Water – a new direction

Wessex Water’s plan for services and bills up to 2020

June 2014

www.wessexwater.co.uk
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Board introduction

Wessex Water was privatised 25 years ago and is one of the industry’s success stories.

We have:

• transformed customer services: topping Ofwat’s league tables, registering 96% customer satisfaction and having the lowest level of complaints of any water and sewerage company
• made major improvements to the water environment: consistently delivering around 100% compliance with environmental standards and improving river flows, with the lowest level of pollution incidents in the country and no hosepipe bans since 1976
• greatly increased efficiency: regularly topping the efficiency league tables
• delivered £5bn of investment in our region: entirely without taxpayer funding and without missing a single regulatory output.

But we know that the cost to customers has been considerable and that real increases in bills cannot go on forever.

In December 2013 we published a plan for the period 2015-20 and beyond that aimed to show leadership by moving to a new business model that is genuinely sustainable for customers, the environment, employees and investors. This model embraces the whole water environment and delivers outcomes more effectively and at lower cost to consumers. Our plan cut investment by £134m compared to traditional solutions and these savings were passed straight on to customers, reducing their bills by 3%.

We have now refined our plan in the light of feedback from our customers and other stakeholders and are reducing bills further while strengthening our commitment to deliver the outcomes that we promised.

Wessex Water has a strong record of industry leadership and of delivering new approaches. We have consistently outperformed the regulatory contract and shared the benefits with customers; we were the first to separate retail services and our biosolids business, the first to develop catchment management solutions in partnership with other stakeholders and the first to introduce green accounts and social tariffs.

We are confident that we can continue to deliver change in the future. We recognise, however, that we cannot rely solely on our past successes. Our new direction needs a new culture and skills and an evolving organisation. In preparation for the challenges of the next period we have created separate companies with clear leadership and responsibilities. We have introduced strong leadership behaviours and talent progression in our business. We are placing a greater emphasis on retail skills and the ability not only to build assets, but also to negotiate with other stakeholders who will be central to delivering our aspirations. And we are evolving from an asset business to a service business.

Wherever possible we will find innovative ways of delivering improvements and phasing investment to reflect customers’ willingness and ability to pay. The current economic climate is one in which holding down bills must be a priority.

We feel strongly that our proposals must be seen as fair by all our stakeholders. This plan continues to focus on reducing the burden for all customers, increasing support for those who have real difficulty in paying while at the same time meeting all regulatory obligations and continuing to raise service standards. It significantly reduces returns to our shareholder and approaches the limit of a prudently financeable plan, particularly given our need to continue raising the financing for our investment programme.

Wessex Water operates to the highest standards of corporate governance and, as a privately owned company, our board meetings provide for the full engagement of shareholder, independent directors and executives. All decisions affecting the business are taken at these meetings, and the board has been fully involved in all key aspects of the development of the plan. Our governance is not static and we have made recent changes to comply with the UK Code and in response to Ofwat’s principles, including separating the previously combined role of chairman and chief executive.

The coming years will bring new challenges from the economy, further environmental regulation, the need to reduce our carbon footprint, climate change and global resource pressures.

We owe it to our customers to respond to these challenges in ways they support and have fully involved them in the development of this plan. Our plan proposes solutions that meet the needs of both customers and the environment over the next 25 years. The board must ensure the long-term success of the company, and this means our plans have to be sustainable in the broadest sense. In relation to customers, long-term success means our proposals must be seen by them as fair and reasonable – so this plan is focused on a sustainable deal for customers at a time of economic hardship.

We are now presenting a plan that:

• cuts bills by 5% in real terms and provides the most extensive range of affordability assistance in the UK
• increases investment on the outcomes customers value most and on our statutory obligations, meeting or exceeding these in increasingly innovative ways
• includes a comprehensive package of rewards and penalties to incentivise delivery
• is underpinned by a very strong track record of delivery and of sharing past gains and a commitment to promoting new skills and a new culture to match the ambition of our new direction.

The board has already demonstrated that we are being proactive in enacting our plans – instead of taking up the previously agreed real terms increase in bills in 2014, we brought forward the real reduction in bills that we would otherwise have proposed for 2015.

Our plan provides an innovative and genuinely sustainable business model and it has the unanimous support of the full board.
Introduction

We are a long-term business committed to providing high quality, sustainable water and environmental services at a price our customers can afford.

Since 1989 we have transformed both customer services and our impact on the environment, consistently performing at the forefront of the industry – we have a track record second to none.

The efficiencies we have delivered mean bills are a third lower than they otherwise would have been and we have the lowest level of complaints of any water and sewerage company, with numbers continuing to fall.

Now we aim to build on that record by developing a new business model:

- one that moves us from being an asset-driven business to a true service business
- one that allows us to grow our relationship with customers, keep their bills down and engage and communicate with them in new ways
- one that adopts a catchment management approach much more widely, working with farmers and other local stakeholders to improve water quality and supply at source
- and one that develops new markets such as water trading, multi-lay and waste-to-energy; markets in which Wessex Water is already active.

Our plan delivers the higher levels of service billpayers value, alongside continued improvements in environmental outcomes. It has been developed after consultation with more than 24,000 customers and 90 stakeholders, including national customer champions such as Citizens Advice and Which?. It meets or exceeds all our statutory obligations while keeping investment as low as possible through innovation. It recognises current economic realities, as well as the change to the concept of totex. And it has been challenged and informed by the independent customer scrutiny group, making a real difference to our customer and stakeholder engagement and to the overall balance of the plan.
**Benefits for customers**

- We will ensure bills fall in real terms by more than 5% from now until the end of AMP6 – this is in addition to foregoing the real bill rise previously agreed for 2014-15, meaning bills also fell in real terms on 1 April 2014, and will do so every year thereafter.
- Our water supply bills will fall faster than our sewerage bills because we recognise that our water bills are higher than elsewhere – we have a very rural customer base with three times as many assets per customer as the average company so our costs per customer, although efficient, are higher.
- We will continue to provide the highest levels of satisfaction and service in the industry.
- We will extend tap – the most extensive range of affordability measures in the UK.
- We will give customers more choice in the way they deal with us and further extend our interactive digital communications.
- We will complete our water grid and provide greater supply security together with the opportunity to trade water.
- We will improve the resilience of our services, halving the number of properties fed from one source and solving flooding problems.
- We will reduce leakage further and make a commitment to fix reported leaks within a day.
- We will replace customers’ leaky and lead pipes free of charge.
- We will maintain and operate pumping stations previously owned by customers.
- We will provide more on-site services and tariff choices for business customers.
- We have ensured our performance commitments are backed up with meaningful incentive mechanisms.
- We will introduce new customer representation with a customer advisory panel independently nominated by major customer organisations such as Consumer Futures, Which?, CCWater and Advice UK that will elect its own chair and hold us to account in delivering the outcomes set out in this plan.

**Benefits for the environment**

- We will reduce water abstracted from sources affecting rivers with low flows by 25ML/day.
- We will remove more than 250 tonnes of unwanted nutrients from rivers in our region.
- We will aim to have no significant pollution incidents from our assets.
- We will extend our innovative catchment services to achieve environmental improvements in a less costly and more effective way.
- We will introduce a new independently chaired catchment panel that will assure delivery of these innovative approaches and assess our delivery of environmental outcomes.

**Impact on our investors**

- The returns to our shareholder will be reduced, with the annual dividend projected to halve.
- The board has adopted a reduced vanilla WACC for wholesale activities of 3.7% for AMP6 coupled with additional returns on our more innovative investments, reflecting the lower cost but greater risks of these approaches.
- Retail margins are set at 1.0% for households and 2.5% for non-households.
- Taken together, we believe the above is the minimum level to remain sufficiently attractive to investors and the plan approaches the limit of prudent financeability.
- Our shareholder will be accepting greater risks in the implementation of this challenging plan – this is only possible because we enter the next AMP period with a strong balance sheet with relatively low gearing for the sector.
How we will deliver our plan

Achieving our ambition of reducing bills while improving service and the environment will not be easy and is not without additional risk.

We approach the challenge knowing that we have consistently delivered new and innovative approaches in the past. For example, we were the first water company to introduce retail separation and social tariffs, the first to have a customer director and customer charter, the first to develop green accounts and a biodiversity action plan, the first to separate our biosolids business and promote catchment management and the first to introduce real-time monitoring of bathing water quality.

But we know that we must continue to change to deliver a new direction for the future.

In preparation for the challenges ahead we have created separate companies with clear leadership and responsibilities, including companies focusing on environmental services and on non-household retail as we approach market opening. All are headed by senior executives with relevant skills and experience, and we have brought in new skills where needed, for example on business retail.

As we look to 2020 and beyond we expect to be a service business rather than an asset business. We will have a new relationship with our customers – one based on engagement and choice in the services that customers use and in the way that they deal with us. We will see significant developments in markets that are in their infancy today, such as waste-to-energy, retail services and the trading of resources such as water and nutrients. And catchment-based approaches will become the solution of choice for environmental and quality issues.

Our plan also keeps bills as low as possible by:
- incorporating tough productivity improvement targets
- proposing innovative catchment services to achieve environmental improvements in a less costly way, supported by improved behavioural incentives, eg, to encourage customers to save water
- programming improvements over a longer timescale, completing them post 2020 in some cases so we invest based on good scientific evidence and deliver greater value
- further targeting our asset maintenance plans by finding more efficient ways to maintain services and by monitoring our network in real-time.

Since publishing our plan in December we have reviewed again the costs of delivering the proposed outcomes to ensure they are as efficient as possible.

This has been a continual process over the past 18 months. Our initial plans in 2012 were to hold bills in line with inflation to 2020. Since then, in response to challenge from customers and other stakeholders, including Ofwat, we have made further reductions in our plan and foregone the real-terms price rise in April 2014 that had previously been agreed with the regulator.

Since starting work on this business plan, bills have been cut by 7% and our proposed wholesale totex has reduced from over £2bn to £1,849m.

The business model developed at privatisation has been effective over the past 25 years and has delivered significant benefits for customers and the environment – and Wessex Water has been at the forefront of that delivery. Now is the time for a step change to a new business model.

The industry needs a new sustainable direction and Wessex Water offers exactly that with this business plan.
Part 1 –
The context and our approach

1.1 The last 25 years
1.2 What do customers and other stakeholders want?
1.3 External context
1.4 The next 25 years
1.1 The last 25 years

We have always been clear about our aims – the provision of high quality, sustainable water and environmental services, while keeping bills affordable.

Over the last 25 years we have performed well against these and have consistently achieved the highest levels of performance in the water industry, with:

• the best quality of service and lowest number of customer complaints
• the lowest levels of service failures
• no restrictions on water use since 1976
• industry leading environmental performance.

We have been a leading water company for efficiency over many years and this in turn has benefited both our customers and our investors.

We have delivered a £5bn investment programme which has:

• improved our assets and resilience
• ensured we meet tough new environmental and drinking water quality standards
• reduced service failures, including a 90% reduction in properties at risk of sewage flooding
• reduced customer contacts and transformed customer services.

We have been a responsible and innovative business noted for breaking new ground in a number of directions. Examples include:

• social tariffs
• tap – our affordability assistance programme
• warm voice telephone answering
• separating our retail and biosolids businesses
• introducing catchment management
• setting up Coastwatch, our bathing water quality alert system
• installing real-time network monitoring in the Weymouth area to ensure uninterrupted service throughout the 2012 Olympics
• and, most recently, developing an extensive innovation and research programme in partnership with Bath University.

We have a long history of sharing outperformance through our customer benefits and customer dividend programme.

Our delivery has also been facilitated by the consistency and stability in the sector, which has protected customers and ensured cheaper access to debt.
### Wessex Water's performance

<table>
<thead>
<tr>
<th></th>
<th>2000-05</th>
<th>2005-10</th>
<th>2010-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer service score OPA/SIM (of 10 WaSCs)</td>
<td>4th</td>
<td>1st</td>
<td>1st</td>
</tr>
<tr>
<td>% of customers satisfied/very satisfied</td>
<td>93%</td>
<td>95%</td>
<td>98%</td>
</tr>
<tr>
<td>Operating expenditure efficiency</td>
<td>Band A</td>
<td>Band A</td>
<td>Band A†</td>
</tr>
<tr>
<td>Capital expenditure efficiency</td>
<td>Leading</td>
<td>Upper quartile</td>
<td>Upper quartile†</td>
</tr>
<tr>
<td>% of regulatory outputs met</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Drinking water quality performance score</td>
<td>99.9%</td>
<td>&gt;99.9%</td>
<td>99.98%</td>
</tr>
<tr>
<td>Leakage (Ml/day)</td>
<td>77</td>
<td>73</td>
<td>69</td>
</tr>
<tr>
<td>Properties experiencing supply restrictions</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Properties at risk of internal flooding more than once in 10 year</td>
<td>0.09%</td>
<td>0.03%</td>
<td>0.01%</td>
</tr>
<tr>
<td>Compliant sewage treatment works</td>
<td>97.1%</td>
<td>98.4%</td>
<td>99.2%</td>
</tr>
<tr>
<td>Annual pollution incidents (category 1 and 2)</td>
<td>8</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Energy from renewable sources</td>
<td>6%</td>
<td>11%</td>
<td>18%</td>
</tr>
</tbody>
</table>

† Based on internal assessment of industry data.

A strong history of delivering on our past commitments, coupled with our leading performance on service and efficiency, places us in a unique position as we set out our goals for the period ahead.

Customers and regulators can have confidence that we will deliver our proposed plan for AMP6 and do this effectively and efficiently.
1.2 What do customers and other stakeholders want?

The day to day interactions we have with our customers and our regular customer research and stakeholder engagement programme have been critically important to this plan.

But we have gone beyond this in our consultation, working alongside our customers and stakeholders at all times as we moved towards a new business model that brings benefits for all parties. In particular, the independent customer scrutiny group has been a valuable source of guidance and challenge in compiling our plan. The composition and role of this group is set out in the case study on pages 12 and 13.

This journey began in 2010 with customer feedback from day to day service, accelerating through 2011 and into 2012 when we asked customers and other stakeholders about their long-term expectations of us and their expectations for bills and service.

We used this to develop our strategic vision for the period to 2040, testing it with customers to ensure we had understood their long-term priorities. We developed nine key work areas or outcomes, deliberately focused on the areas of our business that customers and other stakeholders saw as priorities for the future.

In late 2012 and early 2013 we carried out detailed research into customers’ priorities for service and price and developed a draft plan for the period to 2020 setting out how we would measure our performance against delivering the nine outcomes, together with targets for achievement against them up to 2020.

At each stage we have tested a range of scenarios with customers, both for bills and for service, to ensure they can make an informed choice from a credible range of options.

The nine key outcomes span customer, environmental and wider social issues and form a package that our plan aims to deliver in an affordable and sustainable way in partnership with our regulators and other stakeholders.

