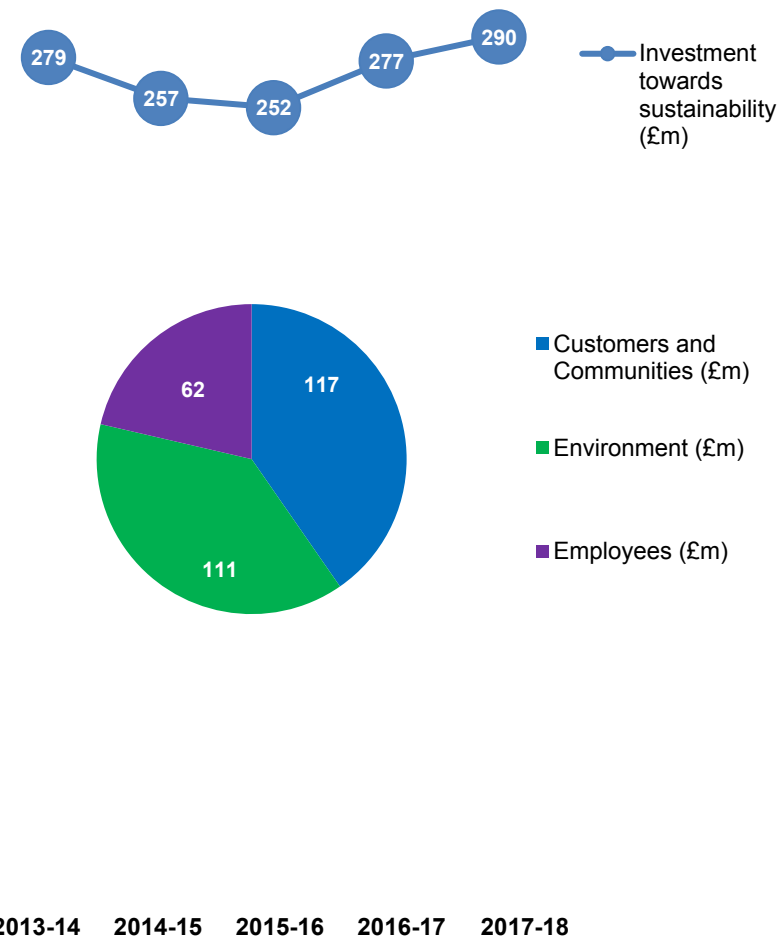
Examples of discretionary expenditure include our education service, contributions to community projects in our region, grants to wildlife organisations and training programmes for employees.

Company commitments

- Transparent publication of group structure
- Transparent publication of tax arrangements
- Carry out planned investment in our assets and for the water environment and also contribute to local community initiatives
- Annual accounting and reporting of investment in infrastructure and programmes that benefit customers, communities and the environment

In 2017-18, we delivered gross capital expenditure for the third year of the AMP6 programme of £250.5m, which is £36.5m higher than the £214.0m delivered last year. This profile is typical of a five-year capital programme where there is lower expenditure in the first years of the new AMP period as the new programme of work is designed and construction commences on site

The group structure and company tax arrangements are published in the annual report.



Sustainability accounting: environmental accounts

Since 2002 we have produced accounts that enable a wider view of our sustainability. Firstly, they provide a monetary assessment of environmental effects that are not typically dealt with through investment or some other payment. Secondly, they summarise our expenditure on items relevant to sustainability in its broader sense.

Major impacts – the water environment

We make significant investment each year to improve the water environment, addressing issues such as low river flows that can occur during dry weather, nitrates and pesticides found in groundwater, phosphorus in rivers and streams, flooding from the sewerage system and bathing water quality. The pace and location of this investment is influenced by many factors including:

- the extent to which the UK is meeting existing European standards
- ongoing discussion as to what standards are needed to achieve good ecological status in the future
- the emerging science on the prevalence and origin of pollutants
- surveys of the condition of waterbodies (at local, national and international scales)
- the efficacy of treatment technology.

Some environmental impacts remain 'externalised'; that is, they have not yet been fully addressed through investment or some other intervention. The most material example of this in our sector would be impacts on the quality of rivers, estuaries and coastal waters, where improvements are being implemented over several years to comply with the Water Framework Directive and the Priority Substances Directive.

Major impacts – greenhouse gas emissions

Emissions are calculated using the most recent guidance from the government for environmental reporting and Ofwat for their key performance indicators. They are split into three categories:

- Scope 1: emissions from on-site activity and our own vehicles
- Scope 2: emissions related to grid electricity generation

- Scope 3: third party emissions associated with Wessex Water's activities, e.g., personal vehicles for business travel, outsourced fuel use and transport, plus emissions related to grid electricity transmission and distribution.

kilotonnes CO ₂ e	Scope 1	Scope 2	Scope 3	Total	2016-17
Gas, diesel and other fuels	10	-	5	15	14
Grid electricity	-	75	7	82	92
Transport	10	-	1	11	12
Process emissions	27	-	10*	37	39
Exported renewable (netted off)	-19	-3	-	-22	-23
Total (net emissions)	28	72	23	123*	133

*excluded from the Ofwat KPI calculation.

