



Sustainability indicators  
and accounting 2016-17

[www.wessexwater.co.uk](http://www.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 2016-17 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
- 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 2016-17 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 1.44% 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

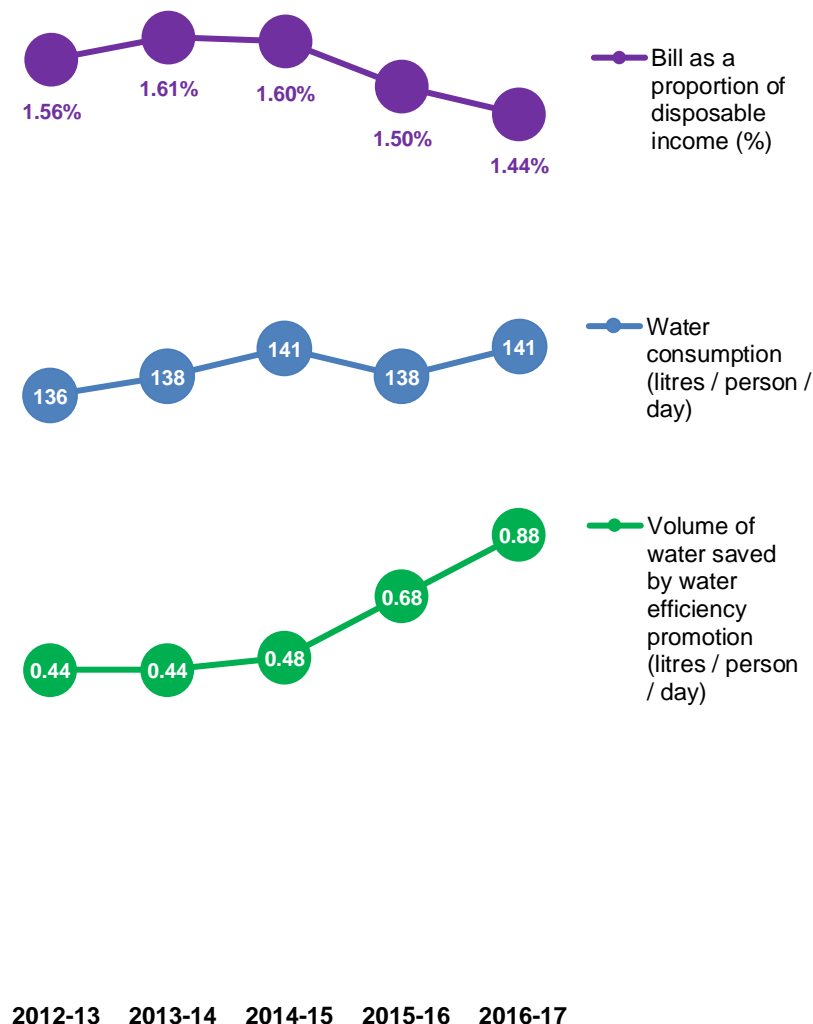
	2016-17	2019-20
• Bill as a proportion of disposable income (%)	1.44	Reducing trend
• Water saved by water efficiency promotion (litres / person / day)	0.88 (in year)	3.26 (5 year cumulative)
• Water used (litres / person / day)	141	131

### 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 2016-17**, we continued to support those who are financially vulnerable through our assistance programme, **tap**. We helped more than 27,000 customers to pay charges and repay debt, while offering practical help to reduce water and energy bills. This represents a 28% increase over the year. Around 10,000 customers are in receipt of our main social tariff, Assist, which offers discounts of up to 90% for those in the greatest financial hardship. A further 3,000 pensioners on Pension Credit receive a discount of around 20%. Our partnerships with the debt advice community are thriving; holistic advice is vital to help customers get back on track and into sustainable payment. We liaise with a growing number of community based organisations outside the debt advice sector and geographical mapping helps us engage with customers who are typically much harder to reach and likely to be some of the most vulnerable. We launched five new projects in hard to reach areas such as deprived housing estates. We continue to support financial capability and money management projects in our communities, funding a further four this year through our Money Matters awards.

In 2016-17, we helped customers save almost a litre of water per person per day. We offered free water saving kits, including sprinkler heads for hosepipes and more efficient showers. We attend summer shows around our region to encourage customers to be smart about water, such as Yeovilton Air Day, the Bournemouth Air and Dorset County Show.



## 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

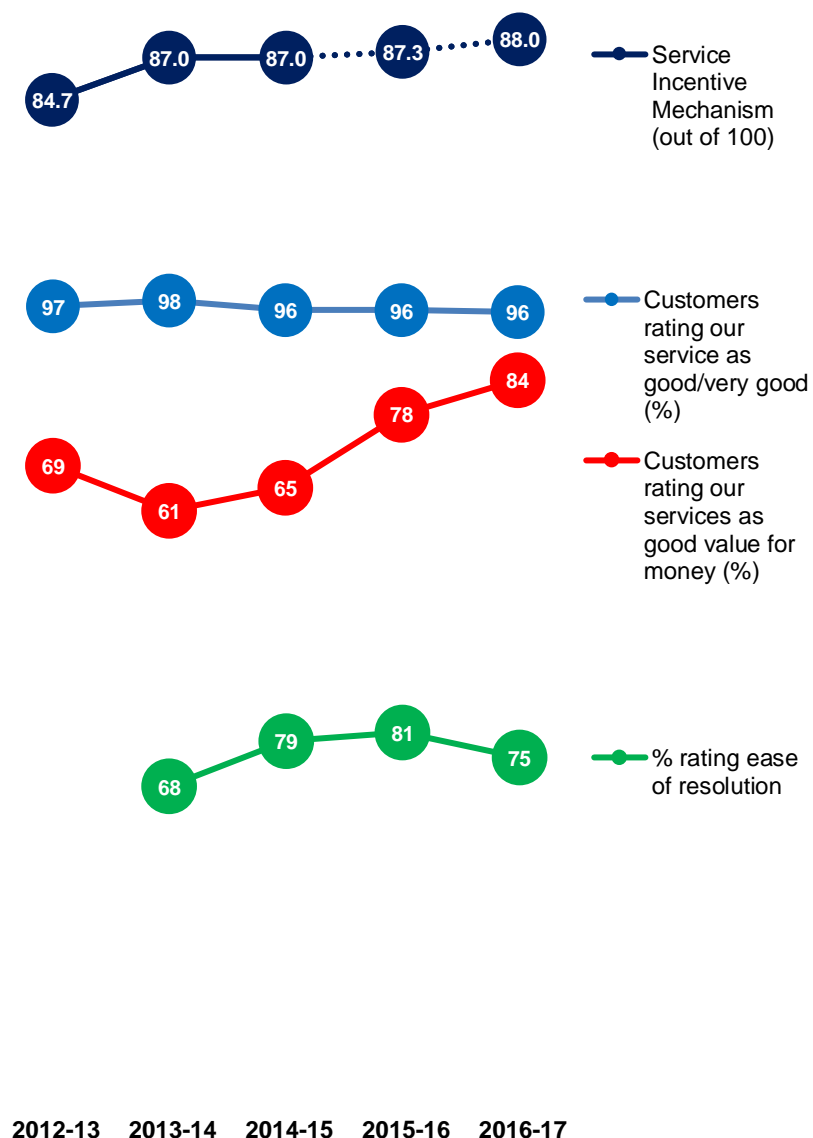
	2016-17	2019-20
• Service Incentive Mechanism score	88	>86
• Customer service rating good or very good	96%	>95%
• % rating ease of resolution	75%	Improving trend
• Customers rating service as good value for money	84%	75%
• Meet best practice for accessible communications – achieve the British Standard 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 2016-17, 95.8% 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 once again improved with 83% of customers rating our service as very good or good value for money. Our overall customer effort score has dipped slightly with 75% of customers saying it takes little or no effort to resolve their query, but the number saying it takes no effort at all has improved to 59%. In September the Consumer Council for Water confirmed that we continue to have the lowest number of complaints in the water industry. We've had no referrals this year to the water ombudsman, WATRS. We retained our government 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. We've demonstrated our commitment to accessible and inclusive services for all by retaining the British Standard for inclusive services provision (BS 18477) and the Louder than Words charter mark.

We continue to widen our use of alternative communication channels while remaining committed to offering personal telephone answering and, most importantly, choice for customers. We have also extended our opening hours for operational contact. Our billing customer relations staff have been through further training to make our replies to complaints simpler and easier to understand.





## 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

- Customer contacts about drinking water quality
- Compliance with drinking water standards

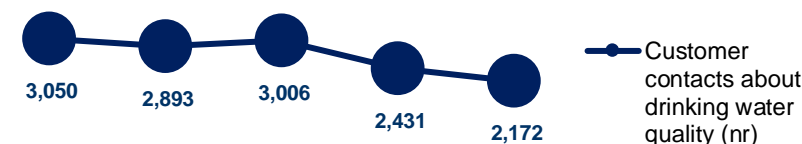
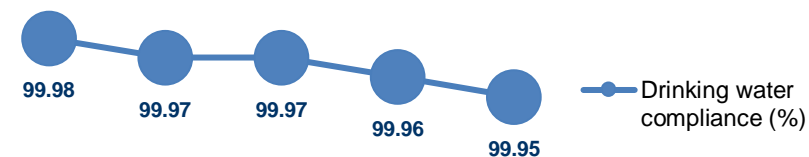
	2016-17	2019-20
Customer contacts about drinking water quality	2,172	2,250
Compliance with drinking water standards	99.95%	100

### Other company commitments

- Sources protected through catchment management
- 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 2016, our overall compliance with drinking water standards in was 99.95%, marginally below our long-term performance. In 2016 there were 23 failures out of approximately 34,000 tests, of which 20 were due to domestic plumbing and service pipe issues such as lead pipes, nickel taps and copper plumbing. The remaining three exceedances were related to our iron water mains. There was a further reduction in the number of customer contacts about acceptability of water due to the ongoing benefit of our mains rehabilitation work and improved customer communications.