Our plan has been developed with the help of more than 24,000 customers and 90 stakeholders, including:

• focus groups with households, businesses, prospective customers, teenagers and our four liaison panels
• face-to-face and telephone interviews with households, businesses and stakeholders
• online customer panels
• in-depth interviews with local and national stakeholders and consumer representatives, including organisations like Citizens Advice and Which?
• responses to our customer magazine and website articles
• image tracking research
• routine customer feedback including feedback calls, satisfaction surveys and proactive call backs.

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**OUR NINE OUTCOMES**

- Affordable bills
- Excellent service for customers
- Reduced leakage
- Highest quality drinking water
- Improved bathing waters
- Rivers, lakes and estuaries protected
- Sewage flooding minimised
- Resilient services
- Reduced carbon footprint
Customer and stakeholder engagement

- 2010
  - Customer feedback from day to day service and regular tracking research

- 2011
  - Customer feedback from day to day service and regular tracking research

- 2012
  - Customer feedback from day to day service and regular tracking research
  - Consumer longer term priorities
  - Image tracking
  - Testing the strategic direction statement
  - Customer preferences for service and price

- 2013
  - Customer feedback from day to day service and regular tracking research
  - Magazine poll
  - Domestic & business online survey
  - Testing the business plan
  - Website survey

- 2014
  - Customer feedback from day to day service and regular tracking research
  - Image tracking
**Bills and improvements in service**

The current economic situation weighs heavily on customers’ household and commercial budgets.

Their expectations about how their incomes will change in the future have shifted downward. This has led customers to give a clear message now in favour of keeping bills down, providing that this doesn't reduce service levels. Affordability is the top priority for many.

Customers expect that we will do things in cleverer, cheaper ways and are more interested in ways that we can help them reduce their own bills, through water efficiency and water meters.

Tackling leakage also ranks highly. The taste and hardness of tap water is important but only a minority see a need for improvement. Conversely, keeping the risk of sewage flooding to a minimum is seen as very important even though few customers are directly affected.

Business customers are looking for a closer relationship with their water company and a wider range of added value or tailor made services to suit their needs.

Overall there is a clear preference for steady changes in bills over the five-year period and 82% preferred this option to a one-off cut followed by increases or the option for bills to move each year to match more closely the actual costs of supply.

We have used our research work on willingness to pay, conducted by Ipsos Mori and analysed by NERA, to help us make the best use of limited resources on changes in service levels that customers value most.

**Priorities for customers**

<table>
<thead>
<tr>
<th>Afforable bills</th>
<th>Tackling leaks</th>
<th>Taste and hardness</th>
<th>Smart meters and water efficiency advice</th>
<th>Cleaner rivers and beaches</th>
<th>Upgrading pipes and drains</th>
<th>Cutting our carbon footprint</th>
<th>Local call centres</th>
<th>Free meters when you move house</th>
<th>Turning waste into renewable energy</th>
<th>Reducing sewer overflows into sea</th>
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</tbody>
</table>

**Customers' preferences for bill profile**

<table>
<thead>
<tr>
<th>Volatile, reflecting annual costs</th>
<th>Smoothed</th>
<th>No view</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of respondents</td>
<td>13%</td>
<td>82%</td>
</tr>
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</table>

**Our other obligations**

It is clear that our stakeholders expect high levels of corporate responsibility and want to see us operating as a sustainable business, paying our taxes and delivering fair returns. They expect an efficient company delivering value for money.

They want to see us continuing work to improve the environment and to ensure that we deliver all the mandatory investment required in the process, including the EU Drinking Water Directive and UK regulations, and the wide range of environmental obligations regulated by the Environment Agency and Natural England.

Our wider engagement here has also been informed by a sustainability panel chaired by one of our non-executive directors, Dame Fiona Reynolds. The panel helps Wessex Water search for emerging issues, taking in a broad range of topics related to customers and communities, the environment, public health and resilience. Other panel members include a second non-executive director Gillian Camm, and individuals from outside the company with interests in domestic customers, catchment management, land-based industries, biodiversity, public health, and water processes.
Testing the business plan

Before publishing our plan in December, we asked more than 1,100 customers and 30 stakeholders what they thought of it. The large majority supported it:

- 81% found our proposals acceptable
- only 9% of customers rejected the plan
- the remainder took a neutral view.

When describing the plan, customers assessed it as proactive, balanced, future focused and responsible. The majority felt our business plan struck the right balance between bills and service.

The overall acceptability ratings are much higher than both the 67% achieved by our plan at the previous price control and the expectation from the Consumer Council for Water that companies’ plans should achieve at least 70% acceptability with customers.

The minority who rejected the plan fell into two broad groups. The first were customers who have entrenched negative views about monopoly, privately owned water companies. These customers lack trust in water companies and utilities in general. The second were those who are already in financial difficulty and very sensitive to price changes even when presented with falling bills in real terms. In response, a key element of our plan is to extend tap, which is already the most extensive range of affordability measures in the UK, to ensure that those in financial difficulty receive as much assistance as possible.

Stakeholders were overwhelmingly supportive of the plan. All national stakeholders, including organisations such as Which?, gave very positive feedback about our approach, as did the great majority of our local stakeholders.

Our latest customer engagement highlights that the top priority for customers continues to be affordable bills. Our December plan proposed that average household bills would be more than 5% lower in real terms by 2020 than the level previously agreed with Ofwat for 2014-15. Our refined plan will now see bills fall by 7%. This further reduction has been welcomed by the Customer Scrutiny Group as further contributing to customer acceptability of our plan.

Results of customer research

- 12,700 telephone interviews
- 31 focus groups with households
- 72 in-depth interviews and focus groups with businesses
- 6 discussion groups with teenagers and prospective customers in their 20s
- 15 in-depth interviews with national stakeholders
- workshops, discussions and email survey with our customer liaison panels
- 3,839 face to face interviews with household customers
- online surveys of 4,078 household customers
- online surveys of 1,383 business customers
- magazine poll of 1,751 customers
- full independent review by our regional customer scrutiny group

- 7% think they will be better off in the year ahead
- 54% think their household budget will stay about the same
- 39% think things will get worse
- 80% say they are able to afford their new water bill
- 14% starting to worry
- 6% are already struggling to pay
- 11% would choose to pay more for an even better service
- 86% find their current service and bill acceptable
- 3% want to pay less, even if service goes down
The role of the customer scrutiny group (CSG)

This fully independent customer scrutiny group (CSG) was set up by Wessex Water to put customers and other stakeholders at the heart of the price-setting process. Our research programme has been developed with, and challenged by, the group.

It was formed in December 2011 to bring together regulators, customer representatives and other stakeholders to challenge our engagement and ensure the views of customers were heard and reflected in our business plan.

Chaired by Charles Howeson and John Savage (deputy chair), it draws expertise from four pre-existing liaison panels. Each brings together a number of organisations around a set of issues of common interest and provides a platform for two-way exchanges of information, priorities, concerns and ideas. A representative from each panel sits on the CSG, together with members from CCWater, DWI, EA and Natural England. In this way, when developing our plans we have been able to directly take into account the views of more than 90 organisations representing the full range of consumers and stakeholders in our region.

This process has made a real difference to our customer and stakeholder engagement. It has added to the quality of our business plan both from the challenges and observations that have been made by the CSG and the liaison panels and also because of the additional guidance and advice this process has provided. Our stakeholders have been more directly involved in formulating our PR14 proposals than at previous price reviews and this has generated a more comprehensive and considered plan.

Each component of our customer research has been developed in conjunction with a sub-group of the CSG led by CCWater and our interpretation of the findings challenged by the full group. This challenge has influenced the overall path of bills as well as the way in which the successful delivery of our outcomes will be measured and the way in which incentives and proposals to share pain and gain with customers will operate. These are core elements of our plan and the CSG has been effective in challenging and shaping them. This challenge has continued as we have refined our plan.

As a result of its wide-ranging membership the CSG has also been able to form a view that this plan continues to take due account of all stakeholder requirements, in particular ensuring statutory and other environmental obligations are being met or exceeded.

The CSG’s concerns about financial rewards expressed in its December 2013 report to Ofwat remain, due to the low level (28%) of customer support for rewards. The way Wessex Water has outlined its positive rewards accords with how customers prioritised issues in the willingness to pay research. The CSG is encouraged that that Wessex Water has approached the issue of deciding how to apply rewards and penalties in a way that ensures the Company is only getting rewarded when it has developed an industry leading approach; achieved industry leading standards; or allows it to finance an environmental requirement that was not known about when the business plans were submitted, such as on river water quality.

The CSG remains enthusiastic and supportive of the overall Business Plan.

Reports from the CSG on how we have reflected customer and other stakeholder priorities in our plan are included as Part 5 of this document.
Our stakeholders have been more directly involved in formulating our PR14 proposals than at previous price reviews and this has generated a more comprehensive and considered plan.
1.3 External context

Our customers

Affordability
When we submitted our business plan for the 2009 review, it was clear that the financial crisis and economic downturn was going to put pressure on household budgets. We responded by submitting a plan that deferred some lower-priority improvements to keep bills down. However, we were required to resubmit the plan with higher bill increases.

Over the past few years, real wage growth has been negative but our charges have increased in real terms. As a result, we have seen a reduction in customers’ perceptions of our value for money. Our plan for the next five years aims to correct this imbalance by ensuring that bills reduce in real terms.

Water bills may be a relatively modest part of most households’ disposable income, but budgets are being increasingly stretched by rising costs of essentials, eg, food, heat, light, rent and travel, as well as cutbacks in welfare including housing benefit.

Monthly expenditure on key household bills 2008-2013 (Source USwitch)

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2013</th>
<th>Increase</th>
</tr>
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<tbody>
<tr>
<td>Food</td>
<td>£220</td>
<td>£256</td>
<td>+17%</td>
</tr>
<tr>
<td>Gas</td>
<td>£44</td>
<td>£67</td>
<td>+52%</td>
</tr>
<tr>
<td>Electricity</td>
<td>£34</td>
<td>£45</td>
<td>+32%</td>
</tr>
<tr>
<td>Water</td>
<td>£28</td>
<td>£32</td>
<td>+14%</td>
</tr>
<tr>
<td>Rent</td>
<td>£467</td>
<td>£577</td>
<td>+24%</td>
</tr>
<tr>
<td>Council tax</td>
<td>£80</td>
<td>£92</td>
<td>+15%</td>
</tr>
</tbody>
</table>

In 2010 we were the only company with a social tariff and better placed than others to deal with the consequences for customers on the lowest incomes – last year we increased the scale, scope and value of the assistance provided. More than 15,000 households are benefitting from the wide range of affordability measures in our award winning tap programme. This help is available to all households with genuine difficulty in paying and around 12,000 of these receive reduced charges through our social tariffs.

Population growth
Over the last 30 years our region has seen its population grow by a quarter, 50% more than the national average, driven by inward migration from people of working and non-working age. We are expecting a further 19% increase in our water supply area population by 2040, and a 22% increase in our waste water area, covering the conurbations around Bristol and Bournemouth. Consequently, significant capacity related investments that we have been able to defer in previous AMPs can no longer be delayed without affecting the levels of services we provide.

Private sewers
The transfer of private sewage pumping stations will take place in 2016 bringing improvements for customers and the environment, but also driving some increase in costs.

Retail competition for non-household customers
We support the introduction of effective and efficient competition for all non-household customers and are already seeing greater market activity. We believe that if implemented correctly the benefits of improved legitimacy and customer focus will outweigh the short-term costs.

The environment

The environment in our region is exceptionally varied in terms of landscape and wildlife habitats and we are committed to looking after it in a responsible and ethical way.

Environmental programme
Our environmental programme is substantial, driven by the requirements of the revised Bathing Water Directive and the new obligations of the Water Framework Directive. Keeping these requirements affordable requires innovation on our part as well as from other stakeholders and regulators, and a collaborative approach.

Climate change
The unpredictable weather of the last few years, which has included both drought and flood, reminds us that we must adapt if our services are to remain resilient to a changing climate. But it also offers us the opportunity to demonstrate that there are positive opportunities if we take a more sustainable, long-term approach to the management of resources, particularly land and water, and our assets.

Two years of drier than average weather put considerable stress on rivers and streams in our areas. Nonetheless, we were able to maintain our services to customers without restriction.
The unprecedented rainfall which followed, coupled with urban creep (the addition of impermeable areas that drain to the sewer network), had a significant impact on the number of flooding incidents from our sewer system. Without action to ensure there is sufficient capacity to counter drought and flood, the risk of service failures will inevitably increase over time.

**Financing and infrastructure**

**Access to finance**
The returns required by markets for long-term, RPI linked investments have remained lower than assumed last time prices were set. In time interest rates will rise as the economy returns to more typical conditions but markets currently expect low interest rates to continue at least into the middle of AMP6.

Our plan means customers will benefit from this in the prices they pay over the next five years. Looking ahead, however, we must bear in mind the long-term nature of the water industry and the need to ensure continued access to finance. It is important that short-term returns are not set so low as to deter this long-term investment.

**Ageing infrastructure**
Since privatisation we have invested heavily to meet new and tighter standards. More than £1bn has been spent on shorter life assets, primarily mechanical, electrical and instrumentation equipment. Even with careful proactive asset stewardship these assets have a finite life and need renewing in a timely and cost effective manner otherwise service failures will increase.

Despite customer service improvements, the below ground network, especially sewers, has seen restricted maintenance investment. The deterioration rate currently exceeds the rate of rehabilitation and, in time, the need to increase investment must be addressed to minimise service failures.
1.4 The next 25 years

Our current business model has served Wessex Water and our customers well for 25 years, but we are now facing new challenges. We have responded to these with our new business model, which adopts a sustainable approach across our whole business: socially, environmentally and to our financial management for the next 25 years. Much of what we do needs to continue but alongside this is a requirement for development and innovation.

There are different ways of delivering individual outcomes whether by compliance with statutory obligations such as the standards that come from European legislation, or increasing the efficiency and resilience of the services we provide. There are also choices on how quickly to deliver required improvements. Achieving them all requires a consistent and coherent strategy for delivery.

Our proposed new approach offers the opportunity for new efficiencies and will see more joint working on the management of the water environment, working with consumers and other partners in our region.

When we updated our 25-year plan we identified that in order to meet the challenges faced over the next quarter century:

- bills would need to increase at 1% above inflation to meet continuing resilience, environmental and infrastructure investment – unless we can find dynamic efficiencies
- we could not rely on heavy engineering approaches to deliver this – we needed a greater focus on solutions that could deliver similar outcomes with fewer resources and without major upfront capital expenditure
- collaboration and partnerships with others in these new approaches is essential – it is very rare that we can implement the required work independently of others
- affordability measures need to be enhanced and focused on those at the lower end of the income scale where real terms income growth is less likely.

Our plans to 2020 take this strategy forward but given the economic circumstances customers currently have no appetite for real terms bill increases. However, environmental regulators continue to demand higher levels of environmental compliance and customers’ service expectations will continue to rise.