*Please note that figures may not match the totals due to rounding.

Carbon dioxide from energy and transport accounts for around three quarters of our total greenhouse gas emissions. The remainder is in the form of process emissions (methane and nitrous oxide) from sewage and sludge treatment. By generating and using our own electricity from sludge digestion and from our nonregulated activities – principally food waste digestion – we avoid the use of additional grid electricity and the carbon dioxide that this entails. We also exported self-generated renewable electricity and biomethane; for carbon accounting purposes the carbon footprint of the conventional energy that these displace is netted off from our gross emissions.

Our net operational emissions for 2017-18 as reported to Ofwat were 122 kilotonnes CO₂ equivalent – a fall of 1 kilotonne from the previous year.

Some of the process chemicals we use to treat water and sewage have an estimated carbon footprint for their manufacture (but not their transportation); together this amounts to 8ktCO₂ equivalent. We also estimate the whole life carbon footprint of each project in the investment programme when carrying out initial appraisals. This includes the embodied carbon of materials used, the construction process and an estimate of annual carbon dioxide emissions during the operational lifespan of the asset being created.

Investment to address environmental impacts

Issues addressed by our 2015-20 investment programme include low river flows that can occur during dry weather, phosphorus in rivers and streams, flooding from the sewerage system and bathing water quality. The single largest scheme is the integrated supply grid which has involved investment of more than £200m to address simultaneously a number of customer service and environmental concerns. Other work includes expenditure to reduce the impact of abstraction on rivers at risk of low flows, to reduce nutrient levels in rivers, enhance bathing water quality and improve the condition of our sewerage infrastructure.

Alongside investment in physical assets, we will continue working with others to better manage catchments and surface water, addressing impacts on the water environment at source. This includes drinking water source protection and, increasingly, the wider water environment as we seek alternatives to conventional end-of-pipe treatment. We are also carrying out extensive environmental investigations during 2015-20 that will inform investment during 2020-25. We report in more detail on these initiatives in our catchment report at www.wessexwater.co.uk/catchmentmanagement/

Licences, charges and environmental taxation

We are subject to numerous licences, taxes and other annual charges that have an environmental basis. These include abstraction licences and discharge consents paid to the Environment Agency, the Carbon Reduction Commitment Energy Efficiency Scheme, and environmental components of energy bills such as the Renewables Obligation and the Climate Change Levy. Combined, we paid approximately £13.5m for these in 2017-18.

Other valuation methods

Environmental costs can be assessed by calculating the hypothetical investment needed to eliminate an environmental impact, for example, the cost of switching from fossil fuel energy to renewable sources. Typically, we assess investment costs for renewable energy generation and emerging carbon abatement technologies on a case-by-case basis.

A further approach is the use of shadow prices, such as the carbon values that form part of the Green Book Supplementary Appraisal Guidance for Valuing Greenhouse Gas Emissions and Energy Use, for use in policy and project appraisal. For our business plan for 2015-20 we also applied transfer values for environmental and social elements (such as traffic disruption, recreational benefits) derived from willingness to pay surveys and previous studies such as the national Benefits Assessment Guidance. The monetary cost of our greenhouse gas emissions using shadow prices, based on guidance from the Department for Energy and Climate Change, would be £0.5m using traded carbon values and £8.0m using non-traded carbon values.

In a few cases there are also market based valuations, such as carbon offsets, which account for the emissions avoided by renewable energy, energy efficiency and carbon storage projects, with prices reflecting varying levels of accreditation. Other environmental markets are emerging and we are continuing to develop an online environmental trading system, EnTrade. This UK-first initiative was originally set up to enable farmers to bid for payment to carry out work that reduces nutrient leaching from topsoil. We are looking at ways in which EnTrade could facilitate transactions for other environmental benefits.

Sustainability accounting: sustainability spend

	2017-18 £m	2016-17 £m
CUSTOMERS AND COMMUNITIES		
Mandatory <i>Example: water supply improvements</i>	116	133
Discretionary		
a) -	0	0
b) <i>Example: replacement of customers' supply pipes; education service</i>	1	1
c) <i>Example: charitable donations to community projects</i>	<1	<1
ENVIRONMENT		
Mandatory <i>Example: sewage treatment improvements to benefit the water environment</i>	111	79
Discretionary		
a) -	0	0
b) <i>Example: trials of options for more sustainable water resources</i>	0	<1
c) <i>Example: conservations grants to wildlife organisations</i>	<1	<1
EMPLOYEES		
Mandatory <i>Example: basic pay and conditions including pension</i>	52	53
Discretionary		
a) <i>Example: enhanced overtime payments</i>	4	4
b) <i>Example: staff training</i>	6	7
c) <i>Example: enhanced maternity leave</i>	0	0
TOTALS		
Customers and communities	117	134
Environment	111	79
Employees	62	64

Mandatory expenditure - governed primarily by legislation or regulation

Discretionary expenditure - optional, with three sub-types:

- a) primary benefit to Wessex Water; secondary benefit to others
- b) equal benefit to Wessex Water and to others
- c) primary benefit to others; secondary benefit to Wessex Water