In 2010 we began work on our biggest ever project, a major integrated water supply grid, and it remains on track for completion in 2018. All the major pipelines have been laid and work is well advanced on the final parts of the scheme at Black Lane in Blandford and Codford, near Warminster. For the first time ever we have transferred water between our southern and northern resource zones, thus delivering some of the benefits of the scheme in advance of the target date.



2012-13 2013-14 2014-15 2015-16 2016-17

## 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

- Volume of water leaked (MI/d)
- Reported leaks fixed within a day

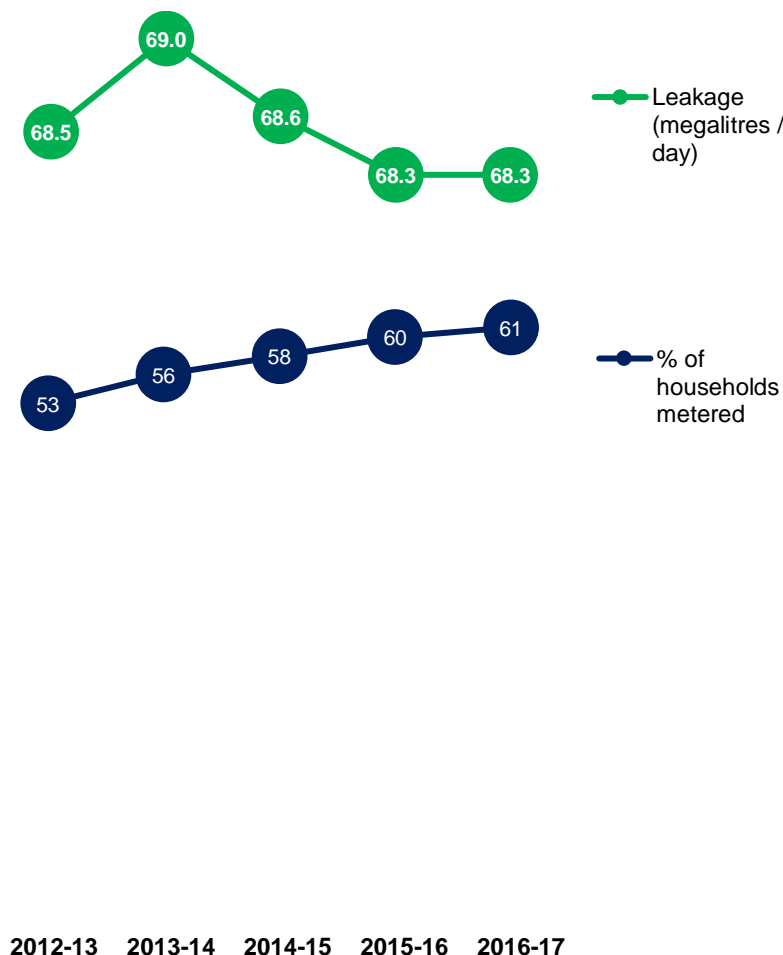
	2016-17	2019-20
Volume of water leaked (MI/d)	68.3	<66.5
Reported leaks fixed within a day	70%	90%

### 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 2016-17, we have maintained leakage at 68 MI/d which is below our agreed target for the year and also met our target of fixing 70% of leaks reported to us in the same day. We also completed over 5,000 free in-home water efficiency checks, fitting devices and sharing behaviour advice, and repaired for free nearly 4,300 of our customers’ leaking pipes to help reduce our customers’ water-use. 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.

This year we’ve developed our metered bills so we are now able to provide graphical water use information. This will help customers compare their use over time and identify leakage.



## 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, following the Directive's change of classification and tightening of standards. This tightening, rather than any underlying deterioration in water quality, is why we report 98% of beaches passed EU bathing water standards against our target of 100%.

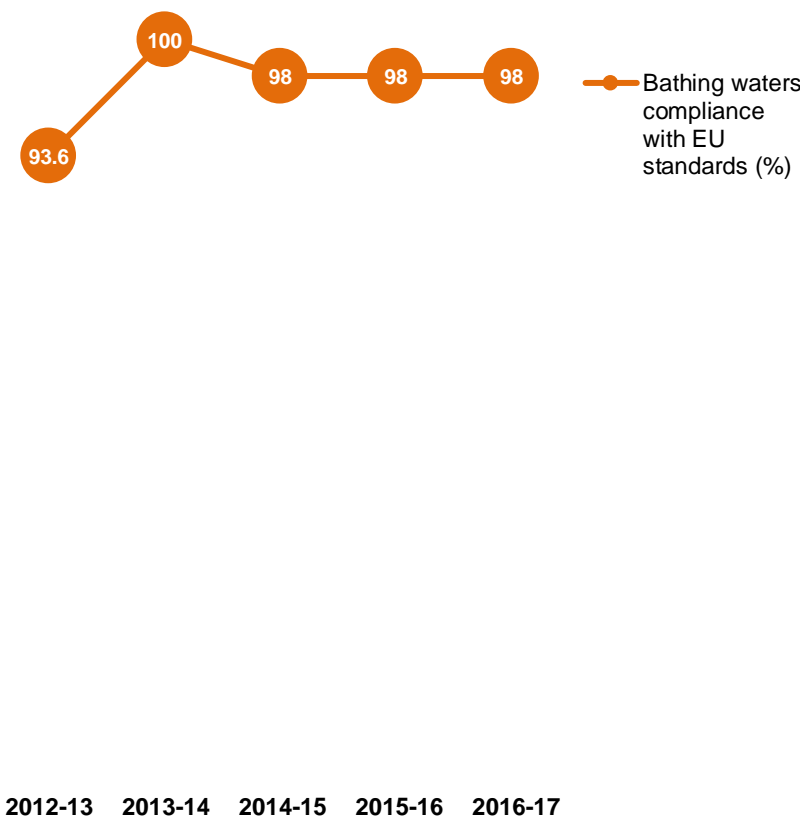
### Performance commitments

	2016-17	2019-20
• Agreed bathing water schemes delivered	100%	100%
• Beaches passing EU bathing standards	98%	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 2016-17**, Burnham Jetty was the only bathing water within our region that failed to meet the 'satisfactory' standard. This is due to tighter standards, rather than any underlying deterioration in water quality, and is why we report 98% of beaches passing EU bathing standards against our performance commitment target of 100%. We have an agreed programme to improve our assets in the vicinity of Burnham Jetty and completed all the agreed National Environmental Programme schemes during the year. Outputs included a new underground storage tank at a pumping station near Highbridge; increasing pumping capacity at Blake Gardens in Bridgwater to reduce overflow spills; proactively investigating misconnections of sewage to the surface water system that could pollute the river Parrett in Bridgwater; and installing 67 overflow monitors. We also investigated the effects of our discharges near Taunton on the quality of bathing water at Burnham Jetty, using tracer surveys, hydrological modelling of the river system and extensive sampling. The study showed limited effects from these discharges, so no further investment is proposed. Elsewhere in Dorset and Somerset we support Litter Free Coast and Sea project officers to raise awareness of bathing water quality and promote behaviour change for local residents, tourists and businesses. Projects included 'Don't feed the locals' (a scheme to reduce seagull nuisance), two-minute beach cleans and various events and workshops.