Our new approach delivers the framework for these dynamic efficiencies which, coupled with a reduction in the returns required by investors for water assets, gives us an opportunity to deliver improvements to both service and the environment without the need for bills to increase in real terms by 2020.

Our plan proposes that average household bills will be more than 7% lower in real terms by 2020 than the level previously agreed with Ofwat for 2014-15 in our 2009 final determination. If, as the Office for Budget Responsibility predicts, the economy returns to more normal patterns then bills in 2019-20 will be a smaller proportion of household income than they were 10 years previously.

To deliver this we are planning innovative approaches to achieve environmental improvements that are less costly but have less certainty in meeting the required standards. We will extend our use of catchment strategies that improve water quality at source, protect water resources and enable our customers and partners to take part in and reap the benefits of a more integrated approach to managing land and water, and investigate whether trading with other stakeholders will achieve the desired outcomes at a lower overall cost for our customers than the traditional asset focused approach.

Wessex Water average household bill (corrected for inflation)
Catchment management will deliver better environmental outcomes at lower cost to our customers.

Catchment management is a potentially transformative tool. Working with farmers in every catchment in our area would deliver a very different business model that reduced costs, provided much better control at source over water quality and quantity, and also delivered significant social benefits such as improved landscape and wildlife protection.

These more innovative approaches mean the company is assuming more risk and this needs a constructive response from our regulators. For example, regulation must evolve to include a catchment-wide approach to issuing permits. This will require a greater level of transparency and partnership between the regulator and the regulated.

We plan to deliver our obligations under the Water Framework Directive but have phased our programme to extend beyond 2020 and are focusing on delivering investments now based on good scientific evidence that give the greatest value. We have worked well with the Environment Agency to gain their support for this approach.

We are further targeting our asset maintenance plans by finding more efficient ways to maintain services and managing some additional risk over the five-year period.

We have incorporated real terms productivity improvement targets of an additional 1% year on year despite being consistently benchmarked at the top of comparative efficiency measures in the industry.

We are already putting our plan into action and did not take up the agreed real terms bill increase of 1.5% in the 2014–15 charging year. Instead average household bills are declining in real terms from April 2014 onwards. In addition did not seek an interim determination (IDoK) that would have increased customers’ bills for the increased costs of private sewers or rising bad debt. These costs have instead been met by our shareholder.

<table>
<thead>
<tr>
<th>Catchment Strategies</th>
<th>Water supply</th>
<th>Waste water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>• The grid</td>
<td>• North Bristol sewer</td>
</tr>
<tr>
<td></td>
<td>• Real-time monitoring</td>
<td>• Real-time monitoring</td>
</tr>
<tr>
<td>Catchment trading</td>
<td>• Nitrate and pesticide trading</td>
<td>• Nitrate and pesticide trading</td>
</tr>
<tr>
<td></td>
<td>• Volume trading</td>
<td>• Surface water removal</td>
</tr>
<tr>
<td></td>
<td>• Resilience trading</td>
<td>• Catchment permitting</td>
</tr>
<tr>
<td>Behavioural</td>
<td>• Water efficiency</td>
<td>• Waste-to-energy</td>
</tr>
<tr>
<td></td>
<td>• Usage signals and incentives</td>
<td>• Flood compensation</td>
</tr>
</tbody>
</table>

- Usage signals and incentives
And we are taking further action on affordability. Last year we widened the scope of our social tariffs and we expect a further 10,000 households to benefit as a result. Our Assist social tariff is open to all households that have genuine difficulty in paying and results in bill reductions of £200 per year on average. This approach is far more effective in dealing with affordability issues than anything a small percentage reduction in bills will achieve. This tariff is one part of our industry leading tap scheme which encompasses water and energy efficiency help, debt repayment schemes and a more generous WaterSure scheme.

Our tailored affordability plans give targeted help to customers in financial distress in a way that makes a real difference. Most of our customers are customers for life so over the long term we reap the rewards of a balanced and understanding approach when they are seeking assistance.

It is clear from our consultations that customers prefer gradual changes to bills and the predictability of their bill is particularly important for those at the bottom end of the income scale. Consequently we have smoothed revenues so that bills decline in real terms gradually over the period, while ensuring that returns to investors over the period are sufficient and the business remains financeable in each of the five years.

We are determined to embrace new mechanisms and innovative solutions in order to deliver value for money to all our stakeholders and to lead our industry in a new, genuinely sustainable direction.

Customers prefer gradual changes to bills and the predictability of their bill is particularly important for those at the bottom end of the income scale.
The following section shows our plan in more detail, indicating how we intend to achieve improvements to service up to 2020 in the nine key work areas. This is an integrated plan and many of the actions are designed to affect more than one work area.

Where we have targeted improvements these have been informed by legal requirements and customer priorities – optimised to be where the benefits most outweigh the costs of delivery.

We have taken our nine work areas and considered how customers should be able to judge our success. We have developed 29 measures of our performance and set targets for achievement against them up to 2020. These are summarised overleaf.

We will publish our performance each year and are proposing that failure to deliver will, in many cases, lead to financial penalties.

In response to feedback on the plan we published in December we now propose rewards if we over-deliver on our commitments in areas where this is of genuine benefit to customers and where they are willing to pay for that over-delivery.

Our committed target levels have taken into account our ability to deliver improvements customers value most highly, within the constraint of bills that will fall in real terms, and our statutory obligations.
Together with the Customer Scrutiny Group and our other stakeholders we have developed 29 measures of our performance and set targets for achievement against them up to 2020. Around two thirds of the measures have financial penalties, either as direct incentives or linked via related penalties such as the ability of other regulators to fine us for poor performance. Those with direct financial incentives are highlighted in pink. Full details of all 29 performance measures are included in Technical appendix T1.

### Affordable bills

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of water used per person</td>
<td>138 litres/day</td>
<td>131 litres/day</td>
</tr>
<tr>
<td>Bill as a proportion of disposable income</td>
<td>1.6%</td>
<td>Reducing trend</td>
</tr>
</tbody>
</table>

### Reduced leakage

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of water leaked</td>
<td>&lt;70 Ml/day</td>
<td>&lt;66.5 Ml/day</td>
</tr>
<tr>
<td>Reported leaks fixed by the next day</td>
<td>New measure</td>
<td>90%</td>
</tr>
</tbody>
</table>

### Excellent service for customers

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIM service score</td>
<td>86</td>
<td>&gt;86</td>
</tr>
<tr>
<td>% rating service good/very good</td>
<td>&gt;95%</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>% rating good value for money</td>
<td>69%</td>
<td>75%</td>
</tr>
<tr>
<td>% rating ease of resolution</td>
<td>New measure</td>
<td>Improving trend</td>
</tr>
<tr>
<td>Accessible communications</td>
<td>New measure</td>
<td>Meet best practice</td>
</tr>
</tbody>
</table>

### Highest quality drinking water

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer contacts about water quality</td>
<td>3,000 pa</td>
<td>2,700 pa</td>
</tr>
<tr>
<td>Compliance with drinking water standards</td>
<td>99.98%</td>
<td>99.98%</td>
</tr>
</tbody>
</table>

### Improved bathing waters

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreed schemes delivered</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Beaches passing EU bathing standards</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Rivers, lakes and estuaries protected

- **Measure**: EA’s Environmental Performance Assessment
- **Current**: Above average
- **By 2020**: Industry leading

- **Compliance with abstraction licences**: 100%
- **Abstractions at Mere exported**: 447 Ml/a
- **Length of river with improved flow**: New measure, 99 km
- **River water quality improved**: New measure, 70 water bodies
- **Monitoring CSOs**: 33%
- **% land actively managed for biodiversity**: 47%

Resilient services

- **Measure**: Restrictions on water use (hosepipe bans)
- **Current**: None
- **By 2020**: None

- **Properties suffering unplanned supply interruptions >6 hours**: 1,000 pa
- **Properties supplied by a single source of water**: 78,000
- **Water mains bursts**: <2,000 pa
- **Collapses/bursts on sewerage network**: <300 pa

Sewage flooding minimised

- **Internal flooding from public sewers**: 1.8 incidents per 10,000 properties
- **Risk of all flooding from public sewer due to hydraulic capacity**: New measure

Reduced carbon footprint

- **Greenhouse gas emissions**: 149,000t
- **Proportion of energy self-generated**: 18%
- **By 2020**: 119,000t, 24%
Why is this important?

The top priority for the majority of customers is affordable bills.

Around 7% of our customers struggle to pay their water bills. Wessex Water is a leader in the UK on the range of schemes and practical help available for customers in financial difficulty.

- **tap** currently offers more than 15,000 households tailored assistance that meets their individual financial circumstances.
- Our social tariff was the first in the industry and was recently extended to help an additional 10,000 households.
- 10,000 households in our area choose to switch to a meter every year to reduce their bills.
- We offer customers practical advice and free devices to help them save water – which also has the added benefit of leaving more water in the environment.
- Our education programme gives important lessons to children, the customers of the future, visiting 13,000 of them each year.

Our strategy to 2020 and beyond

- Aiming to keep bills as low as possible and below inflation until at least 2020, achieved through innovation and productivity improvements.
- Giving customers greater control of their bills through metering and practical help to save water.
- Promoting wiser use of water and sewerage services to keep bills down for all.
- Enhancing our affordability assistance and working closely with trusted third party deliverers.
- Vigorously pursuing those who can pay but don’t, to keep bills down for others.
What will we be doing to 2020?

We will continue to offer customers help to afford their water charges and repay their debts by widening tap – our tailored assistance plan. This will be developed further and remain the industry’s leading affordability package. But we will not focus only on those in debt. We will invest in financial literacy and money management projects around our region through our Money Matters awards.

We will continue to work with the debt advice sector to develop our social tariff and, using our affordability advisory group, we will ensure the tariff reaches all groups of customers, particularly those who may become vulnerable through changes to welfare reform.

We already promote metering and will extend this to fit a meter free of charge when a customer moves into an unmetered property – giving them more control over their bill and encouraging them to reduce their water use. Our customers see metering as the fairest way to pay and we have demonstrated that change of occupancy metering is cost-beneficial and the most acceptable approach to metering customers in our region. By 2020 nearly 80% of customers will be metered.

We will meet our customers’ needs by supporting the metering programme with a wider range of help to enable them to use water more wisely. Our services will include free and subsidised devices, retrofit schemes offering greater practical assistance than previously and partnership working with community groups.

When we install the meter we will check for leaks on the customer’s supply pipe and fix them free of charge, which will reduce overall leakage.

In combination our enhanced metering and water efficiency services will lead to peak demands in our region falling by more than 16 Ml/d or 4%.

We will increase our use of social media to bring our services and the ability for customers to control those services much closer to them. We will also improve the layout of our bills and simplify the information provided so that the bill gives clear and accurate information on water use and the associated cost.

We will continue to improve the way we deal with customers who choose not to pay, by making the best possible use of the information we have about each customer to tailor and segment our debt recovery activity. We will apply this at all stages in the debt recovery process, from adding specific messages to bills and varying the time between sending reminders, to late-stage recovery processes such as court action.

Our commitments

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</table>

We will report on our performance against these measures each year. Measures with direct financial incentives are highlighted in pink and further details are given in Technical Appendix T1.
Why is this important?

Excellent customer service is fundamental to our business and we always put customers at the heart of everything we do. A company with a strong customer service ethos has customers who value the services they provide, are happy to pay for them and consider the company a trusted service provider. This is key to our desire to be a truly sustainable water company.

We have consistently been at the top of Ofwat’s overall satisfaction measure, the Service Incentive Mechanism (SIM), and our standards of service and package of customer guarantees are industry leading. A large majority of our customers consider our services to be good value for money and find us easy to deal with.

We perform very well when compared to our peers in the water industry but there is always more to do.

Customers increasingly compare us to other service providers, outside the utility sector, and their expectations are set by the service they receive in these other sectors. We want customers to value the services we provide and see us as a company they admire and trust.

Our strategy to 2020 and beyond

- Offering customers choices where we can.
- Carrying out activity to timescales that meet customers’ expectations.
- Making it as easy as possible for customers to contact us when and how they want to.
- Avoiding service failures by using real-time monitoring and management of our network.
- Rapidly rectifying service failures that do happen, with minimal disruption and keeping customers informed at all times.
- Partnering with business customers to offer water efficiency advice and other on-site services.
- Communicating our services and their value effectively to customers and community groups.
- Treating all customers as individuals, making sure we take into account their individual needs.
- Offering choices of tariff and service level and increased flexibility in the way services are paid for.
What will we be doing to 2020?

• We will continue to answer the telephone with a person in a local call centre without the need to select options.
• We will repair or replace leaky customer pipes free of charge.
• We will fit meters for customers free of charge and within 30 days, not the 90 that we are allowed in the regulations.
• When a customer reports a leak we will aim to fix it within a day.
• If customers have a blocked sewer, we will attend within four hours.
• We will provide a one stop shop to resolve a customer’s problem.
• We will continue to check that customers’ problems are resolved before we consider their contact is closed. If we haven’t resolved it we will apologise and put it right straight away.
• If we fail to meet our obligations, our compensation payments under the Guaranteed Standards Scheme will remain higher than required in law to better reflect the cost to customers – we will also say sorry.

We will further extend communication channels with customers and keep them informed, using more text messages, email, and social media, eg, instead of customers telling us about a burst in our region we will identify it first and tell them via text message what we are doing to fix it. We will expand our range of self service options, introduce online reporting and tracking of operational problems. And we will use social media to build our customer relationship, enabling more informal and immediate interactions.

We will increase our efforts to avoid service failures in the first place, including:

• real-time monitoring of our network will mean we can detect potential failures, such as burst pipes, before they happen or very soon after, reducing the impact on our customers
• where repairs or replacement of pipework are needed we will use trenchless technologies where possible to minimise disruption and waste material.

We will continue to ensure our services are accessible to all customers, including those with additional needs, and that our service offering and communication methods suit all our customers.

We will offer tailored and segmented services to our business customers, including account managers, on-site water services, wider consultancy services, aggregated and electronic billing and smart meter technology.

We will continue building on our partnership relationships with community groups and stakeholders, eg, Citizens Advice and the Money Advice Trust, as well as with schools to educate our future customers. Our partnership with the debt advice sector is integral to tap, our tailored assistance programme covering a wide range of schemes and practical help for customers in difficulty.

Our customer advisory panel will help us shape our policies and approach so that we can meet the needs of customers they represent.

We will learn from other sectors and admired brands that are customer focused and innovative in their service offering and see if we can adopt their approach.

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Case study: tap

tap brings together a wide range of schemes and low-rate tariffs to help our vulnerable customers afford their water charges and help them repay their debt, getting them back on track. Each customer is assessed individually and the help tailored to meet their needs with more than 15,000 benefiting through tap this year. We deliver much of this assistance through our very strong partnerships with Citizens Advice, the Money Advice Trust and other local debt advice agencies.

In addition we have expanded our social tariff scheme Assist – in partnership with Citizens Advice Bureaux we have also introduced WaterSure Plus which has reduced the bills of 3,000 metered customers by £70 per year compared to the government’s WaterSure scheme. In 2012-13 we increased the funding to agencies in our region to acknowledge an increase in the demand for their independent services.

Jan Westrope, chief executive of Citizens Advice Bureau for Bath and North East Somerset, said, “We were delighted to receive your support of our money advice provision especially during such uncertain times for charity organisations and people they serve.”

We also recognise that simply helping customers once they are in debt is not enough, so this year we launched our Money Matters awards to improve financial literacy and money management skills among both young and vulnerable people across our region. We have been asked to take part in a number of Citizens Advice events this year designed to showcase our partnership work as an example of creditor best practice.

“We were delighted to receive your support of our money advice provision especially during such uncertain times for charity organisations and people they serve.”
Case study: Weymouth real-time monitoring

Wessex Water supplies 1.3 million customers with around 280 million litres of water a day, via 11,500 kilometres of water mains. We aim to be a reliable service provider and when unplanned interruptions occur we aim to rectify them rapidly, with minimal disruption, keeping customers informed at all times.

Our customers often provide us with early warning of network failures by calling the contact centre to report low water pressure or a loss of water supply. We would like to reduce this reliance on customers and be proactive in our communications with them.

We need to collect more real-time data from the water supply network and respond quickly to alerts but until recently remotely monitoring the network in real time was costly, requiring expensive equipment and mains power supplies.

To deliver the strategic target of delivering water without restrictions we decided to investigate the use of innovative new technology to monitor the supply network. With the added impetus of the Olympic sailing events in Weymouth in 2012, we had the perfect opportunity to trial new network management techniques to ensure excellent customer service throughout the games.

To solve the problem of limited data capture we invested in more than 170 new data logging devices that can monitor and transmit flow and pressure recordings every 15 minutes for up to five years. These send the data back to our operations centre via GPRS mobile technology. The loggers were installed across the Weymouth water supply area, giving us real-time data for every flow meter in the area and up to three pressure recordings to every 1,000 properties.

Each of the monitoring points is linked to an alarm within our regional monitoring and control system, notifying the control room which can then use the information to guide site staff towards the problem, reducing the time needed to search for the failure.

Since completion of the Weymouth trial a number of positive results have been measured:

- during the Olympics we were able to use the new loggers to inform the fire brigade of supply network pressure during a fire at the Weymouth Pavilion
- an alarm flagged a large customer service leak within the network that had not affected customer supplies
- operational staff have intervened in multiple cases of illegal use of fire hydrants
- an alarm alerted the control room to a burst main one hour before customers would have run out of water.
Reduced leakage

Why is this important?
Reducing leakage is key to the efficient operation and management of our water supply network.

Customers regard leakage as wasteful, a service failure and inherently wrong. If we are asking customers to be wiser in their use of water we must also show that we are continuously driving down leakage.

Even when customers are told that leakage reduction is a relatively expensive activity and there comes a point when it is cheaper to recycle the water through the environment, many still put it as one of their top priorities.

Similarly, fixing leaks quickly is both a key customer priority and essential to managing leakage and maintaining the security of our water supplies.

We have halved leakage since 1995 and always kept it below the target set by Ofwat. We spend around £10m per year managing leakage, fixing more than 12,000 leaks a year in the process.

We want to continue to drive down leakage – by 2020 we will reduce it by 5%, and by 2040 we plan to reduce it by a further 20%.

We want to improve customer service by treating leaks as a service failure and fixing those reported by customers within a day.

Our strategy to 2020 and beyond
We know that leakage can never be entirely eliminated but we can continue to bring it down by:

• proactively managing our supply network, including a targeted programme of pipe replacement and pressure control
• treating leaks reported by customers as a service failure rather than an asset maintenance issue
• innovative techniques for leak prediction, detection and repair
• reducing leakage from customers’ pipes, through metering and smart technologies.
What will we be doing to 2020?

We will improve customer service by treating leaks as a service failure so we will aim to fix those reported to us by customers by the next day.

We will install meters free of charge when a property has a change of occupier as well as when customers request them. Fitting meters provides us with a good opportunity to look for any leaks from customers’ supply pipes, allowing more efficient, quicker identification. If we find such a leak we will repair it free of charge unless the leak is under a building.

Proactive management of our supply network will continue, including:

• controlling water pressure in our mains
• having people on the ground proactively identifying and repairing leaks
• continuing to invest in the latest equipment and technology to ensure we find leaks as quickly and efficiently as possible
• by responding quickly during cold weather when the number of pipe bursts increases and customers report leaks to us.

Our programme of pipe replacement will continue, prioritised to replace the weakest pipes, based on records of bursts and repeat leaks.

Replacement rates up to 2020 are likely to remain at the current level of 50km per year. However, beyond 2020 we will need to increase the rate at which we replace our network.

Our long-term aim is to bring leakage down to the lowest possible level while keeping bills affordable. To achieve our long-term target we will embrace new technology and systems to deliver the required reduction without unaffordable increases in customers’ bills. Leakage is an important area for innovation and most of the advances are led by technology developers and suppliers, spurred by the economic advantages of alternatives to pipe replacement.

We will look to real-time network control and monitoring technologies that predict where leaks are most likely to occur, or pinpoint the location of leaks when they happen.

Our commitments

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of water leaked</td>
<td>&lt;70 Ml/day</td>
<td>&lt;66.5 Ml/day</td>
</tr>
<tr>
<td>Reported leaks fixed by the next day</td>
<td>90%</td>
<td>New measure</td>
</tr>
</tbody>
</table>

We will report on our performance against these measures each year. Measures with direct financial incentives are highlighted in pink and further details are given in Technical Appendix T1.
Why is this important?

Providing high quality drinking water is a fundamental and essential service for our customers and communities. For this reason drinking water is governed by strict European and UK water quality legislation, overseen by the Drinking Water Inspectorate.

Since privatisation we have invested in additional water treatment and improved water mains, supported by improved quality and risk management systems and day to day management and monitoring of water supplies.

Our annual compliance with quality standards has averaged 99.98% over the last three years and not fallen below 99.95% since 2005. Complaints about tap water in our area have fallen since 2009, but we still receive about 3,000 complaints each year.

We need to continue to deliver very high levels of compliance with drinking water standards. Customer research shows that the taste and appearance of water are priority issues and so we need to maintain a downward trend of customer contacts about the acceptability of the water they receive.

Our strategy to 2020 and beyond

Our approach to achieving the outcome is a combination of:

- proactive maintenance of our water treatment assets and distribution network
- protecting sources of raw water by preventing rather than removing contamination wherever possible, using catchment initiatives
- delivering a water supply grid that enables us to avoid the use of water sources where the raw water quality has deteriorated
- implementing source-to-tap drinking water safety plans.
What will we be doing to 2020?

Addressing raw water deterioration
The raw water quality at a number of our sources continues to show signs of deterioration largely as a consequence of agricultural activity. We will take action at the following sites:

- at six groundwater sources predicted to breach the nitrate standard our preferred approach is to use catchment management to limit deterioration rather than removing contamination at the works
- at two surface water reservoirs which have suffered from peaks of the pesticide metaldehyde (the active ingredient of some slug pellets), catchment management is the preferred approach
- by 2020 we will be taking the catchment approach at 17 sites to manage nitrate and pesticide levels in the water, working with the farmers of more than 70,000 acres of land
- providing alternative supplies to Porlock treatment works, which is unable to provide compliant treated water due to deterioration of the water in Nutscale reservoir
- upgrading Durleigh treatment works because the quality of raw water has deteriorated.

Lead
In December 2013 the standard for lead was tightened to 10µg/l. Our strategy is a twin track approach of:

- lead pipe replacement, offering free replacement of customers’ lead service pipes
- phosphate dosing, a process that safely coats the inside of lead pipes.

Cryptosporidium
Based on the outcome of risk assessments and our drinking water safety plans, there is one site where we propose enhanced treatment using ultraviolet (UV) to protect against cryptosporidium.

Customer acceptability
Around half the contacts we receive from customers about their tap water relate to discoloured water, a third about taste and odour and the remainder about white water. We will undertake a mains rehabilitation programme to reduce discoloured water complaints. This will be a continuation of the current programme but at a lower level of expenditure, concentrated in the eight areas of our region that are the cause of most customer complaints. For taste and odour, which is often caused by customers’ plumbing, we will raise awareness in addition to the specific projects at Porlock and Durleigh.

On-going catchment management and completion of the grid project
Continuation of the catchment management activities which began in AMP5 together with completion of the grid project will enable us to manage sources previously identified as at risk of exceeding the nitrate limit.

Our commitments

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer contacts about water quality</td>
<td>3,000 pa</td>
<td>2,700 pa</td>
</tr>
<tr>
<td>Compliance with drinking water standards</td>
<td>99.98%</td>
<td>99.98%</td>
</tr>
</tbody>
</table>

We will report on our performance against these measures each year. Measures with direct financial incentives are highlighted in pink and further details are given in Technical Appendix T1.
Case study: Catchment management

In some locations, the quality of the water we use is affected by fertilisers and pesticides used on nearby farms. So, we give face-to-face advice to farmers and landowners, and in some locations we pay them to change to using chemicals that are not a problem for water sources. This helps to control and reduce the levels of nitrates and pesticides that reach our boreholes and reservoirs, which in turn means we can avoid expensive additional water treatment.

Most of our water supplies are from underground aquifers. This type of water needs little treatment as it is much cleaner than water from reservoirs or rivers. However, groundwater can be affected by nitrates and pesticides used in agriculture that have not been taken up by crops and have washed down through the soil.

Above a certain level, nitrates and pesticides in tap water are considered to pose a health risk. They can also pollute the water environment once they have percolated through the soil and reached streams, rivers and estuaries.

The traditional solution is to build additional water treatment to remove the pollutants. While they are reliable, they are expensive to build and operate, using a lot of additional energy and treatment chemicals.

Instead, we are purposely trying to address the root causes of the problem, rather than just treating the symptoms. Over the last eight years, we have created a team of agricultural advisers who work with local farmers and landowners. They visit farms, analyse water and soil samples and offer practical help and advice on methods of land management that protect water quality. In some circumstances, we have also provided financial incentives for farmers who avoid using pesticides in high risk areas or, in the case of metaldehyde slug pellets, switch to a type that uses chemicals that can be removed by existing water treatment. We also talk to organisations such as the National Farmers Union (NFU) to gather further support.

This catchment management work has achieved some real, measurable outcomes. The treated water from ‘at risk’ sources has stayed within nitrate limits and we no longer require additional treatment to remove pesticides, such as metaldehyde, at one groundwater site and two reservoirs. This approach is more sustainable – it saves money for our customers, the farmers spend less on fertiliser and pesticides, it offers wider benefits for the environment, and builds our links with the local community.

We are purposely trying to address the root causes of water contamination by nitrates and pesticides, rather than just treating the symptoms.
Case study: Innovation

Professor Martin Cave’s 2009 report on competition and innovation in water markets made a number of proposals for how to increase innovation in our industry. Here we explain some of the innovations that we have been developing.

If we are to maintain leading performance in a rapidly changing world, we need to innovate. Our innovation work includes trialling new technologies, investigating the state of the water environment in our region, collaborative research with other water companies and universities and novel improvements to our operational assets. As innovation comes from both within and outside our business, we encourage staff to make improvements and work with researchers, businesses and other external bodies. This can result in more efficient ways of working and investment that is better targeted.

Recent projects include:
- trialling smart water meters that communicate real-time information on water use via smartphones, tablets or computers
- comparing reedbeds rooted in different mineral types to see which is best for removing phosphorus from effluent
- employing catchment advisers to improve the quality of groundwater, streams and rivers
- using various trenchless technologies including robots to survey and repair sewers
- composting grit and screenings at Bristol sewage treatment works to reduce waste going to landfill
- funding debt advisers outside our business to help customers who struggle to pay their water bill
- producing energy from food waste using anaerobic digesters.

Our future innovation work will be guided by the priorities set out in this document. In many cases we will be tackling the causes of the issues that concern our customers and regulators, rather than just treating the symptoms.

As part of this, we recently formed a research partnership with the University of Bath. Its main research themes include sustainable water and sewage treatment, keeping bills affordable and reducing our carbon footprint. These will be explored by researchers from across the university in departments majoring on sciences, engineering and management.

Our innovation work includes trialling new technologies, investigating the state of the water environment in our region, collaborative research with other water companies and universities, and novel improvements to our operational assets.
Why is this important?

The coastline in our region has some of the best beaches in the country and it is recognised that many of the 47 designated bathing waters could be adversely affected by discharges from our sewerage assets as well as by diffuse pollution.

Under the revised Bathing Water Directive, two beaches on the north coast of our region are predicted to fail the new standards and two are predicted to be classed only as ‘sufficient’. We have already invested in enhancing our assets to tackle two of these beaches in AMP5 (Weston Uphill and Weston Main), while one of the remaining two beaches is not affected by our assets.

Our Coastwatch alarm system has been a great success in providing real-time warnings of overflow operation to beach users. All bathing water beaches that could be affected by our assets are covered by the Coastwatch system.

Our strategy to 2020 and beyond

- Enhancing our assets where they are known to be influencing bathing water quality and where the value of the benefits can be demonstrated to outweigh the costs.
- Continuing to gather data that identifies the assets where further work is needed, including areas where urban and agricultural run-off contributes to poor water quality.
What will we be doing to 2020?

Most of our investment will be focused on improving the quality of water at Burnham Jetty off the coast of Somerset – the one remaining bathing water predicted to fail the revised standards.

Integrated urban drainage management
Rather than just building more storage we will be continuing a strategy to disconnect surface water from combined sewage systems. This will reduce the number of spills from overflows that can be associated with bathing water quality at Burnham.

Disinfection of intermittent discharge trial
At Highbridge the storm tank overflow discharge point is close to the bathing water. In addition to integrated urban drainage management, and instead of significant volumes of additional storage, we will be installing an innovative UV process to disinfect the settled stormwater before spills occur.

Improved secondary treatment and disinfection
We will be enhancing treatment at three sewage treatment works that we believe may influence bathing water quality. This will include ensuring all flows from these works receive UV disinfection.

Additional stormwater attenuation
Several sewage overflows (CSOs) in Bridgwater and near Highbridge generate spills that are understood to affect the bathing water at Burnham Jetty. We will increase the volume of stormwater attenuation by 12,000m³ at five sites.

Our commitments

Bathing water quality can be influenced by many sources of pollution. We have our part to play in ensuring bathing waters pass European standards and through the investment described on these pages aim to ensure that our assets are not contributing factors to any failing beach.

By 2020 we will have delivered all our proposed investments and expect bathing waters potentially affected by our assets to be classed in ‘Excellent’ or ‘Good’ status.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreed schemes delivered</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Beaches passing EU bathing standards</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

We will report on our performance against these measures each year. Measures with direct financial incentives are highlighted in pink and further details are given in Technical Appendix T1.