2012-13 2013-14 2014-15 2015-16 2016-17

## 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

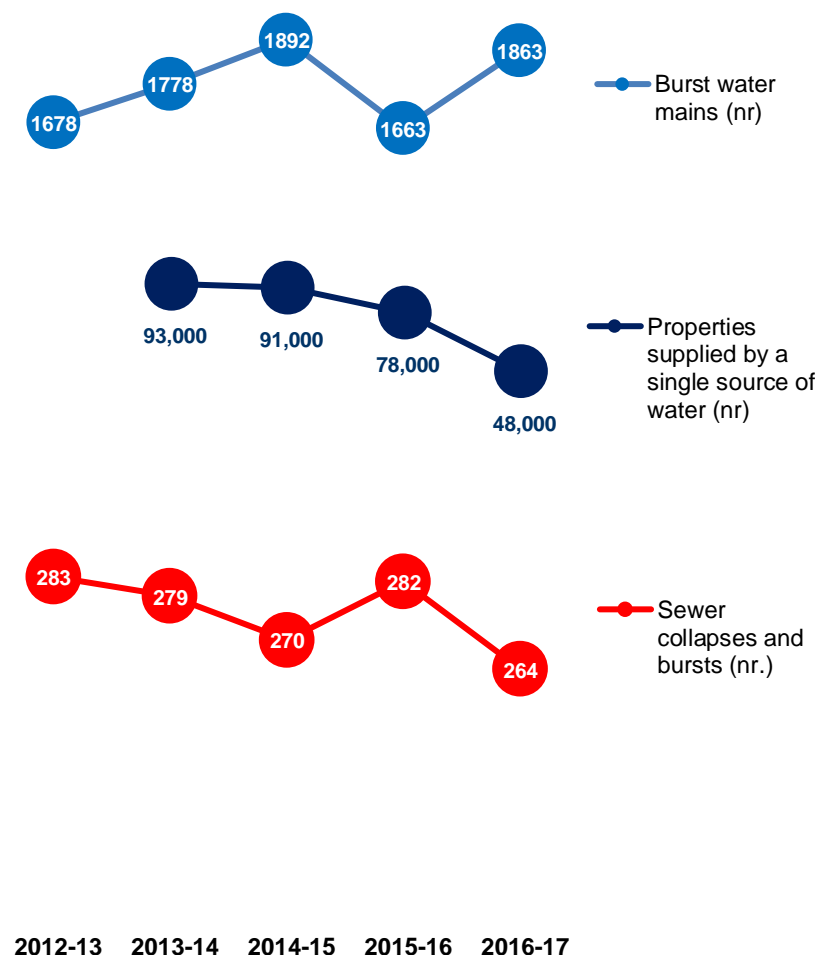
	2016-17	2019-20
• Restrictions on water use (hosepipe bans)	0	0
• Water mains bursts / year	1,863	<2,000
• Collapses/ bursts on sewerage network / 5 year rolling average	276*	<300
• Number of properties supplied by a single source of water	48,000	42,000
• Reduce planned, unplanned and third party water supply interruptions lasting >3 hours (average minutes / property / year)	12.8	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 2016-17 we have reduced the number of properties supplied by a single water source from 78,000 to 48,000, providing the added resilience of an alternative supply should they need it. This is thanks to our water supply grid, which will enable us to meet demand for water over the next 25 years without the need to develop new resources. We also reduced the average duration of supply interruptions over the entire year from 14.3 minutes to 12.9 minutes per household. This is a result of more proactive work by our teams, improved communications with customers and better ways of working. We also assessed the overall resilience of our business, assets and services, using an established method by which we can determine the status of our systems and processes, identify improvements, and manage progress. We intend to repeat the assessment annually.

**\*264 collapses / bursts on sewerage network in 2016-17 – 276 is the five year rolling average**





## 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

- Internal flooding incidents (number /10,000 properties)
- Risk score – flooding (due to hydraulic incapacity) compared to 2015
- Deliver the Bristol Frome Valley sewer growth scheme

**2016-17**                      **2019-20**

1.20                              1.66  
51,125                          50,651

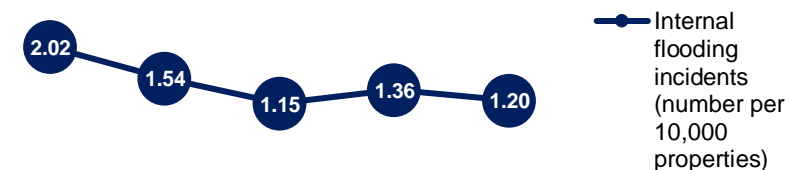
### Other company commitments

- Partnership schemes to which we contribute

4                                  At least 10

In 2016-17, we invested £9m to reduce this risk of inadequate capacity at 99 locations. The responsibility for flooding is often complex and we work with local authorities as they produce surface water management plans and sustainable strategies for flood management. We were consulted more than ever before, attending more than 100 liaison meetings. Together with Wiltshire Council and the Environment Agency we are trialling a shared resource to review planning applications in Wiltshire. We have contributed a further £50k towards the partnership scheme to reduce flooding at Cannington in Somerset and £25k towards a sustainable partnership scheme in Southmead, Bristol.

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 fell further, down to 1.20 incidents per 10,000 properties compared to our target of 1.72. We believe members of the public are being misled by advertising and labelling related to certain wet wipes and other products branded as ‘flushable’. Following a complaint to the Advertising Standards Authority, they decided that this issue did not sit within their area of enforcement, but the action was successful in raising public awareness.



2012-13    2013-14    2014-15    2015-16    2016-17

## Stakeholder engagement

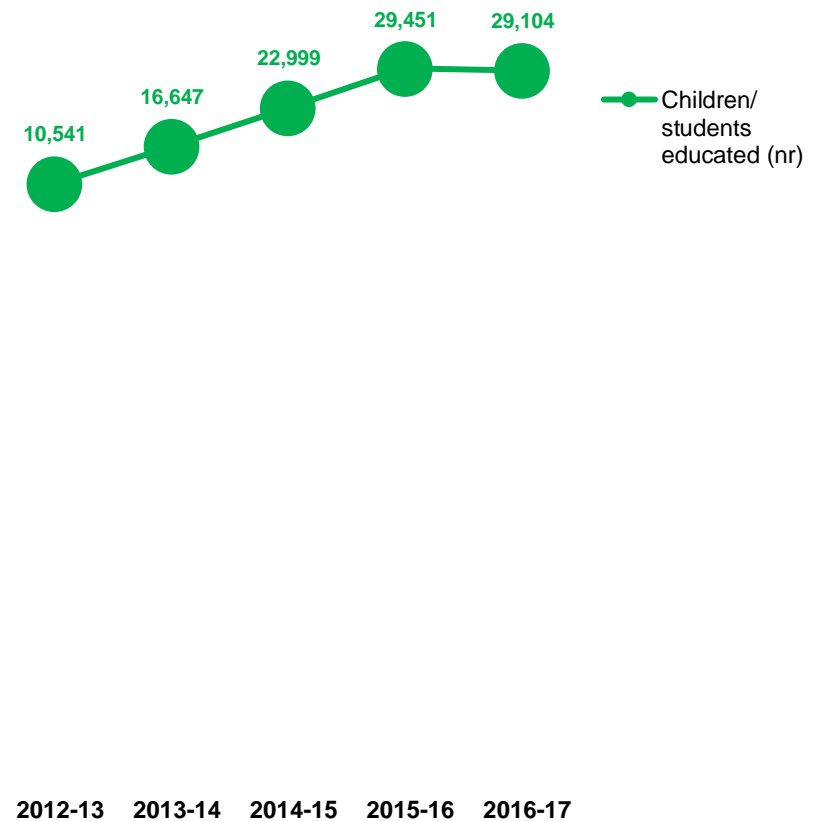
**Outcome:** Customers, local communities, economic interests, environmental organisations and other stakeholders in our region who are fully engaged in our activities.

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, have an active education programme for children/students and meet local people living near to our capital schemes. 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.

### 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 2016-17, as part of our engagement strategy *Your say, your future*, we conducted major research to inform our 25-year vision, to get customers' views on paying for changes in service levels and their opinions on our resilience. We introduced a tool that allows us to gather real-time feedback from customers, which enables continuous improvement of policies, processes, systems and training. We launched a Young People's Panel, involving sixth formers from schools and colleges in our region. As future customers, their views on which services matter most, our day-to-day work, resilience, intergenerational fairness and affordability are invaluable. We also sought the views of our 'Have Your Say' online customer panel on our 25-year vision, our customer magazine and experience of drought. After each survey we explain the results and what we are doing in response. Our education advisers visit schools across our region, covering all aspects of the water cycle with students of all ages and community groups and receive visitors to our eight education centres across our region. Our Watermark awards local environmental projects in our region. For example, last year one project we helped to support was building a pond as part of a school outside classroom initiative. We also supported environmental projects in locations near sections of our new water supply grid. Meanwhile, the entirety of our engagement work is overseen by our challenge group the Wessex Water Partnership, independently chaired by former water minister Dan Rogerson. Data in the graph is based on headcount numbers collected by education advisers.



## 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 2016-17**, our asset management framework continues to help us maintain a truly integrated approach to risk and investment decision making. Last year we were re-certified to the international standard for asset management, ISO55001:2014.

To improve our assets that may affect the Burnham Jetty bathing water we have constructed a 1,200m<sup>3</sup> underground storage tank at Sloway Lane pumping station near Highbridge, increased pumping capacity at Blake Gardens in Bridgwater to reduce overflow operation and proactively investigated misconnections of foul flows that could end up in the River Parrett in Bridgwater.

## 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.

### 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 2016-17**, we continue to work with regulators and others to promote longer term investment and more sustainable standards, solutions and technologies; 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. Our work to control pesticides, metaldehyde in particular, remains industry leading. The voluntary 'no use' approach that we have championed appears to be the only way to successfully avoid metaldehyde reaching rivers and reservoirs.

Our programme for AMP6 includes innovative projects such as the first catchment permitting trial in the UK, where we are piloting a catchment scale trial to limit phosphorus discharges from our assets in the Bristol Avon catchment. This is £25m cheaper than traditional solutions but delivers the same level of Water Framework Directive compliance. In the Poole Harbour catchment we have run the first reverse auctions to encourage farmers to plant cover crops that reduce the amount of harmful nutrients leaking into the water.

## 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 both 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 as appropriate to any social impact risk identified
- Continue our work with WaterAid and other relevant organisations

**In 2016-17**, we made our suppliers aware of their new obligations under the Modern Slavery Act. We reviewed and systematically assessed the level of social impact risk in each category of spend and also reviewed how a sample of key suppliers promote sustainability across their supply chains.

Staff and contractors raised £132,544 for WaterAid throughout 2016-17, 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 and 1,049 with access to sanitation as well as providing hygiene education. Three members of staff visited the area in September to understand WaterAid's work and the future technical support required throughout the project. Fundraising activities have included the WaterAid lottery, the Golf Day, the Bristol Water Vs Wessex Water football match, the Bath Half marathon, Give an hour and much more. Awareness raising has increased including a quarterly internal newsletter on recent volunteer activities and WaterAid campaigns as well as an opportunity in February for staff to encounter a virtual reality experience called 'aftershock'. Volunteers were given state of the art headsets to step inside the world of Krishna, a plumber in post-earthquake Nepal through a 7 minute immersive experience.