We are not able to completely control whether or not bathing waters pass the standards – other pollution sources, eg, those from farming or from seagulls, can influence bathing water quality too – but it is important that we have an incentive to deliver on the things we can control.

We therefore propose that financial penalties should apply if we do not deliver the schemes that we have agreed with our environmental regulators.
Why is this important?

Our operations can affect watercourses – whether via abstraction rates, discharges from sewage works or combined sewer overflows (CSOs).

In the last 15 years we have made changes in abstraction that have improved river flows by more than 40 Ml/d and a further 25Ml/d improvement is committed in 2018 as part of the grid scheme. We work with local communities to provide data on our activities and advice on reducing their own water usage, decreasing the amount of water we need to take.

Our environmental performance is exceptionally high – we have been industry leaders in two of the last three assessed years. Environmental standards continue to tighten and in order to meet European Water Framework Directive (WFD) requirements we need to play our part in reducing the volumes of nutrients reaching rivers. In addition, focus is growing on persistent chemicals that appear in sewage effluent.

There is growing pressure from stakeholders to know more about the operation of CSOs and we need to invest in monitoring equipment to provide this information.

The government’s biodiversity strategy requires us to conserve and enhance our land to ensure that there is no net loss of biodiversity.

Our strategy to 2020 and beyond

- Delivering water abstraction reductions alongside other outcomes through the integrated water supply grid.
- Innovating in our delivery of the required standards, encouraging other stakeholders and regulators to take a collaborative approach that achieves the outcomes required on a catchment basis in a low cost, low carbon way.
- Programming work to meet the WFD over a longer time span and focusing investment in this AMP on good scientific evidence and delivering greatest value.
What will we be doing to 2020?
We will continue a range of innovative solutions that we have pioneered.

Reducing water abstraction
Completion of our integrated water supply grid will reduce abstraction pressures on the Wyley and Bourne rivers. We will also investigate the environmental impact of a number of other sources to ensure the quantity of water we are permitted to abstract would not damage the environment.

Customers want us to reduce the amount of water we export from our Mere source. We intend to use this opportunity to pilot a financial incentive as part of Ofwat's proposed Abstraction Incentive Mechanism. We will also undertake investigations to confirm the environmental impact of abstractions before agreeing a long-term solution.

Delivering the NEP
We have a series of further investments to meet our obligations under the National Environment Programme. These include meeting the requirements of the Urban Wastewater Treatment Directive, the Countryside and Rights of Way Act and the Habitats Directive.

Delivering the 2nd River Basin Management Plan
Together with the EA we have defined a programme of no-regrets investment that moves towards the goal of the WFD (most notably phosphorus reduction) in an affordable, sustainable, efficient way based on sound science, while recognising the uncertainties caused by the misalignment of timing between the EA's river basin plans and the water industry AMP periods. We are planning to upgrade the performance of 47 sewage treatment works and to carry out investigations within our area to improve the evidence base and reduce uncertainty around further improvements in the future.

Assessing the prevalence of EU priority substances
We will continue investigating the occurrence of substances like ibuprofen and fire retardant chemicals in sewage discharges. Working with Defra and the EA, we will identify cost effective solutions for reducing the concentration of these in the water environment.

Improvements to combined sewer overflows (CSOs)
We will ensure that all CSOs that present a risk to the environment or the public are monitored by 2020 and tackle misconnections of surface water draining into foul sewers to reduce the frequency of CSO operation.

Biodiversity of landholdings
A number of specific projects have been identified through the NEP to deliver biodiversity enhancements. We will also aim to deliver wider biodiversity benefits and wildlife connectivity as part of the source protection work of our catchment management team, particularly in the Poole Harbour catchment and upstream of our reservoirs. The sensitive management of our landholdings and wider biodiversity work will contribute towards the delivery of our ‘no net biodiversity loss’ outcome and assist in improving water quality at source.

Our commitments

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA’s Environmental Performance Assessment</td>
<td>Above average</td>
<td>Industry leading</td>
</tr>
<tr>
<td>Compliance with abstraction licences</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Abstractions at Mere exported</td>
<td>447 Ml/a</td>
<td>100 Ml/a</td>
</tr>
<tr>
<td>Length of river with improved flow</td>
<td>New measure</td>
<td>99 km</td>
</tr>
<tr>
<td>River water quality improved</td>
<td>New measure</td>
<td>70 water bodies</td>
</tr>
<tr>
<td>Monitoring CSOs</td>
<td>33%</td>
<td>100%</td>
</tr>
<tr>
<td>% land actively managed for biodiversity</td>
<td>47%</td>
<td>100%</td>
</tr>
</tbody>
</table>

We will report annually on our performance against these measures. Measures with direct financial incentives are highlighted in pink and further details are given in Technical Appendix T1.
Defra’s river catchment pilot projects are focused on meeting the European Water Framework Directive, and national and local requirements. We are organising one of these projects in south Dorset. By bringing together a range of organisations, using sound science and being innovative, we believe there is a better chance of tackling the most important issues successfully.

The Dorset Frome and Piddle are chalk rivers that are nationally recognised for their salmon and trout fishing. The rivers flow through an agricultural area and into the sea at Poole Harbour, which is an important waterbody and wetland for wildlife, shellfishing and recreation.

Many organisations in the catchment of the Frome, Piddle and Poole Harbour, including Wessex Water, had worked in isolation in the past. They have not always seen interconnections or opportunities to achieve more through better co-operation. We saw that bringing various parties together would be a good way to identify and resolve issues which would benefit from a collaborative approach.

We started by bringing together 14 organisations into a steering group. Information was gathered from government agencies, water companies, data from water quality monitoring trailers, existing projects in the area and local knowledge. This helped the steering group and task groups to identify the main issues affecting the water environment; notably nutrients, sediment levels, channel alterations and water flow rates. Both empirical data and mathematical models were used to map the issues affecting the watercourses in question, helping stakeholders to understand what is happening. Talks and visits have helped a range of interests to be involved, beyond those in the main steering group.

Then, an action plan was developed, based on some new ideas as well as existing projects and plans. The organisations involved will now work on implementing the agreed actions and continue to gather evidence on the catchment. We expect this action plan to form the basis of the River Basin Management Plan for the area. This is currently being developed by the Environment Agency.

By working in this way, we and the other partners have identified many issues that are interrelated, and can be tackled best through closer collaboration and by extending existing action, such as agronomic advice for farmers and landowners.

Bringing various parties together is a good way to identify and resolve issues which would benefit from a collaborative approach.
Case study: The water supply grid

The water supply grid is an eight-year project to improve the security of supply for customers. New pipework is connecting areas of our region with a water deficit to areas with surplus water. This will allow us to continue meeting demand for water during drought periods as well as in normal weather conditions. It will also help us reduce the water we abstract as required in some places to improve river flows and protect their ecology.

The project comprises more than 25 new schemes across Somerset, Wiltshire and Dorset, involving more than 150 km of pipeline, 30 new pumping stations and 11 new storage tanks. The diagram shows the main new links, including a major north-south pipeline running from north of Poole to the centre of our region, and a number of smaller connections and extensions. By joining up our main supply pipes in this way, we are able to do a number of things at once: meet demands for water, deal with groundwater sources suffering from higher nitrate levels, and deliver environmental benefits without developing new water resources or providing additional treatment.

Careful construction is very important as our region is environmentally rich, containing many protected species and a variety of designated sites including Sites of Special Scientific Interest (SSSIs), County Wildlife Sites, World Heritage Sites and Areas of Outstanding Natural Beauty (AONB). We intend to build the new pipelines in ways that cause minimum disruption to local communities and minimise construction traffic movements. So, we carry out comprehensive environmental and engineering surveys, which help us understand and address environmental and community considerations, both during design and construction. We use construction techniques such as trenchless technology to pass under sensitive river locations, railways and major roads, and we re-use excavation and construction materials where feasible.

We are consulting local interest groups and members of the public to ensure their views are incorporated into pipeline routes and the design of new buildings. The project, which began in 2010, will be completed in 2018, with some elements already finished in 2013.

The project comprises more than 25 new schemes across Somerset, Wiltshire and Dorset, involving more than 150 km of pipeline, 30 new pumping stations and 11 new storage tanks.
Why is this important?

Sewage flooding is one of the worst service failures to affect customers. Ensuring drainage services work effectively is one of our key targets.

We continuously educate our customers about what can and cannot be flushed down the toilet and lobby manufacturers of so-called ‘flushable’ products about the blockages that result.

In addition, with a changing climate and an increase in impermeable areas connected to the sewer system, we need to make sure that our pipes have sufficient capacity to cope.

Our performance in minimising the number of sewage flooding incidents and the number of properties classed as ‘at risk’ is excellent. We are consistently upper quartile performers in this level of service. To remain there, we need to invest in education, lobbying, and regular maintenance of our sewer network as well as enhancing its capacity where additional properties are built or levels of impermeable area increase.

Our strategy to 2020 and beyond

• Tackling sewer blockages – continuously educating our customers through targeted campaigns.
• Providing adequate capacity – investing where development occurs and where sewers are already at the limit of their capacity during heavy rainfall.
• Working in partnership with other risk management authorities to reduce flood risk.
What will we be doing to 2020?

**Education**
We will enhance our activity in educating all customers about what they should and should not flush down the toilet or pour down the sink. This will be a multi media campaign using apps, web based tools, customer magazines, targeted leaflet drops, messages on bills, classroom experiments, etc.

**Lobbying**
Manufacturers of so called ‘flushable’ products are responding to the nation’s growing attitude towards disposing of ‘one-use’ products, often using the toilet as a waste disposal unit. We will continue to demonstrate the consequences of these products and lobby for more responsible labelling.

**Sewer cleansing and maintenance**
Cleansing sewers from the build-up of fats, oil and grease as well as from grit, silt and root ingress all helps to maintain the free flow of sewage and prevent flooding. We will increase our activity in this area and continue to target locations of high risk.

We will use real-time information for high-risk locations in an attempt to predict problems before they affect customers or the environment.

**Accommodating development**
We will work with developers to ensure new development follows sustainable drainage principles. Where necessary we will provide additional capacity in downstream sewers by separating surface water flow from foul flows and providing additional attenuation.

Our biggest single investment will be in North Bristol where large numbers of new properties generate the need for significant investment in sewer capacity.

**Partnership working**
We will work closely with lead local flood authorities to jointly deliver schemes where we have common objectives to reduce flood risk to properties.

**Maintaining a stable level of flooding risk**
We will invest to ensure that the number of properties at risk of internal flooding is reduced to 95 from the current target of 105.

In addition, we will focus on external areas such as gardens, roads and public spaces, using a risk-based approach, to ensure risk levels are kept stable in the face of other factors that will increase flooding, eg, climate change and increasing areas of impermeable land draining to the public sewer network.

Our investment approach will be many faceted – from local attenuation and separation of storm flows, to infiltration sealing and sewer enlargement.

We will pioneer a method for measuring the risk of all sewer flooding in addition to following well proven industry approaches for measuring risk for internal flooding risk.

**Our commitments**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal flooding from public sewers</td>
<td>1.8 incidents per 10,000 properties</td>
<td>1.7 incidents per 10,000 properties</td>
</tr>
<tr>
<td>Risk of all flooding from public sewer due to hydraulic capacity</td>
<td>New measure</td>
<td>Stable compared to 2015</td>
</tr>
</tbody>
</table>

We will report each year on our performance against these measures. Measures with direct financial incentives are highlighted in pink and further details are given in Technical Appendix T1.
Resilient services

Why is this important?

The resilience of essential services is important for government, regulators and customers alike. They want to know that our services will be provided during acute, disruptive events, or in the face of more gradual long-term changes. This concern has been heightened by challenging weather in the last few years.

Customer research consistently shows that reliable water supplies and sewerage services are seen as basic requirements.

We have not had to impose any restrictions on water use since 1976 and have kept leakage under control throughout the recent cold winters.

We take resilience and business continuity seriously – they are part of the ways we manage risk. We have protected critical assets at our water treatment works and sewage pumping stations to keep them working during flood events and protection of our water supply sites against malicious attack is largely complete.

In the long term weather events previously regarded as unusual will be more frequent due to climate change. We need to continue improving the resilience of our water and sewerage systems under extreme events to match the level of service that customers want and are prepared to pay for.

Our strategy to 2020 and beyond

Our general approach to achieving the outcome will be a combination of:

- conventional ways involving building physical assets, such as service reservoirs for water storage, additional treatment works, larger stormwater storage, and protection of assets
- more innovative approaches such as improved monitoring and systems providing early warning of problems, together with more focus on demand management and trading water between water companies.
What will we be doing to 2020?

Completing our integrated water supply grid
Our integrated water supply grid will enable us to move water around our region, improving our ability to deal with any unforeseen problems at individual water supply sources.

Currently about 15% of our customers are served by single sources which, should they fail catastrophically for example due to pollution of the source or fire, would cause an extended loss of supply. The grid will enable us to reduce the number of customers served by a single source. About 42,000 properties, supplied from our largest treatment works at Maundown, will remain that cannot be supplied from elsewhere. However, Maundown obtains raw water from two sources and is a modern works with enhanced security.

Improving the monitoring of our supply and sewerage networks
We began a pilot trial of real-time monitoring of the water supply network in Weymouth in 2012. It demonstrated the potential of this approach to improve customer service by earlier warning and identification of bursts.

We will roll out real-time monitoring to the supply network together with improved centralised customer and operational intelligence capabilities. Our modelling has shown that with improved real-time monitoring we can maintain our level of customer service, as measured by the number of supply interruptions, without increasing the length of mains replaced each year. We already have small scale trials of real-time monitoring in the sewerage network and will extend these further during AMP6.

Improving security at critical sites
Under the guidance of the Security and Emergency Measures Direction we will be investing in additional security at critical waste water sites, having completed the programme on our supply sites in AMP5.

Our commitments

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictions on water use (hosepipe bans)</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Properties suffering unplanned supply interruptions &gt;6 hours</td>
<td>1,000 pa</td>
<td>750 pa</td>
</tr>
<tr>
<td>Properties supplied by a single source of water</td>
<td>78,000</td>
<td>42,000</td>
</tr>
<tr>
<td>Water mains bursts</td>
<td>&lt;2,000 pa</td>
<td>&lt;2,000 pa</td>
</tr>
<tr>
<td>Collapses/bursts on sewerage network</td>
<td>&lt;300 pa</td>
<td>&lt;300 pa</td>
</tr>
</tbody>
</table>

We will report each year on our performance against these measures. Measures with direct financial incentives are highlighted in pink and further details are given in Technical Appendix T1.
Why is this important?

In the long term, a hallmark of a sustainable company would be that it has eliminated greenhouse gas emissions from its year-to-year operations.

Consequently, reducing our carbon footprint is one of our sustainability goals and part of a national effort to decarbonise the economy. We also need to insulate ourselves from the growing monetary cost of energy and carbon. As water companies are substantial energy users, and with high energy prices and new taxes, it makes economic sense to increase our energy efficiency and power generation.