## 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.

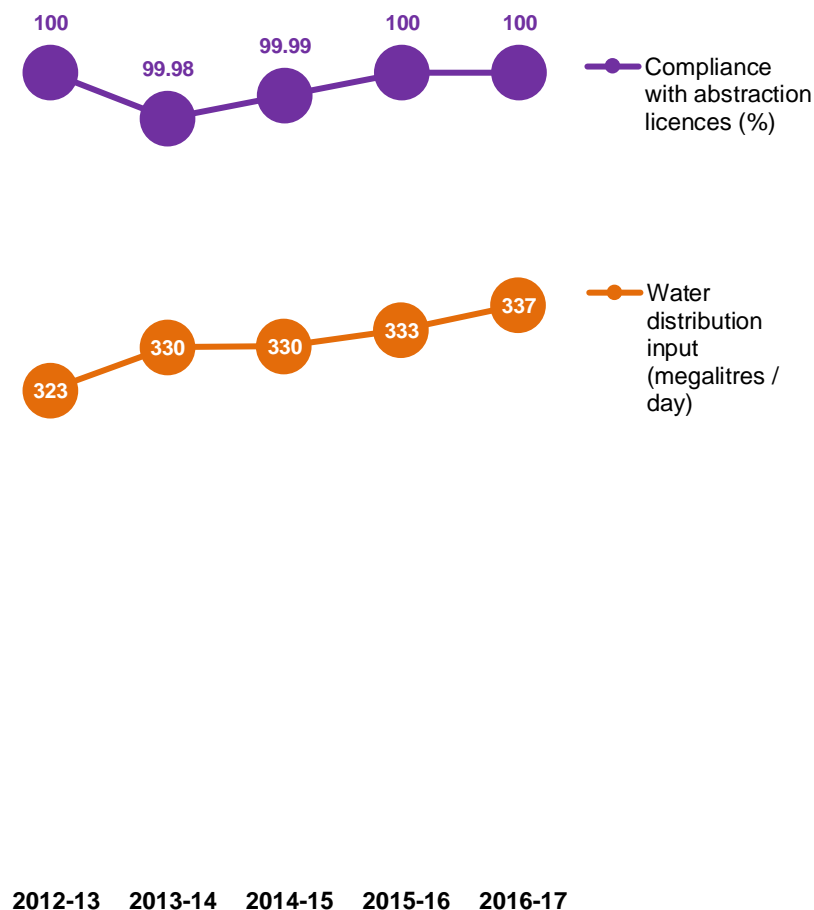
### Performance commitments

- Compliance with abstraction licences
- Abstractions at Mere exported (Ml/year)
- Distance of river with improved flow (km)

	2016-17	2019-20
Compliance with abstraction licences	100%	100%
Abstractions at Mere exported (Ml/year)	341	100
Distance of river with improved flow (km)	0	99

**2016-17** was a drier than usual year with 86% of average rainfall across the region. Resource management actions and rainfall in early 2017 helped improve the resource position and, although reservoirs refilled later in the season than we usually experience, by the end of the year storage stood at 91% of total capacity. Some groundwater levels and river flows were still below average at the end of the year.

Using our performance measure to limit abstraction at our Mere source has resulted in significant reductions in output. In 2016-17 we were able to minimise abstraction between July and November. However, we then had to return to regular abstraction levels to help manage the effects of the dry autumn on the wider resource situation and the need for other source outages as part of our grid investment programme. During the year we used 341Ml against a target of 100Ml and we anticipate this performance will improve later in the AMP once the supply grid is fully commissioned.





## 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 with regard to 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.

### Performance commitments

	2016-17	2019-20
• Install event duration monitoring on combined sewer overflows which present a risk to environment	50%	100%
• Improved water bodies through sewage treatment investment, to improve river water quality (nr)	8	70
• Be industry leading in Environment Agency's Environmental Performance Assessment	Industry Leading	Industry Leading

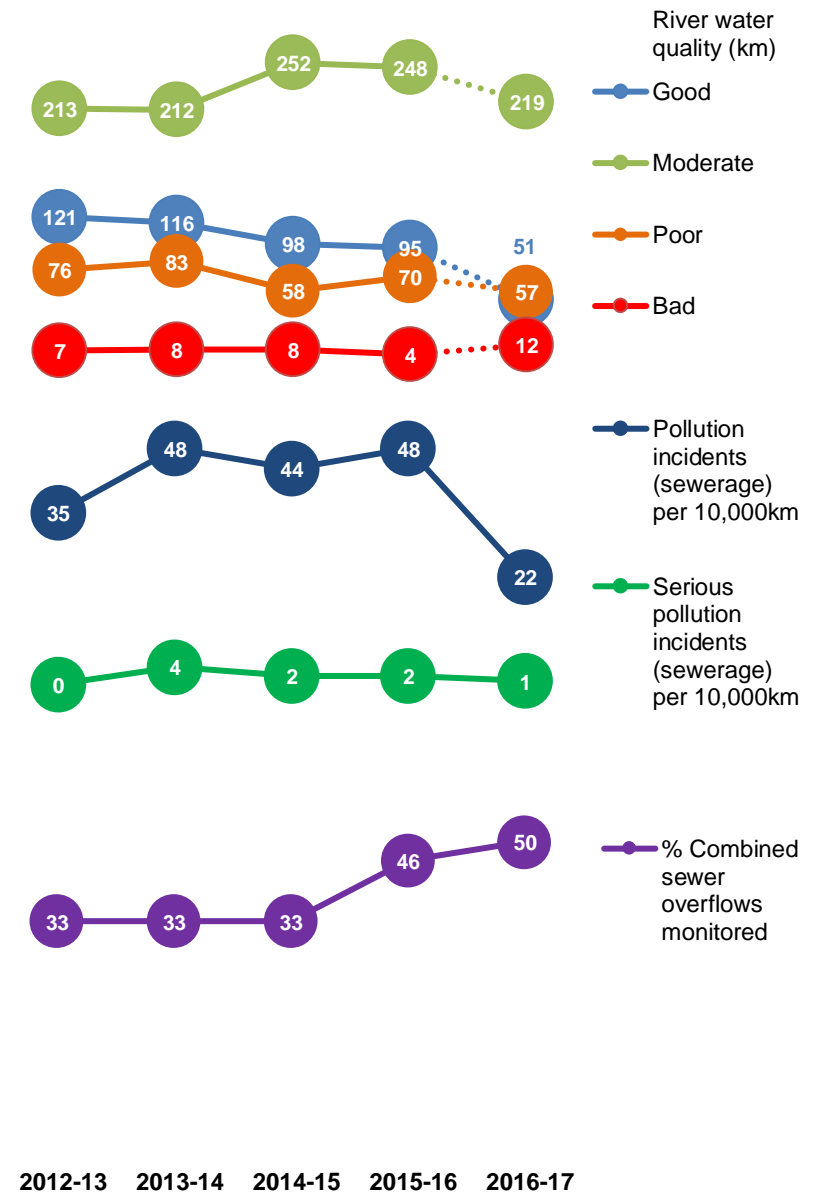
### Other company commitments

- 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 2016-17, we continue to develop better ways to tackle our most pressing environmental and social concerns. One of these, launched this year, is EnTrade – an innovative, market-based method for improving the water environment. EnTrade involves an online platform by which farmers bid for payment to carry out measures such as planting cover crops that reduce the amount of nitrogen that leaches from soil into groundwater. This approach is much more cost-effective than conventional engineered solutions and the first two auctions were comfortably over-subscribed.

Meanwhile, pollution incidents per 10,000km of sewers have decreased because the length of sewers has increased significantly following the adoption of private sewers, on top of our proactive approach to identifying and addressing the causes of incidents.

River water quality information on the facing page is from Environment Agency data.



## 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

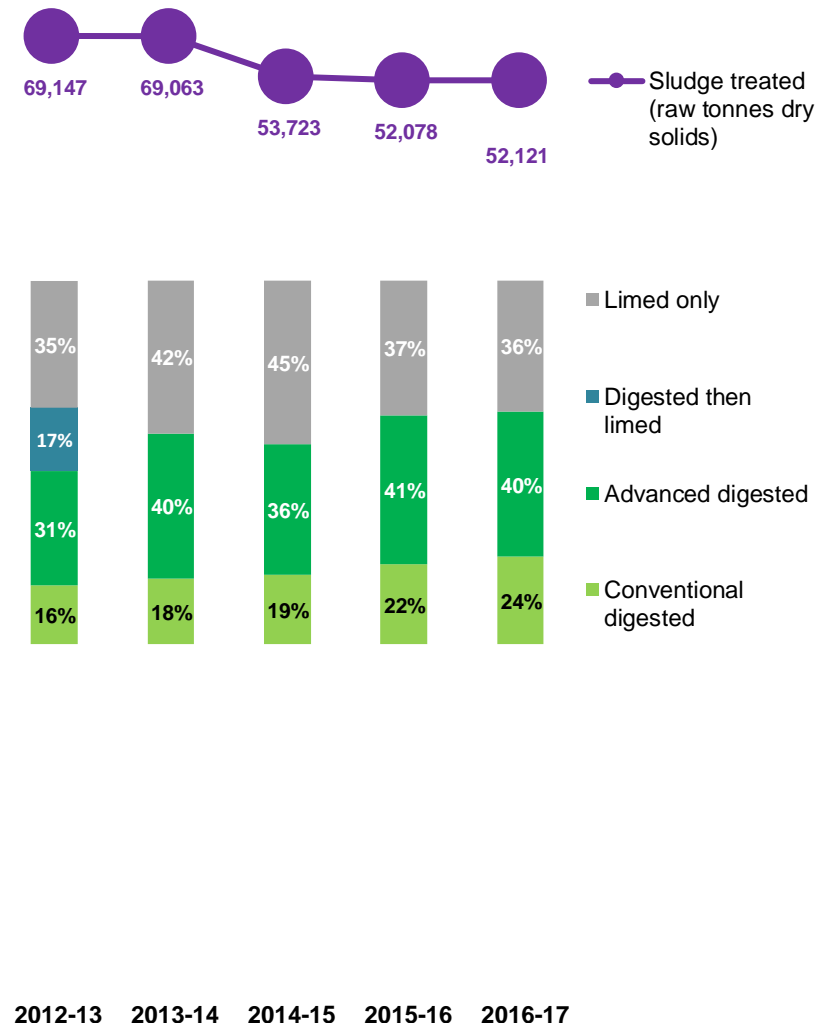
We aim to be responsible stewards of our landholding. This encompasses land under tenancy to farmers and other users, redundant sites that require ongoing management, and land that has redevelopment potential. We also have a strong interest in promoting responsible land use, especially where there are benefits for maintaining the integrity of drinking water sources and improving the quality of streams, rivers and coastal waters. Our reservoirs and lakes provide many opportunities for access and recreation in some of the most beautiful surroundings in the West Country, including fishing, walking, waterskiing, 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 facility at Tucking Mill, near Bath, which provides free fishing for anglers with disabilities. We also have specially designed wheelie boats (wheelchair accessible boats) at Sutton Bingham and Clatworthy reservoirs.

We have some wider influence of land use in our region. One example is through the reuse of sewage sludge - a valuable by-product of sewage treatment. It is treated to meet regulated standards by through anaerobic digestion or by adding lime, both of which help to reduce odours and remove pathogens. All the sludge is then reused on farmland in line with a code of practice agreed with other sectors with 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, including persistent organic compounds and microplastics, and are involved in joint research to understand potential impacts. Additionally, we are influencing land use through our catchment management work. Initially focused on protecting drinking water sources, it is extending to improve the wider water environment through partnerships that we have convened and through novel approaches such as EnTrade, an online trading system described in the previous page.

### Company commitments

Company commitments	2016-17	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 2016-17, under our Conservation, Access and Recreation project, ten new schemes have been initiated this year, including the refurbishment of the toilet block at Sutton Bingham reservoir, improving footpaths at Otterhead Lakes and Tucking Mill reservoir, a public bat walk at Backwell Lake and tree surveys and improvement works across a number of sites.



## 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). Our management of these vital habitats exceeded government targets; 99.5% of our SSSIs were assessed by Natural England as being in favourable or unfavourable but recovering status. 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

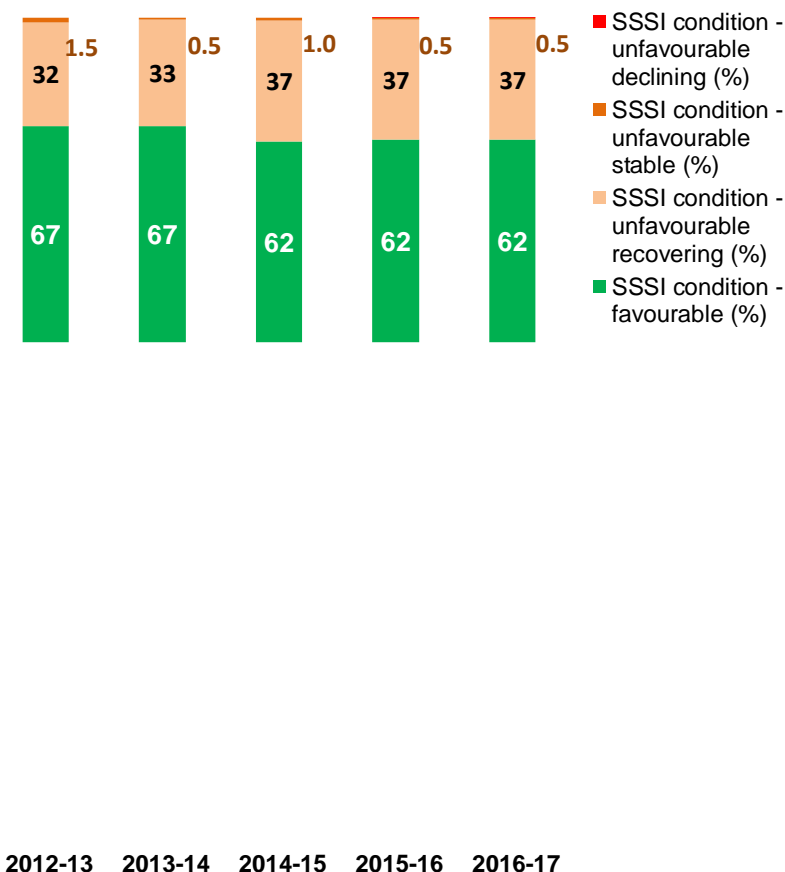
- |  | 2016-17 | 2019-20 |
|--|---------|---------|
| • Land assessed and managed appropriately for biodiversity | 73%     | 100%    |

### 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 2016-17**, most of our holdings in excess of 10 hectares have been surveyed, amounting to just over 70% of our land area.

We are currently tracking losses and gains of habitats resulting from capital scheme work, over the period 2015-17. We have started to develop a ‘Biodiversity Index’ to calculate biodiversity loss/gain in more detail for individual schemes and work out amounts of compensatory habitat. We continue to support wildlife projects funded by our Biodiversity Action Plan Partners Programme up to £80,000 per year and will be supporting four projects in our area between 2015 and 2020. Our small grants scheme, new for this phase of the programme, has supported three projects this year which have led to the creation of training materials, improving accuracy of riverfly monitoring, recruiting volunteers, constructing brushwood berms to improve river flow and exploring new ways to control the invasive Himalayan balsam.



## 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

	2016-17	2019-20
• Annual greenhouse gas emissions from operational services (kilotonnes CO <sub>2</sub> e/year)	123	119
• Electricity demand generated from our own renewable sources	29%	24%

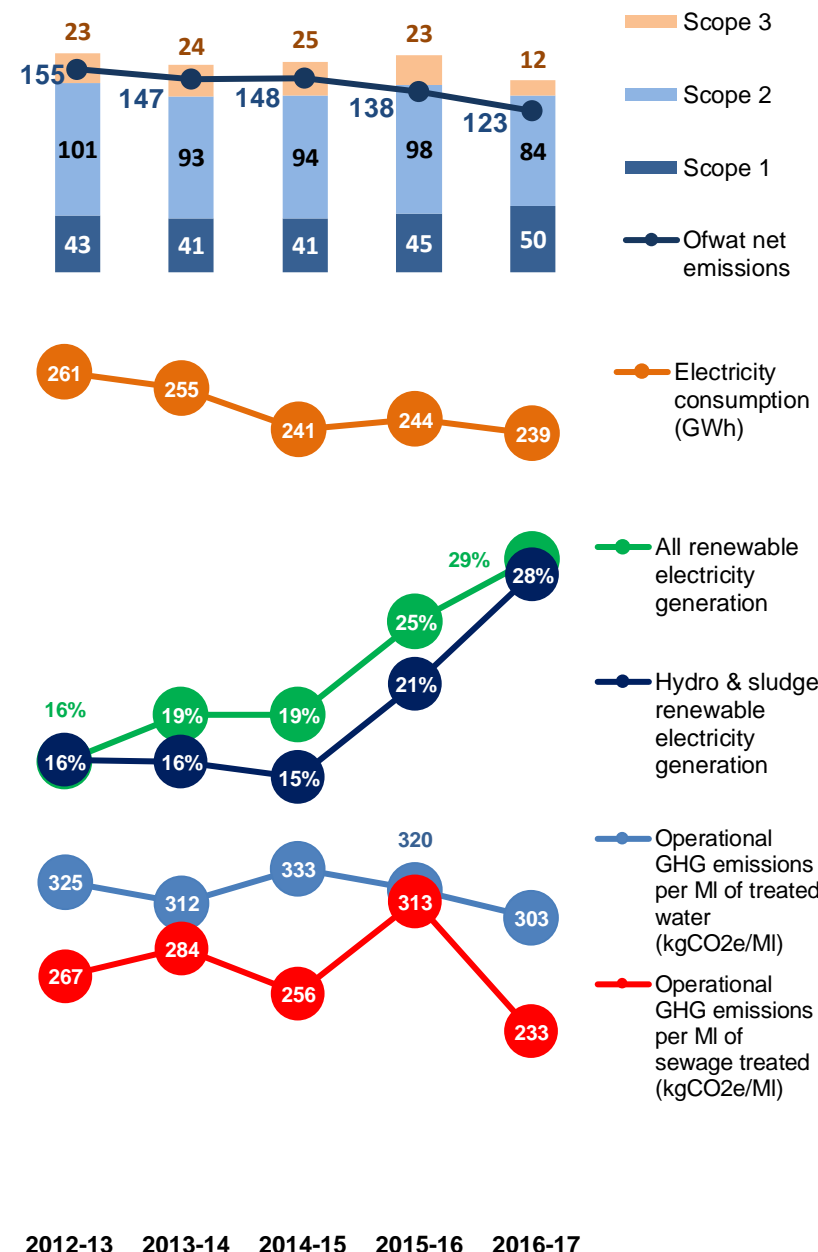
### Other company commitments

- 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 2016-17, our net greenhouse gas emissions fell to 123 kilotonnes carbon dioxide equivalent. This was our lowest since 1999-2000 and meant we met our performance commitment for the year. The reduction was the result of work to improve energy efficiency, increase and diversify renewable energy generation and the falling carbon dioxide intensity of UK grid electricity.