Our carbon footprint has not changed a lot in the last 25 years. While we use more electricity than in the early-1990s, the national grid is less carbon-intensive now. We avoid energy use in various ways and are working to improve the energy efficiency of pumps and treatment works. The renewable electricity that we generate ourselves is equivalent to 17% of our power needs. In the wider group we are pursuing further opportunities, such as the food waste digestion facility at Bristol sewage treatment works developed by our subsidiary company GENeco.

Increasingly active management of our energy use, on top of favourable weather, led to a reduction in our carbon footprint in 2011-12. The exceptionally wet weather in 2012 led to the following year’s increase.

Our strategy to 2020 and beyond

- Firstly, energy use will be avoided by managing the volumes we pump and treat (eg, catchment management, leakage reduction, surface water management).
- Secondly, where energy is required it will be used efficiently, by monitoring and modifying the equipment we use.
- Thirdly, we will switch our energy use toward renewable sources, building on the amount we already generate – mainly from combined heat and power units supplied by sludge digester gas.
- Fourthly, we are investigating options and technologies for offsetting our remaining emissions, such as storing carbon by turning organic matter into inert material.
What will we be doing to 2020?

**Action 1: Energy avoidance**
Reducing leakage, managing demand for water and using catchment management to limit the need for additional water treatment, will help to avoid unnecessary energy use. Meanwhile, work with other agencies to improve surface water management will reduce energy consumption at sewage pumping stations.

**Action 2: Energy efficiency – water supply**
We will extend monitoring of energy use in our water supply network to enable focused optimisation. We will work on more efficient operation of pumps and increase their efficiency through testing, maintenance and procurement. We will also conduct site audits at water treatment works.

**Action 3: Energy efficiency – waste water**
We will carry out a comprehensive programme of site audits to optimise secondary sewage treatment processes, particularly focusing on aeration. We will run an energy incentives and awareness programme. We will also keep a close eye on technology innovation and conduct trials of the most promising options.

**Action 4: Renewable energy generation**
We will further enhance the capacity of our Taunton anaerobic digestion facility, allowing more raw sludge to be brought from adjacent areas, increasing power generation.

**Action 5: Offsetting and carbon storage**
We will pursue opportunities to trial pyrolysis of waste material generated at sewage treatment works. This could eventually lead to the production of biochar as a method of carbon storage.

**Our commitments**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Current</th>
<th>By 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas emissions</td>
<td>149,000t</td>
<td>119,000t</td>
</tr>
<tr>
<td>Proportion of energy self-generated</td>
<td>18%</td>
<td>24%</td>
</tr>
</tbody>
</table>

We will report each year on our performance against these measures. Measures with direct financial incentives are highlighted in pink and further details are given in Technical Appendix T1.

We will continue to make energy efficiency savings, aiming to offset increases in power demand caused by quality investment and population growth. We aim to increase electricity generation from sludge biogas to 56 GWh/year. In so doing, our renewable energy generation will increase by a third from 18% today to 24% by 2020.

In terms of our overall carbon footprint, a range of possibilities is shown in the graph on the opposite page depending on the rate at which the national grid decarbonises. The dotted line shows a halfway path which would result in an 20% reduction to the 119,000 tonnes referred to above.
Part 3 – The efficient cost of delivery

3.1 Wholesale water
3.2 Wholesale sewerage
3.3 Assessing and improving efficiency
3.4 Wholesale revenues
3.5 Retail price control for households
3.6 Retail price control for non-households
3.7 Financing the plan
3.8 Allocating risk and reward and sharing outperformance
3.9 Revenues, bills and financial projections

Price basing: unless otherwise stated all financial values presented in this section are at 2012-13 prices, and historical outturn values have been restated to 2012-13 prices using the Retail Prices Index (RPI) as published by the Office for National Statistics.

Rounding: figures in tables may not add due to rounding differences.
### 3.1 Wholesale water

The following table sets out the costs of the activities we need to carry out to deliver our committed performance levels. In the supporting documents chapter W1 provides a summary of the wholesale water business plan, with more detailed explanations included in separate chapters for each activity. The icons next to the activities in the table show the outcomes influenced by each activity – in each case activities deliver multiple outcomes.

<table>
<thead>
<tr>
<th>Wholesale water – the cost of delivery</th>
<th>Associated outcomes</th>
<th>Total expenditure 2015-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter W2</strong></td>
<td>![Icon]</td>
<td>£400m</td>
</tr>
<tr>
<td>Continuing to deliver water services at the existing, industry leading, level:</td>
<td>- ![Icon]</td>
<td></td>
</tr>
<tr>
<td>- operating and maintaining our network and treatment works effectively and efficiently so they provide excellent levels of service to customers, now and into the future</td>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td>- using risk-based maintenance strategies to ensure investments are optimised and costs are kept to a minimum in the AMP without storing up unaffordable problems for future generations.</td>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td><strong>Chapter W3</strong></td>
<td>![Icon]</td>
<td>£68m</td>
</tr>
<tr>
<td>Balancing the supply and demand for water:</td>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td>- fitting a meter free of charge when someone moves house – to give customers greater control over their bills and help them to save money when they save water</td>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td>- promoting water efficiency</td>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td>- serving the demand from new developments by reinforcing our network.</td>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td><strong>Chapter W4</strong></td>
<td>![Icon]</td>
<td>£115m</td>
</tr>
<tr>
<td>Improving the resilience of our services Connecting our supply network into a grid to:</td>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td>- give our customers more secure supplies</td>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td>- improve river flows in environmentally sensitive areas</td>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td>- tackle deteriorating raw water quality</td>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td>- allow us to sell water to neighbouring companies with supply/demand deficits.</td>
<td>![Icon]</td>
<td></td>
</tr>
</tbody>
</table>
## Wholesale water – the cost of delivery continued

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Outcomes and Associated Expenditure 2015-2020</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| W5       | Maintaining and enhancing drinking water quality:  
- improving our treatment works and distribution networks  
- catchment management to tackle quality problems at source rather than removing the contaminants at the treatment works. | £64m     |
| W6       | Reducing leakage:  
- proactive management of our supply network, including a targeted programme of pipe replacement and pressure control  
- active leak detection and repair  
- reducing leakage from customers’ pipes, through metering and smart technologies  
- a commitment to fix customer reported leaks within a day. | £50m     |
| W7       | Enhancing the water environment:  
- reducing abstraction from our sources to improve the flow in rivers and their ecology in accordance with the National Environment Programme  
- enhancing the habitats and biodiversity at our sites. | £13m     |
| W8       | Improving service through real-time monitoring:  
- improving service by receiving advance warning of potential problems and fixing them before they affect customers; saving customers money by allowing us to better target our maintenance work. | £11m     |
|          | **Total wholesale water expenditure** | **£721m** |

- Affordable bills  
- Excellent service for customers  
- Reduced leakage  
- Highest quality drinking water  
- Rivers, lakes, and estuaries protected  
- Resilient services  
- Reduced carbon footprint
Total expenditure is increasing by £86m between AMPs 5 and 6, but new and cleverer ways of working, eg, through trading and the use of catchment management, mean our proposed spend is £74m less than it would otherwise be had we taken traditional asset-focused approaches.

<table>
<thead>
<tr>
<th>Wholesale water expenditure (£m)</th>
<th>AMP5</th>
<th>AMP6</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>The water grid (W4)</td>
<td>113</td>
<td>115</td>
<td>2</td>
</tr>
<tr>
<td>Metering, including on change of occupier (W3)</td>
<td>14</td>
<td>27</td>
<td>13</td>
</tr>
<tr>
<td>Growth and new development (W3)</td>
<td>38</td>
<td>41</td>
<td>3</td>
</tr>
<tr>
<td>Drinking water quality (W5)</td>
<td>55</td>
<td>64</td>
<td>9</td>
</tr>
<tr>
<td>National Environment Programme (W7)</td>
<td>6</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Leakage (W6)</td>
<td>45</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>Real-time network monitoring (W8)</td>
<td>0</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Ongoing costs to provide industry leading services (W2)</td>
<td>262</td>
<td>274</td>
<td>12</td>
</tr>
<tr>
<td>Business rates (W2)</td>
<td>68</td>
<td>83</td>
<td>15</td>
</tr>
<tr>
<td>Power costs (W2)</td>
<td>34</td>
<td>43</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total expenditure</strong></td>
<td>635</td>
<td>721</td>
<td>86</td>
</tr>
</tbody>
</table>

Relevant supporting chapters are referenced in brackets.

**The water grid project**

We will be completing our regional water grid in 2018. At our last price determination it was agreed the project should span more than one AMP period. Once complete the grid will:

- increase the resilience of water supplies by significantly reducing the number of properties reliant on a single water source
- enable us to improve flows in environmentally sensitive rivers in Wiltshire by reducing abstractions without compromising our ability to supply our customers in times of drought
- allow us to deal with deteriorating raw water quality at disparate sources without costly carbon-intensive investment.

Working with Sembcorp Bournemouth we have developed a support agreement for alternative reciprocal water resources that will provide the same level of resilience as the original plan for water treatment works redevelopment.

The grid was already innovative in the way that it holistically addressed all the issues above, but this new trading approach, together with a detailed review of the most advantageous route for the transmission main, has saved a further £37m in AMP6.

**Metering**

Following completion of our metering and tariff trial in 2012 we will meter properties on change of occupier. Our metering study and subsequent customer research has proved the cost benefit case, and shown that this is the most effective way to extend metering in a way that customers support, giving them greater control over their bills.

Metering is a key route to promoting further engagement and behavioural change with customers and through AMP6 we will continue to innovate in the way that we engage with them to deliver better environmental and social outcomes.

**Growth and new development**

Expenditure on growth and development will increase as the economy returns to growth over AMP6. This will be balanced to some extent by a growth in receipts from infrastructure charges and new connections, offsetting some of the £3m increase shown in the table above.

**Quality improvements**

Our drinking water quality programme is based on risk assessments and drinking water safety plans, and has been agreed with the Drinking Water Inspectorate. Options for maintaining and improving compliance and customer satisfaction with the quality of the water they received have been subject to comprehensive evaluation. In the Porlock area we are proposing source and network rationalisation rather than new treatment processes to remove taste and odour. Following the success of our new catchment management approaches in AMP5, we will extend this approach for sites that are predicted to exceed the nitrate standard rather than use the conventional approach of treatment. Taken together these sustainable approaches reduce investment costs by £30m with lower operating costs and a reduced future maintenance burden as further benefits.
We have worked with the Environment Agency (EA) in developing the National Environment Programme. Environmental improvements will follow a staged process of risk assessment by the EA and investigations and trials by Wessex Water and only when the environmental benefit is certain will the project proceed to implementation and subsequent monitoring. This enables delivery to be spread over a longer time period and ensures the identification of the best environmental solution.

**Leakage**
Reducing leakage is one of our customers’ highest priorities. Additional investment in leakage is required to deliver the proposed improvements in reported leak repair time and the research into the options for achieving our ambitious long-term target of reducing leakage by 25% by 2040.

We continue to reduce our power costs through energy efficiency initiatives. This, together with increasing self-generation, principally from biogas combined heat and power, means we aim to reduce grid electricity use to what will be the lowest level since 2000-01.

**Real-time network monitoring**
Installing real-time network monitoring will be essential to allow us to obtain the most value from the proposed level of maintenance investment. During the last price review we anticipated that it would be necessary to increase the rate of mains replacement from the current level of 50km per year to 70km per year. With the roll out of real-time monitoring to improve the response times to network incidents, this increase can now be deferred to AMP7, saving £18m on replacement costs. Real-time network monitoring will cost £11m so the net saving in AMP6 is £7m.

**Ongoing operating and maintenance costs**
Although we have amongst the lowest maintenance expenditure per asset in the industry the overall amount is driven by our comparatively large numbers of treatment and distribution assets. These are required to deliver services to a customer base spread evenly across an undulating geographical region in rural areas and small market towns. We operate three times as many assets per customer as the average company. So our costs per customer, although efficient, are higher.

We have a growing and ageing asset base, e.g., our stock of short-life mechanical and electrical assets and IT systems are ageing faster than the rate of replacement. Additional expenditure is needed to maintain customer service and an acceptable level of risk, resulting in an underlying increase of £12m.

**Business rates**
Our business rates bill for the five years will be higher because, although we are not assuming any increase in real terms in business rates over the period, during AMP5 we benefited from a period of transitional relief which will not be repeated in AMP6. This benefit was reflected in our 2009 determination and therefore in customers’ bills.

**Energy costs**
Energy prices are predicted to increase significantly above RPI over the period, with Ofwat forecasting energy prices rises by 30% in real terms. Our own forecast, undertaken at a localised level but taking into account the expectations for price increases at a regional level, is similar. We expect our input energy prices to increase by 25% in real terms by 2020 from the current level.
3.2 Wholesale sewerage

The following table sets out the costs of the activities we need to carry out to deliver our committed performance levels. In the supporting documents chapter S1 provides a summary of the wholesale sewerage business plan, with more detailed explanations included in separate chapters for each activity. The icons next to the activities in the table show the outcomes influenced by each activity – in each case activities deliver multiple outcomes.

<table>
<thead>
<tr>
<th>Wholesale sewerage – the cost of delivery</th>
<th>Associated outcomes</th>
<th>Total expenditure 2015-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter S2</td>
<td>Continuing to deliver sewerage services at the existing, industry leading, level:</td>
<td>£750m</td>
</tr>
<tr>
<td></td>
<td>• operating and maintaining our network and treatment works effectively and efficiently so they provide excellent levels of service to customers, now and into the future</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• using risk-based maintenance strategies to ensure investments are optimised and costs are kept to a minimum in the AMP without storing up unaffordable problems for future generations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• educating our customers regarding what not to throw down the toilet in order to prevent blockages and reduce incidents of flooding and restricted toilet use.</td>
<td></td>
</tr>
<tr>
<td>Chapter S3</td>
<td>Increasing the capacity of our sewerage assets:</td>
<td>£172m</td>
</tr>
<tr>
<td></td>
<td>• investments in response to the impact that urban creep and climate change is having – making our sewers more resilient to flooding in heavy rainfall events</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• anticipating the impact that new development has on our collection capacity by enlarging the carrying capacity of our sewers and the treatment capacity of our treatment works</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• special focus in North Bristol where significant new development has generated the need to continue delivering our strategic trunk sewer network.</td>
<td></td>
</tr>
<tr>
<td>Chapter S4</td>
<td>Improving the resilience of our services:</td>
<td>£4m</td>
</tr>
<tr>
<td></td>
<td>• investments to ensure we can continue to maintain services even in emergency conditions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• increasing the resilience of our highest risk assets from security threats.</td>
<td></td>
</tr>
<tr>
<td>Chapter</td>
<td>Description</td>
<td>Associated outcomes</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>S5</td>
<td>Assuming responsibility for private pumping stations:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- transferring ownership of private pumping stations that currently serve two or more properties to remove maintenance liability from our customers.</td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>Increasing the amount of renewable energy we generate:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- investment to increase our ability to digest more of our sludge in order to produce more biogas for electricity production to reduce customer bills and our carbon footprint.</td>
<td></td>
</tr>
<tr>
<td>S7</td>
<td>Enhancing the water environment:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- improving our sewerage assets to benefit the water environment in accordance with the National Environment Programme</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- starting the delivery of the Water Framework Directive before the river basin management plans are published in 2016</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- making investments to reach good ecological status of water bodies based on sound scientific evidence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- using innovative catchment management and catchment permitting approaches to keep costs down and deliver multiple benefits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- extending the public sewer network where it has been demonstrated that this has a net benefit in improving the environment.</td>
<td></td>
</tr>
<tr>
<td>S8</td>
<td>Improving service through real-time monitoring:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- investments to ensure we can see what is occurring in the network in real-time to improve levels of service to customers and the environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- ensuring we deliver our commitment to monitor all sewer overflows that present a risk to the environment or the public by 2020.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total wholesale sewerage expenditure</strong></td>
<td></td>
</tr>
</tbody>
</table>
Total expenditure is increasing by £273m between AMPs 5 and 6, but new approaches to delivery through the use of catchment services and delivering improvements over a longer time period mean our proposed spend in AMP6 is £134m less than it would otherwise be had we taken traditional asset-focused approaches.