Our electricity use continues downwards from its peak in 2007-08, largely through concerted energy efficiency work which is delivering around four gigawatt hours of savings each year. We are also gaining financial benefits by using innovations such as Open Energi's dynamic demand system which enables instantaneous, temporary adjustment of the site's energy use to maintain a balance on the local electricity grid.

Following installation of advanced anaerobic digestion and associated electricity generation at Trowbridge sewage treatment works in 2015-16, we are making good progress with a scheme to improve digestion at Berry Hill, near Bournemouth. Meanwhile, our operating division GENeco has finalised an agreement with Unilever for a certified supply of bio-methane originating from anaerobic digesters at Bristol sewage treatment works.



# Resource efficiency

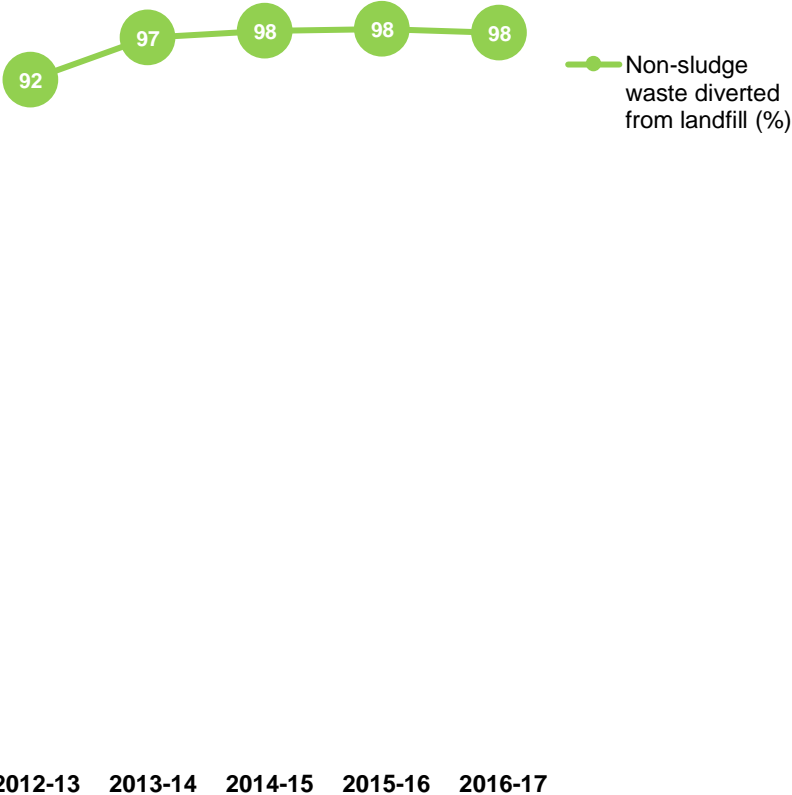
**Outcome:** Waste generation minimised, with zero waste to landfill; environmental sustainability embedded within our supply chain

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	2016-17	2019-20
• Non-sludge waste diverted from landfill	98%	100%
• Apply sustainability criteria across all supply chain frameworks and develop additional selection criteria as appropriate		

**In 2016-17**, we achieved zero waste to landfill on all of our managed office facilities. We also established a zero waste to landfill contract for all soil and stone waste from our construction work, and began the process of establishing this for all other wastes. We began a number of schemes on reuse and reduction of waste, including training for staff and schemes for reuse of construction materials, and continued an auditing programme across our supply chain on resource efficiency matters.

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 2016-17**, we've carried out regular trials of new products developed by other companies including:

- a hydrogen sulphide resistant product that deals with corrosion in pipes and tunnels
- an epoxy lining system that can be used for sewers more than 300mm in diameter
- a mobile unit that analyses the phosphate content of river water

The first part of our joint research programme with the University of Bath concluded in 2016-17. The main themes were low energy nutrient recovery from sewage, methods for increasing biogas from sewage sludge digesters, emerging pollutants in waste water, and improved techniques for understanding and comparing the whole life costs of water management. Meanwhile, the university's Water Innovation Research Centre, formed with our assistance in 2014-15, continues to develop. The last 12 months saw the formation of an advisory board that brings together individuals from industry, regulators and academia, plus the hosting of its first water science and engineering conference and the UK International Water Association's Young Water Professionals event.

One project, in the Bristol Avon catchment, involves a novel approach to regulating effluent discharges. We have agreed with the Environment Agency a mandatory reduction in the total tonnes of phosphorus from a group of 24 sites; each of these in turn has a discretionary stretch target. This is a more flexible approach than usual, which will allow optimisation of existing treatment and the use of novel processes or additional treatment that has not been over-sized.

## Safety and well-being

**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.

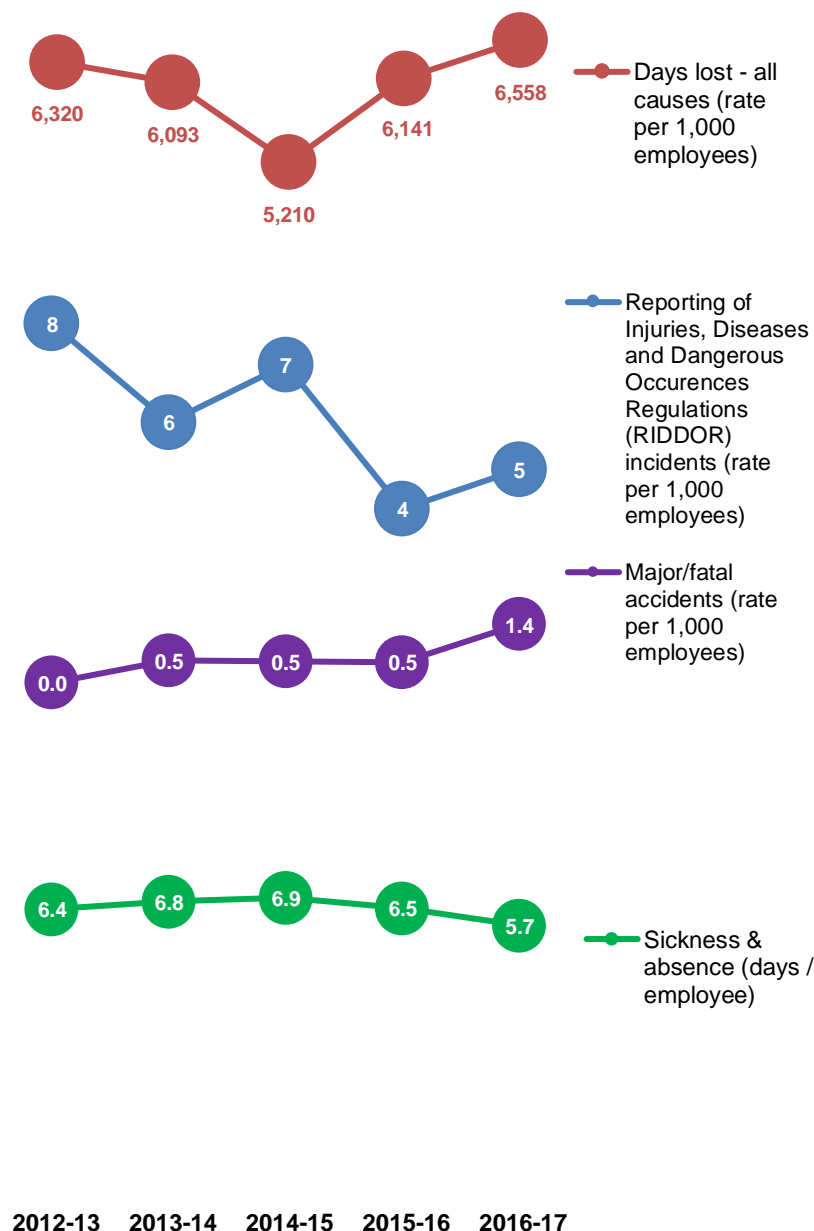
### Company commitments

- 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 2016, we continued to deliver our health, safety and welfare strategy and have encouraged staff to report all incidents, especially "near misses". Any report that raises significant concerns is subject to additional investigation and where appropriate the situation is rectified or procedures improved. Whilst there has been a 17% increase in reported incidents, there was a slight reduction in the number of lost time incidents, with the principal cause of lost time incidents being slips, trips and falls and manual handling. To improve awareness and safety at roadworks we have joined the charity SafeWise which has centres at Weymouth, Bournemouth and Devizes. The charity works with schools and young people to educate them about the risks in the home and on the roads, using full scale street scenes.

Our commitment to safety and performance has been recognised by two external safety bodies. Engineering and Construction were awarded the prestigious Sir George Earle trophy by RoSPA. This is the pinnacle of the RoSPA Awards scheme and is internationally recognised as the premier performance award for occupational health and safety. Operations were awarded a distinction in the British Safety Council's 2016 International Safety awards with a score of 59 out of 60 and were shortlisted for the Power and Utilities sector award that recognises outstanding performance.

Sickness and absence data on the facing page is collated from our human resources (HR) management system.



## Fairness, integration, diversity

**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

To attract and retain talented and engaged individuals, and successfully adapt to the changing expectations of our workforce and society around us, we must ensure that all our stakeholders see us as a fair, responsible and inclusive employer. We recognise that differences in personal characteristics bring richness to our work environment and believe that attracting, developing and retaining employees who reflect the diversity of our customers is essential to our continued success. We are committed to creating an inclusive workplace for all employees and those who work with the company as suppliers, contractors, consultants or customers.

### Company commitments

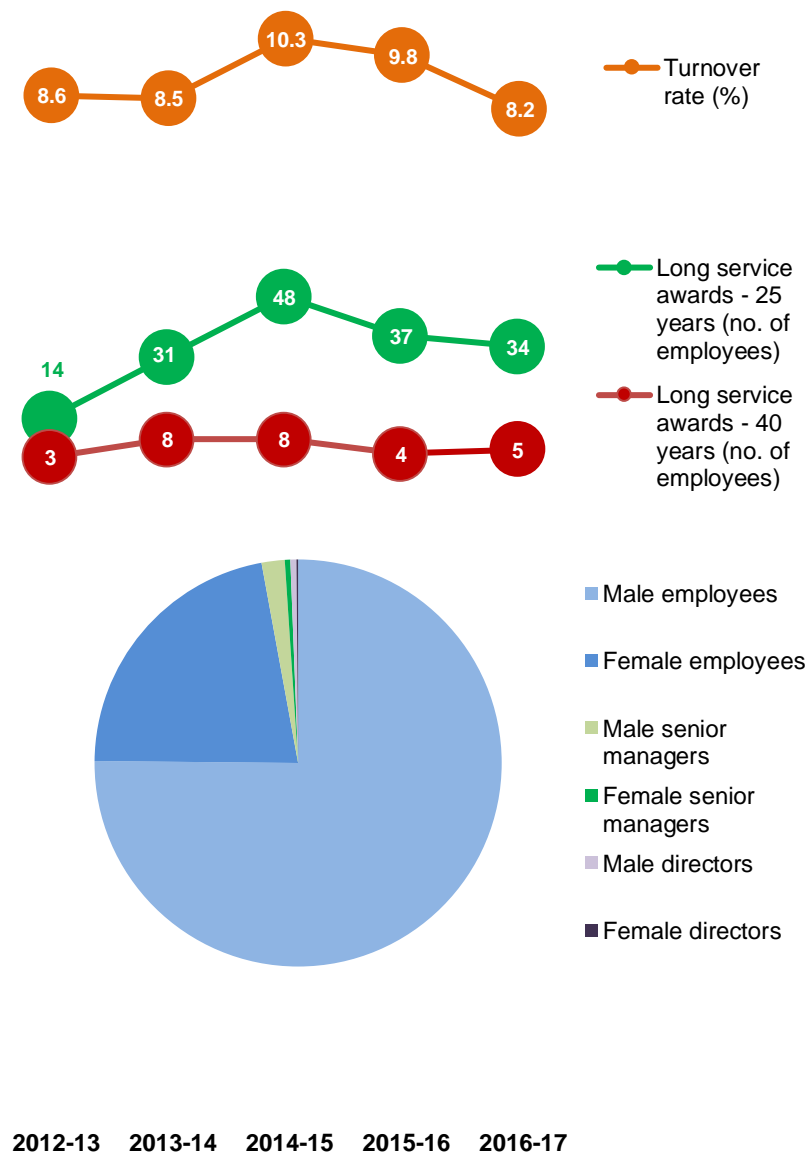
- Maintain employment law training for managers to keep up to date and compliant with employment law developments
- Identify and review rates of staff satisfaction regarding fair and equal treatment irrespective of protected characteristics
- Publish diversity scorecard externally and deliver diversity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

**In March 2017**, there were 2,290 employees, of whom 516 were women and 1,774 were men. There are 14 board directors of whom 11 are men and three are women, and 52 senior managers of whom 10 are women and 42 are men. During the last year, the number of women employees in our workforce increased to 22.54%, whilst in leadership roles the number of women managers increased by 2% to 17.7%.

We are proud that 12% of our technical apprentices this year are female. This exceeds the regional and national average in both engineering and construction sectors and is a reflection of the work we do to engage young women in our sector. We have again worked with our training providers to support local women in engineering events, and ensure our vacancies are promoted to all young people across our region.

We have developed and implemented a range of diversity initiatives including policies on action hearing loss, facilitated action learning sets for employees to support one another through facilitation and coaching. We became members of Women in Sustainability and have been an active member of the Business Disability Forum this year.

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



## Skills and knowledge

**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.

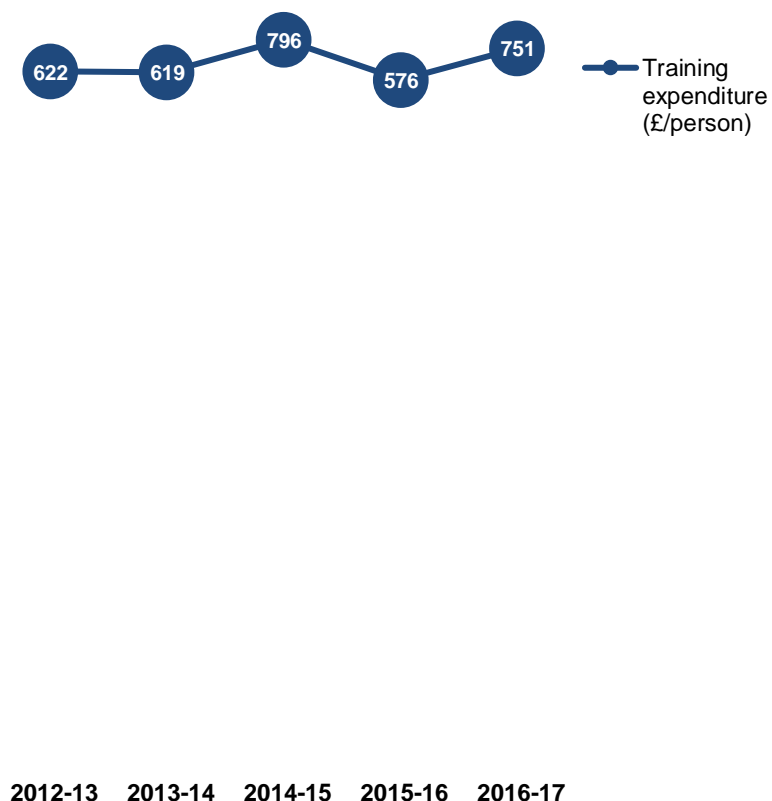
### Company commitments

- 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 2016-17, we have delivered more than 650 courses with an average of three days' development training per employee. We continue to work in partnership with a number of local colleges and universities to enhance our management development programmes. In partnership with the University of the West of England, we have delivered our accredited Institute of Leadership and Management Level 5 programme, which has been very successful. As part of our talent and succession planning for the future, we continued our two-day development centres for nominated high potential employees. This led to a number of rotation, secondment and mentoring opportunities, providing our people with identified career development opportunities.

We are seeing the benefits of running apprenticeship programmes and have an outstanding retention rate with our apprentices, keeping 90% of those who have started since 2010. Over the past year we have employed 43 new apprentices with another 42 posts expected to be filled in the next six months. Following the introduction of the government Apprenticeship Levy, we have taken the opportunity to create career development opportunities for existing staff. We have continued to engage local young people in apprenticeships and held our second apprenticeship open day in November 2016 to coincide with National Engineering Week. We welcomed around 300 visitors to learn more about our business and the career opportunities available to young people.

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



## Values and culture

**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 2016-17**, the staff survey results revealed that 86% of employees rated us a good company to work for while 77% rated us a great place to work. Our staff engagement was 80%, an increase of 3% from last year.

We recognise that we consistently score as the best for 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. To help us achieve this we have 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 help build a sustainable workforce for the future.

We have fully incorporated our aims and values into our development programmes, with the aim of reinforcing positive leadership behaviours across our whole business.

## Internal dialogue

**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 2016-17**, we launched Office 365 in the business which offers improved ways to work flexibly, manage documents and communicate with colleagues and other organisations. The suite of new systems include Office Online, OneDrive for Business, Sharepoint, Skype for Business and Yammer. We've also introduced new Microsoft Surface Hubs into meeting rooms across the business, providing a digital meeting system.

The intranet is a key source for communication and continues to provide up to date information to staff including the company aims and objectives. A review of our intranet system has been completed and work undertaken to launch a new site in June 2017. Employee feedback was utilised to develop a site that is more user-friendly and will help staff work more productively.



## Rewards and incentives

**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 2016-17**, we continue to promote flexible and remote working together with flexible retirement aimed at easing people into retirement gradually.

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 2016 there were 91 suggestions overall, of which 16 were rewarded and five 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 2016-17** 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.

We maintained our credit ratings with Moody's (A3) and Standard & Poor's (BBB+) and ended the year with equity representing 35% of the company's regulatory value.