<table>
<thead>
<tr>
<th>Wholesale sewerage expenditure (£m)</th>
<th>AMP5</th>
<th>AMP6</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality improvements (S7)</td>
<td>92</td>
<td>156</td>
<td>64</td>
</tr>
<tr>
<td>Strategic investment in North Bristol sewers (S3)</td>
<td>0</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Transfer of private sewers (S2)</td>
<td>30</td>
<td>49</td>
<td>19</td>
</tr>
<tr>
<td>Transfer of private pumping stations (S5)</td>
<td>0</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Increase in capacity to prevent flooding (S3)</td>
<td>106</td>
<td>133</td>
<td>27</td>
</tr>
<tr>
<td>Increased resilience of our assets (S4)</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Real-time network monitoring (S8)</td>
<td>0</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Ongoing costs to provide industry leading services (S2)</td>
<td>496</td>
<td>528</td>
<td>32</td>
</tr>
<tr>
<td>Business rates (S2)</td>
<td>48</td>
<td>56</td>
<td>8</td>
</tr>
<tr>
<td>Power costs (S2)</td>
<td>81</td>
<td>104</td>
<td>23</td>
</tr>
<tr>
<td>Sludge enhancement, incl renewable energy (S6)</td>
<td>7</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Cost of operating AMP5 quality schemes (S2)</td>
<td>3</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>866</td>
<td>1,139</td>
<td>273</td>
</tr>
</tbody>
</table>

Relevant supporting chapters are referenced in brackets.

**Quality standards**
European environmental legislation is driving a larger investment programme in AMP6 to meet tighter quality standards. This could be significantly higher but we are proposing a phased approach to delivering the Water Framework Directive to ensure investment is based on good scientific evidence and is as cost efficient as possible.

We are also adopting innovative approaches which will not only deliver the same outcomes at lower cost than traditional approaches, but also provide multiple benefits to the environment. Taken together these approaches will save £134m of expenditure in AMP6 and a minimum of £63m by 2027.

**Strategic investment**
Population growth in the region is forecast to continue at above the national average and are now seeing the significant development of nearly 20,000 properties in the north of Bristol that has been planned for many years. We will be investing in our infrastructure to cope with additional flows on a part of the sewerage network that is currently overloaded. Investment in AMP6 will complete a trunk sewer network around the north of Bristol, and begin a further strategic tunnel to serve development on the old Filton airfield and surrounding area that will extend into AMP7.

**Private sewers and pumping stations**
In October 2011 the length of sewers we are responsible for doubled as we adopted sewers that were previously privately owned. During this AMP we will see the full five-year costs of this change. By October 2016 we will also have assumed responsibility for the operation and maintenance of around 1,000 privately owned sewage pumping stations, an increase of 70% to our current asset base.
Increasing capacity
Sewage flooding is the worst service failure a customer can experience and our commitment to keep flooding risk stable in the face of population growth, urban creep and climate change requires us to invest more in sewer capacity through this AMP.

We will increase our partnership working with other flood risk management authorities and manage the likelihood of flooding incidents both inside and outside properties. We have put forward proposals to raise the priority and tackle incidents where customers suffer restricted toilet use, which we consider an unacceptable level of service. We will be adopting innovative and more sustainable approaches to providing sewerage capacity where possible instead of simply building bigger assets.

Real-time network monitoring
We will also continue to drive down the number of flooding and pollution incidents through investment in real-time monitoring of our sewer network and overflows – which will alert us to situations where blockages are about to cause service failures. In addition, higher profile campaigns to encourage the correct use of the sewerage network and prevent the wrong things being flushed down the toilet and increases in sewer cleansing will further improve our service levels.

Ongoing operating and maintenance costs
We are holding maintenance expenditure as low as possible despite a growing and ageing asset base. Our industry leading approach to managing risk in our sewer network means we will be keeping infrastructure maintenance at the AMP5 level, saving £13m compared to our proposals during the last price review. Our stock of short life, mechanical and electrical assets are ageing faster than the current rate of replacement and additional expenditure of £32m is required to maintain service and an acceptable level of risk.

Business rates
The business will be subject to a rates revaluation in 2017. We expect to see an increase in our total valuation figure and therefore in the associated ratings bill, commensurate with the growth in our asset base.

Energy costs
Energy prices are predicted to increase significantly above RPI over the period, with Ofwat forecasting energy prices rises by 30% in real terms. Our own forecast, undertaken at a localised level but taking into account the expectations for price increases at a regional level, is similar. We expect our input energy prices to increase by 25% in real terms by 2020 from the current level. We continue to reduce our power costs through energy efficiency initiatives. This, together with increasing self-generation, principally from biogas, means we aim to reduce grid electricity use to what will be the lowest level since 2000-01.

We will be continuing our strategy to extract energy from sludge through anaerobic digestion. Our plans for AMP6 will increase our digestion capacity to 97% of all sludge produced and increase the amount of renewable energy generation so that by 2020 nearly a quarter of our energy requirement is self-generated.
3.3 Assessing and improving efficiency

Wessex Water has consistently been assessed as operating at or close to the efficiency frontier.

<table>
<thead>
<tr>
<th></th>
<th>AMP4</th>
<th>PR09</th>
<th>2012-13†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating expenditure efficiency – supply</td>
<td>Band A</td>
<td>Upper B</td>
<td>Band A/B</td>
</tr>
<tr>
<td>Operating expenditure efficiency – waste</td>
<td>Band A</td>
<td>Benchmark</td>
<td>Band A</td>
</tr>
<tr>
<td>Capital expenditure efficiency – supply</td>
<td>Leading</td>
<td>Upper quartile</td>
<td>Upper quartile</td>
</tr>
<tr>
<td>Capital expenditure efficiency – waste</td>
<td>Upper quartile</td>
<td>Upper quartile</td>
<td>Upper quartile</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>n/a</td>
<td>n/a</td>
<td>Band A</td>
</tr>
</tbody>
</table>

† Based on internal assessment of industry data

At the last price review, the last formal assessment, Ofwat’s econometric and unit cost modelling showed this continued to be the case and Ofwat set efficiency targets accordingly.

Since then we have outperformed Ofwat’s determination in both capital and operating expenditure through further efficiency. We have achieved this by finding innovative solutions to delivering outputs and through a culture that keeps a tight control on costs across the value chain. In particular we have constrained wage increases below inflation, reduced the costs of pension schemes and made efficiencies in power use.

We have combined efficient delivery together with leading levels of customer service and environmental performance.

Sections 3.1 and 3.2 explain how we have taken an innovative approach in developing the scope of our plan, identifying dynamic efficiencies that reduce expenditure in AMP6 by more than £200m. We have been helped in this by a price control methodology that has emphasised total expenditure rather than focusing on separate incentives for capital and operating expenditure.

In addition we have set ourselves the target of further efficiency savings of 6% by 2020 compared to 2013 – reducing our total expenditure by an additional £76m.

In total our plan incorporates future efficiency savings that reduce expenditure in APM6 by around £280m.

Our productivity improvements will allow us to absorb future real terms input price increases. We will absorb the annual real terms increases in construction costs forecast at 1.0% above RPI, and the expected above average input cost increases in power, labour and chemicals costs up to 2020 which would otherwise mean our operating costs increasing by 1.0% above RPI.

This is a challenging target for a company that already operates at or near the efficiency frontier and means customers are now taking all the benefit of the first 6% of productivity improvements in the form of lower bills, before the company has any opportunity to take some of the benefits of any further efficiency through additional returns.

Further details of our analysis of efficiency are in Chapter F2 of the supporting documents.

<table>
<thead>
<tr>
<th>Wholesale expenditure (£m)</th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
<th>2019-20</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure at current efficiency</td>
<td>360</td>
<td>385</td>
<td>411</td>
<td>395</td>
<td>385</td>
<td>1,935</td>
</tr>
<tr>
<td>Productive efficiency target</td>
<td>(6)</td>
<td>(11)</td>
<td>(16)</td>
<td>(19)</td>
<td>(24)</td>
<td>(76)</td>
</tr>
<tr>
<td>Expenditure in price control</td>
<td>354</td>
<td>374</td>
<td>395</td>
<td>376</td>
<td>361</td>
<td>1,860</td>
</tr>
<tr>
<td>% efficiency saving</td>
<td>2%</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
<td>6%</td>
<td>-</td>
</tr>
</tbody>
</table>
## 3.4 Wholesale revenues

The following tables show our assessments of required revenues during the period for the two wholesale price controls.

### Wholesale revenue requirement – water

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay As You Go Expenditure (PAYG)</td>
<td>86.6</td>
<td>90.8</td>
<td>84.2</td>
<td>73.4</td>
<td>65.1</td>
<td>400.0</td>
</tr>
<tr>
<td>Depreciation of RCV</td>
<td>33.2</td>
<td>35.0</td>
<td>36.9</td>
<td>38.4</td>
<td>39.7</td>
<td>183.2</td>
</tr>
<tr>
<td>Pension deficit repair</td>
<td>1.5</td>
<td>1.5</td>
<td>1.4</td>
<td>1.3</td>
<td>1.3</td>
<td>7.0</td>
</tr>
<tr>
<td>AMP5 adjustments</td>
<td>17.2</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>25.3</td>
</tr>
<tr>
<td>Taxation</td>
<td>6.1</td>
<td>4.8</td>
<td>3.2</td>
<td>2.3</td>
<td>2.9</td>
<td>19.3</td>
</tr>
<tr>
<td>Allowed return on RCV</td>
<td>24.2</td>
<td>34.9</td>
<td>37.4</td>
<td>44.3</td>
<td>48.4</td>
<td>189.3</td>
</tr>
<tr>
<td><strong>Revenue requirement</strong></td>
<td><strong>168.8</strong></td>
<td><strong>168.8</strong></td>
<td><strong>165.0</strong></td>
<td><strong>161.9</strong></td>
<td><strong>159.4</strong></td>
<td><strong>824.0</strong></td>
</tr>
<tr>
<td>RCV</td>
<td>890</td>
<td>925</td>
<td>957</td>
<td>981</td>
<td>995</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Wholesale revenue requirement – sewerage

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay As You Go Expenditure (PAYG)</td>
<td>102.8</td>
<td>109.7</td>
<td>127.1</td>
<td>126.7</td>
<td>126.9</td>
<td>593.2</td>
</tr>
<tr>
<td>Depreciation of RCV</td>
<td>77.9</td>
<td>78.6</td>
<td>79.9</td>
<td>81.6</td>
<td>83.5</td>
<td>401.5</td>
</tr>
<tr>
<td>Pension deficit repair</td>
<td>3.1</td>
<td>3.0</td>
<td>2.8</td>
<td>2.7</td>
<td>2.6</td>
<td>14.2</td>
</tr>
<tr>
<td>AMP5 adjustments</td>
<td>14.9</td>
<td>3.5</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>19.4</td>
</tr>
<tr>
<td>Taxation</td>
<td>16.5</td>
<td>16.1</td>
<td>14.8</td>
<td>12.6</td>
<td>12.1</td>
<td>72.0</td>
</tr>
<tr>
<td>Allowed return on RCV</td>
<td>71.4</td>
<td>78.2</td>
<td>66.7</td>
<td>65.9</td>
<td>64.5</td>
<td>346.7</td>
</tr>
<tr>
<td><strong>Revenue requirement</strong></td>
<td><strong>286.5</strong></td>
<td><strong>289.0</strong></td>
<td><strong>291.6</strong></td>
<td><strong>289.9</strong></td>
<td><strong>290.0</strong></td>
<td><strong>1447.0</strong></td>
</tr>
<tr>
<td>RCV</td>
<td>1,701</td>
<td>1,716</td>
<td>1,742</td>
<td>1,773</td>
<td>1,803</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Pay As You Go (PAYG) allowance for totex
We welcome the switch to totex for this price review period – it has made a real difference to our approach to investment and empowered us to deliver more sustainable solutions, such as catchment services, that are also cheaper and provide better value for customers.

Our approach to calculating the proportion of total expenditure that is funded through the PAYG line:
• gives a fair balance between expenditure funded by customers now and in the future
• is neutral for customers’ bills
• is neutral for financing
• contributes to a smooth bill profile, in line with customer preferences.

We base our calculation on the proportional splits between operating and capital expenditure in the preceding five-year period. While there is an element of forecast for 2014-15 we have a high degree of overall certainty on these numbers. We make one adjustment to this ratio in the wholesale sewerage control to reflect the impact of our new responsibility for previously private sewers.

Basing our ratios primarily on historical expenditure has allowed us to be more focused on the best way to achieve the most cost effective and beneficial outcome in AMP6.

In line with customers’ preference for stable bills we have applied these same percentages in each year of the price control period up to 2020.

<table>
<thead>
<tr>
<th>PAYG % calculation</th>
<th>Water</th>
<th>Sewerage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMP5 opex</td>
<td>£244m</td>
<td>£342m</td>
</tr>
<tr>
<td>AMP5 infrastructure renewals</td>
<td>£117m</td>
<td>£99m</td>
</tr>
<tr>
<td>AMP5 PAYG expenditure</td>
<td>£361m</td>
<td>£441m</td>
</tr>
<tr>
<td>AMP5 total expenditure</td>
<td>£642m</td>
<td>£868m</td>
</tr>
<tr>
<td>PAYG ratio</td>
<td>56.3%</td>
<td>50.8%</td>
</tr>
<tr>
<td>Change in private sewers expenditure as % of AMP6 totex</td>
<td>-</td>
<td>2.3%</td>
</tr>
<tr>
<td>Final PAYG ratio</td>
<td>56.3%</td>
<td>53.1%</td>
</tr>
</tbody>
</table>

Depreciation
Similarly, our approach to depreciation of the RCV is designed to be neutral for customers’ bills, financing and to maintain intergenerational equity.