## 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.

### This year

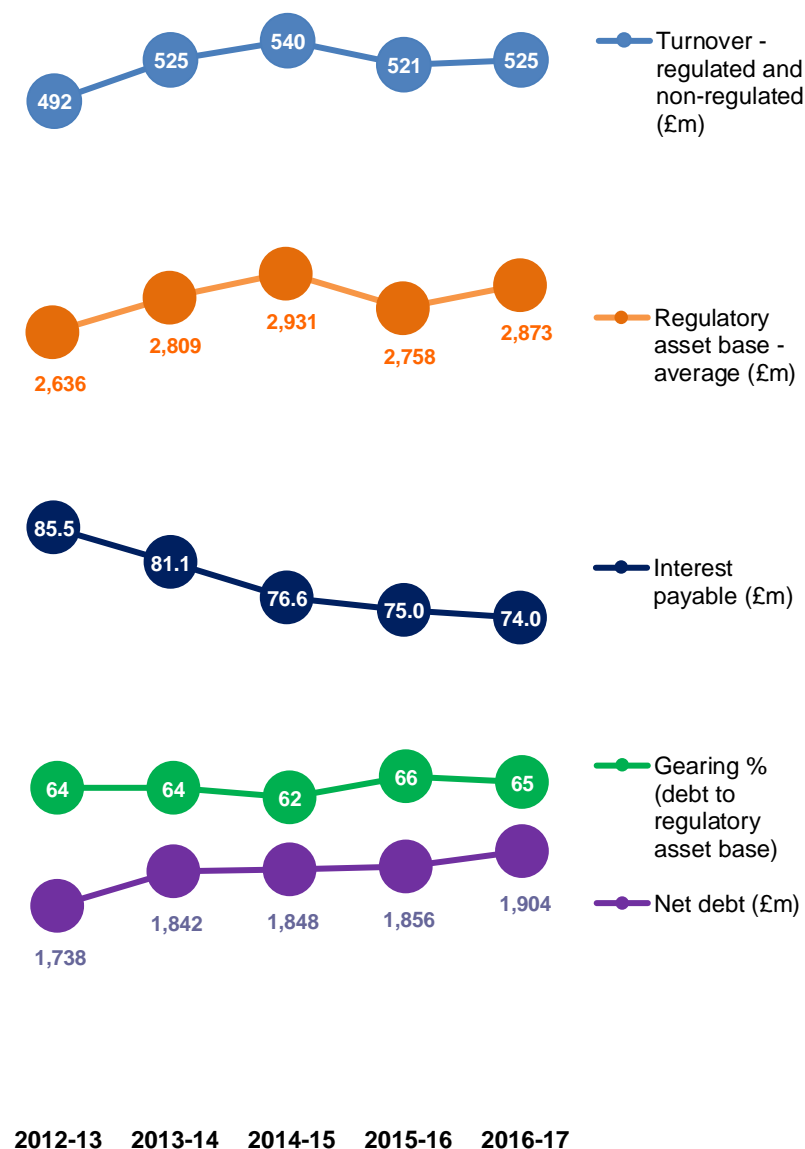
Turnover for 2016-17 increased from £520.8m to £525.3m and profit after tax was £152.4m (against £159.6m last year). Operating costs increased by £12.4m from £286.6m to £299.0m and we achieved all our key financial targets in the year.

Gearing, as measured by net debt to RCV, stands at 65%. On a pensions-adjusted basis, this figure rises slightly over 70%, which the Board still finds an acceptable level. 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 at all times. The Board remains committed to maintaining the Company's current level of credit ratings.

We continue to maintain a straightforward corporate structure, pay the expected level of corporation and other taxes and are classed by the Inland Revenue as low risk.

The Company continues to have a healthy 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 corporate risk register and summary report every six months to a 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. The Chief Executive submits an annual risk review paper to the Board for its review and agreement. This paper details the risk review process, identifies the current principal risks to the business and the mitigation measures in place. It also records the status of emergent risks that have been identified. 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 2016-17**, as part of Ofwat's company monitoring framework methodology we have published details of our information assurance processes, including in October 2016 an information assurance statement, and in May 2017 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 in a material particular. 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 new ways to respond to customer needs, improving our website and continuing to ensure that our accounting and asset data is as robust as it can be. 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 2016-17**, we updated our strategic direction vision document. This document describes our overall purpose, the context in which we operate and how we go about delivery for customers, wider society and the environment. It was last published in 2012. Along with our sustainability vision it 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.

The vision document was issued following full consideration by the Wessex Water services board, Wessex Water Partnership and the Corporate Responsibility Committee.

## 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.

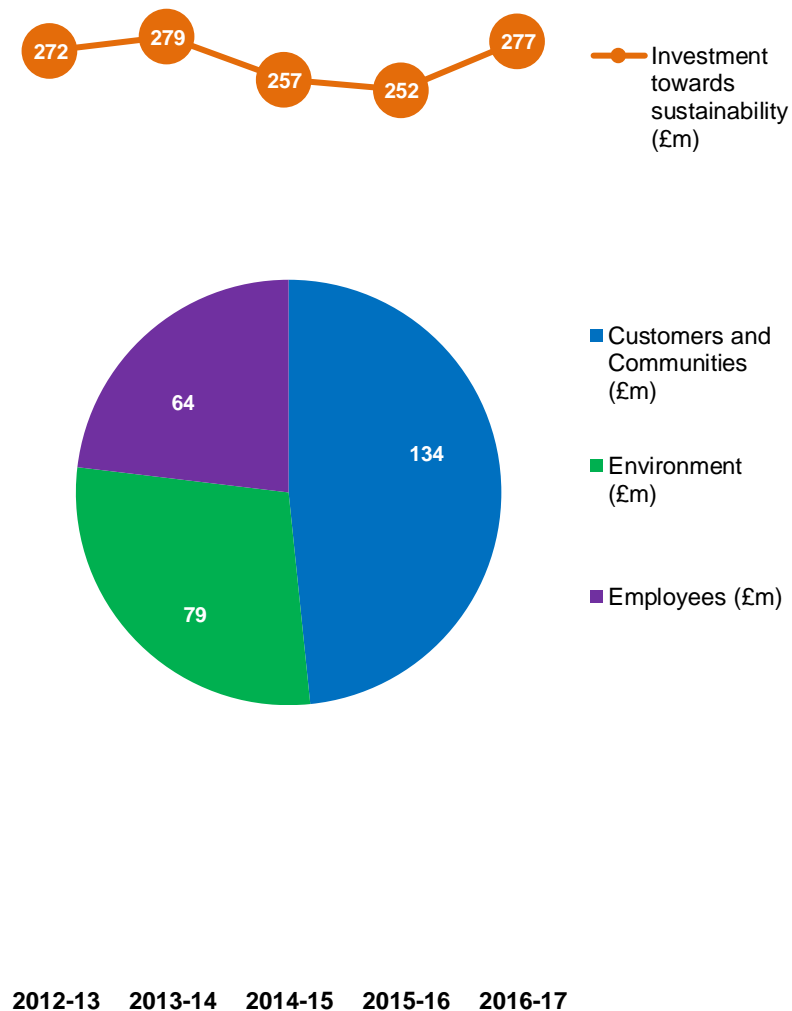
Examples of discretionary expenditure include our education service, contributions to community projects in our region, grants to wildlife organisations and training programmes for employees.

### 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 2016-17**, we delivered gross capital expenditure for the second year of the AMP6 programme of £214.0m, which is £13.2m higher than the £200.8m delivered last year. This profile is typical of a five-year capital programme where there is lower expenditure in the first year of the new AMP period as the new programme of work is commissioned.

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



2012-13 2013-14 2014-15 2015-16 2016-17

## 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, eg, personal vehicles for business travel, outsourced fuel use and transport, plus emissions related to grid electricity transmission and distribution.

kilotonnes CO <sub>2</sub> e	Scope 1	Scope 2	Scope 3	Total	2015-16
Gas, diesel and other fuels	11	-	3	14	11
Grid electricity	-	84	8	92	106
Transport	11	-	1	12	11
Process emissions	29	-	10*	39	38
Exported renewable (netted off)	-19	-4	-	-23	-18
<b>Total (net emissions)</b>	<b>31</b>	<b>80</b>	<b>22</b>	<b>133</b>	<b>148</b>

\*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 2016-17 as reported to Ofwat were 123 kilotonnes CO<sub>2</sub> equivalent – a fall of 15 kilotonnes 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 8ktCO<sub>2</sub> 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**

Our agreed investment programme for 2010-15 included a range of schemes to benefit society and the environment. These were largely driven by European regulation as implemented by Defra, the Environment Agency and Natural England.

The single largest scheme, continuing into the 2015-20 investment period, is the integrated supply grid which will involve investment of more than £200m to address simultaneously a number of customer service and environmental concerns. In December 2014, Ofwat published its final determination on our investment during 2015-20. The programme 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/](http://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 £12.4m for these in 2016-17.

### **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 £7.9m 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 this year we launched an online system called EnTrade. As detailed on page 14, this UK-first initiative is based on a reverse auction, by which farmers bid for payment for farming practices – such as planting specific cover crops – that will reduce nutrient leaching from topsoil.

## Sustainability accounting: sustainability spend

	2016-17 £m	2015-16 £m
<b>CUSTOMERS AND COMMUNITIES</b>		
Mandatory <i>Example: water supply improvements</i>	133	134
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
<b>ENVIRONMENT</b>		
Mandatory <i>Example: sewage treatment improvements to benefit the water environment</i>	79	65
Discretionary		
a) -	0	0
b) <i>Example: trials of options for more sustainable water resources</i>	<1	1
c) <i>Example: conservations grants to wildlife organisations</i>	<1	<1
<b>EMPLOYEES</b>		
Mandatory <i>Example: basic pay and conditions including pension</i>	53	43
Discretionary		
a) <i>Example: enhanced overtime payments</i>	4	3
b) <i>Example: staff training</i>	7	5
c) <i>Example: enhanced maternity leave</i>	0	0
<b>TOTALS</b>		
Customers and communities	134	136
Environment	79	66
Employees	64	50

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