Over the period the percentage run-off of RCV is calculated to match the actual current cost depreciation that would be calculated by our current corporate asset register on assets existing at March 2015 (adjusted for known expenditure up to 2015).

The percentage write-downs of 3.6% for water supply and 4.5% for sewerage are applied on a reducing balance basis.

For future assets, the rate of RCV depreciation has been derived by calculating the average asset life of our entire existing depreciable asset base. We apply this to the RCV additions but reduce the depreciation charge to adjust for the fact that a proportion of expenditure is expected to be non-depreciable.

<table>
<thead>
<tr>
<th>Calculation of average depreciable asset life for new additions to the RCV</th>
<th>Water</th>
<th>Sewerage</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of AMP6 programme</td>
<td>Average asset life</td>
<td>% of AMP6 programme</td>
</tr>
<tr>
<td>Depreciable capital expenditure</td>
<td>67%</td>
<td>15 years</td>
</tr>
<tr>
<td>Non-depreciable (infrastructure enhancement) capital expenditure</td>
<td>33%</td>
<td>-</td>
</tr>
<tr>
<td>Weighted average asset life</td>
<td>100%</td>
<td>23 years</td>
</tr>
</tbody>
</table>
Pension deficit
Our defined benefit pension scheme was closed to new entrants in 2009 and existing members agreed either to accept reduced benefits or to increase their own contribution rates. We have also taken other steps to reduce the costs of the scheme which have allowed us to reduce company contributions by a quarter to 18.2%.

Following the formal revaluation of the scheme in December 2010 the company and scheme trustees agreed a deficit recovery period of 10 years with cash contributions of £8.6m each year.

Since then movements in the bond and equity markets and changes to expectations for inflation have pushed the deficit to £101m at the most recent formal valuation on 30 September 2013. This will require us to increase annual deficit contributions to £10.6m and ongoing contributions to 19.2% of pensionable pay.

Ofwat published an Information Note in October 2013 stating that it plans to roll over funding of pensions from its 2009 Price Determination. Our plan assumes that this principle will apply both to deficit payments (which were funded at PR09 at £4.8m per annum) and to ongoing contributions (which were funded at 21.7%).

Customer satisfaction reward (SIM)
We were the leading water and sewerage company for customer satisfaction in the pilot year 2010-11 and maintained this position in both 2011-12 and 2012-13. For 2013-14 we achieved our highest ever score of 87. This brings our 3 year average to 86, which we believe will continue to be more than one standard deviation above the industry average when final figures are published by all companies in July. The proportion of contacts we return for evaluation of SIM is amongst the highest in the industry, giving far greater confidence about our performance level than some of our peer group performers.

Our consistent performance shows our long-term commitment to achieving the highest levels of customer satisfaction. In order to maintain incentives it is important that comparative success is rewarded. The SIM incentive range is -1.0% to +0.5% of revenues and we have included a revenue uplift of +0.5% in our plan.

Taxation
We have assessed our tax liability on a stand-alone basis under IFRS and at our actual gearing. Allocation of capital allowances between different tax pools has been independently assessed by Chandler KBS.

Other AMP5 rewards/adjustments
We have calculated the adjustments due from other AMP5 mechanisms using the Ofwat models shared with the industry, making adjustments for expenditure related to our new obligations for private sewers where appropriate.

<table>
<thead>
<tr>
<th>Impact of adjustments on revenues</th>
<th>Water</th>
<th>Sewerage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital incentive scheme reward</td>
<td>+£13.8m</td>
<td>+£1.4m</td>
</tr>
<tr>
<td>Opex roller</td>
<td>+£1.4m</td>
<td>+£16.3m</td>
</tr>
<tr>
<td>Revenue correction mechanism</td>
<td>+£5.6m</td>
<td>-£6.0m</td>
</tr>
<tr>
<td>Service incentive mechanism</td>
<td>+£4.5m</td>
<td>+£7.7m</td>
</tr>
<tr>
<td><strong>Total revenue adjustments</strong></td>
<td><strong>+£25.3m</strong></td>
<td><strong>+£19.4m</strong></td>
</tr>
</tbody>
</table>

We have earned positive rewards under the capital incentive scheme related to efficiency in operations and capital delivery reflecting our continued drive to push the efficiency frontier forward. Further details are contained in Chapter F3 of the supporting documents.
### 3.5 Retail price control for households

#### Calculating revenue requirement

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Base retail costs</td>
<td>27.3</td>
<td>28.2</td>
<td>28.9</td>
<td>29.4</td>
<td>30.1</td>
<td>30.7</td>
<td>31.3</td>
<td>150.5</td>
</tr>
<tr>
<td>Metering and growth</td>
<td>-</td>
<td>0.4</td>
<td>1.0</td>
<td>1.7</td>
<td>2.4</td>
<td>3.0</td>
<td>3.7</td>
<td>11.8</td>
</tr>
<tr>
<td>Depreciation funded in wholesale</td>
<td>-</td>
<td>-</td>
<td>(0.8)</td>
<td>(0.8)</td>
<td>(0.8)</td>
<td>(0.8)</td>
<td>(0.8)</td>
<td>(4.1)</td>
</tr>
<tr>
<td>Sub-total</td>
<td>27.3</td>
<td>28.6</td>
<td>29.1</td>
<td>30.3</td>
<td>31.7</td>
<td>32.9</td>
<td>34.1</td>
<td>158.1</td>
</tr>
<tr>
<td>Margin @ 1.0% of sales</td>
<td>-</td>
<td>-</td>
<td>4.1</td>
<td>4.1</td>
<td>4.3</td>
<td>4.4</td>
<td>4.5</td>
<td>21.4</td>
</tr>
<tr>
<td>Pension deficit repair</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total revenue</td>
<td>27.3</td>
<td>28.6</td>
<td>33.6</td>
<td>34.9</td>
<td>36.4</td>
<td>37.7</td>
<td>39.1</td>
<td>181.7</td>
</tr>
</tbody>
</table>

As well as offering the highest levels of customer satisfaction Wessex Water has consistently been one of the most efficient providers of retail services.

Our approach has always recognised that these outcomes are directly correlated – high levels of satisfaction leading to a reduction in the amount of rework and therefore lower cost. In the earlier years of the SIM this correlation was evident in company results. Since then companies have invested to improve their SIM score (or perhaps eased back on debt recovery action for the same purpose) and the correlation between service and cost is now less apparent.

We remain confident that our own balance between efficiency, debt recovery and customer satisfaction has been appropriate and we continue to be at the leading edge of customer satisfaction in the sector.

We expect our 2013-14 costs to be significantly below the average cost to serve (ACTS) of the industry and under Ofwat’s methodology we expect that as a result our funding requirement will be set at our actual costs.

We differ from other companies in the sector because as the majority of our retail services have been separated for some time, the associated savings from this have already been made – it is not realistic to assume that the savings from this can be made twice in the retail price controls.

We have calculated that if we meet a challenging productivity target of 1.0% per annum the net increase in our underlying costs will be 2.0% each year.

---

**Moody’s: household retail costs per billed property**

[Graph showing household retail costs per billed property for various companies, with Wessex Water highlighted.]

Source: Moody’s
Our household retail business will also incur additional costs through the period as more customers move to a metered supply, and from growth in the customer base. The differential costs of providing retail services to a metered customer compared to an unmetered customer are well understood and we have allowed for them in our required revenue calculation.

Our strategy to meet ever increasing customer expectations and to deliver standards seen in the best of the competitive sectors of the economy requires some investment in IT systems over the coming years, over and above the baseline expenditure requirements, to maintain contact, billing and debt recovery systems in working order. This work has already begun and is expected to be completed in 2017.

In their recent review for Ofwat, Ernst & Young had no issues with our approach to allocating costs to retail or between household and non-household – a large proportion of our retail costs are incurred by our separated billing and customer services company Bristol Wessex Billing Services Ltd. Similarly our reported retail costs have remained stable over a number of years with no large variations in costs from one year to the next.

Setting a household retail margin
We propose a retail margin of 1.0% of sales which ensures that:
- the retail business provides a reasonable return for investors and has sufficient income to finance its working capital requirements
- equity returns are reasonable over the period making allowance for the additional risk implied by the lack of any in-period indexation
- there remains a sufficient incentive for continued investment and maintenance of capital items such as billing, debt and customer management systems where updates and enhancements can often appear discretionary in the short term.

Further details can be found in Chapter R1 of the supporting documents.
3.6 Retail price control for non-households

Calculating revenue requirement

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Base retail costs</td>
<td>3.9</td>
<td>4.0</td>
<td>4.0</td>
<td>4.1</td>
<td>4.2</td>
<td>4.2</td>
<td>4.3</td>
<td>20.9</td>
</tr>
<tr>
<td>Margin @2.5% of sales</td>
<td>-</td>
<td>-</td>
<td>3.3</td>
<td>3.5</td>
<td>3.6</td>
<td>3.6</td>
<td>3.7</td>
<td>17.7</td>
</tr>
<tr>
<td>Pension deficit</td>
<td>-</td>
<td>-</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Total revenue</td>
<td>3.9</td>
<td>4.0</td>
<td>7.4</td>
<td>7.7</td>
<td>7.8</td>
<td>7.9</td>
<td>8.0</td>
<td>38.8</td>
</tr>
</tbody>
</table>

Non-household retail controls will be regulated via the setting of default tariffs and the charges to around 100,000 premises will be regulated in this way.

In common with the rest of our value chain, the non-household retail business operates at or near the frontier of efficiency. In 2012 Moody’s published an analysis showing that we had the lowest cost to serve per customer, following a publication from the Scottish Water Industry Commissioner the previous year showing the same.

This reflects the fact that Wessex Water separated its billing and customer service operation some time ago and the greater focus on reducing costs and improving service since that time.

We have calculated that our underlying costs are likely to increase by 2.0% each year, and this is after allowing for a challenging efficiency target.

We have assumed a margin of 2.5%.

We have made an allowance of £5.4m in our base wholesale costs for one-off market set-up.

![Moody's: Non-household retail costs/billed property](source: Moody's)
Setting default tariffs
Our proposed default charges:
• reflect cost to serve differences between different customer groups
• are structured simply, reflecting the way retail costs vary by volume and by the service provided
• are Competition Act compliant
• recover our full retail costs including margin.

We are proposing fixed and volumetric retail default tariffs.

Fixed charges are differentiated between:
• the services we supply
• the volume used – where we find the greater the total value of the customer the greater the frequency of billing required and the additional account management services provided.

Volumetric charges differentiate between:
• the use of the premises billed – mixed domestic/commercial use premises are charged a higher default rate to purely commercial premises reflecting the difference in the collectability of debt raised to such customers
• the volume used – where we find a relationship between the value of the customer and the collectability of the debt.

Our retail costs are lower where we bill customers for both water and sewerage services. We provide discounts to our fixed charges to reflect this.

Levels of service are assumed to conform to our current standards, and all premises where water use is greater than 5Ml per annum are assumed to be billed on a monthly basis and allocated a named account manager. Premises where water use is below 5Ml per annum will receive two bills per year.

For simplicity we propose that eligible customers will pay the wholesale charge that is applicable plus (as a default) the retail charges above based on the volume of service that was used or discharged in the last complete charging year.

Further details can be found in Chapter R2 of the supporting documents.
3.7 Financing the plan

Evidence suggests that the cost of capital for water companies is lower than that assumed the last time prices were determined and customers should benefit from this reduction in the form of lower bills.

The cost of capital should be set in a way which:

• maintains ready access to the capital markets, ensuring efficient financing of the investment required for resilient services to customers and the environment
• encourages the retention of equity to promote risk taking and innovation to the benefit of customers and investors
• rewards companies for establishing efficient financing
• is transparent, stable and predictable through time
• is fair to and gives good value to consumers in both the short and long term.

The plan we published in December presented a potential range for the wholesale cost of capital of 3.7%-4.5%. We chose a point estimate of 4.0%, just below the middle of the range, as set out in the table below.

The academic analysis that supported this range was necessarily based on historical evidence on the risks and returns appropriate for traditional water businesses and utilities with similar risk profiles.

More innovative solutions, including the development of new markets, are generally higher-risk and should, where appropriate, attract higher returns but deliver better value for customers and lower bills. Conversely, traditional asset-based solutions are low-risk and should attract lower returns.

Our plan for AMP6 takes the lead in developing a progressive and innovative water sector – moving substantially beyond traditional asset-intensive solutions, towards new markets and new ways of delivering for customers and the environment.

In assessing the wholesale WACC in our business plan, we took a blended approach and combined these two issues together. This meant we chose a WACC that was higher than if we had approached this in a separated way.

In particular, we noted that, "our approach to delivering outcomes through greater levels of innovation implies a higher level of risk that gives further weight to taking an estimate above the mid-point [of our WACC range]."

Since December, Ofwat has published clear guidance on risk and reward for the 2014 price review. Ofwat’s guidance makes clear that 3.7% should be considered a point estimate that innovative companies can expect to outperform in part through the application of outcome and cost incentives.

<table>
<thead>
<tr>
<th>Weighted average cost of capital (WACC) evidence presented in December business plan</th>
<th>Ofwat PR09 point estimate</th>
<th>Oxera 2013</th>
<th>Wessex Water PR14 point estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost of equity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market return (%)</td>
<td>7.4</td>
<td>6.50</td>
<td>7.00</td>
</tr>
<tr>
<td>Risk-free rate (real, %)</td>
<td>2.0</td>
<td>1.25</td>
<td>1.50</td>
</tr>
<tr>
<td>Equity risk premium (%)</td>
<td>5.4</td>
<td>5.25</td>
<td>5.50</td>
</tr>
<tr>
<td>Asset beta</td>
<td>0.40</td>
<td>0.30</td>
<td>0.40</td>
</tr>
<tr>
<td>Gearing (%)</td>
<td>57.5</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Equity beta</td>
<td>0.94</td>
<td>0.75</td>
<td>1.00</td>
</tr>
<tr>
<td>Cost of equity (post-tax, %)</td>
<td>7.1</td>
<td>5.19</td>
<td>7.00</td>
</tr>
<tr>
<td><strong>Cost of debt</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of embedded debt (%)</td>
<td>3.4</td>
<td>2.70</td>
<td>2.70</td>
</tr>
<tr>
<td>Cost of new debt (%)</td>
<td>4.2</td>
<td>2.20</td>
<td>2.50</td>
</tr>
<tr>
<td>Debt fees (%)</td>
<td>0.0</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Cost of debt (pre-tax, %)</td>
<td>3.6</td>
<td>2.68</td>
<td>2.75</td>
</tr>
<tr>
<td>Vanilla WACC (%)</td>
<td>5.1</td>
<td>3.68</td>
<td>4.45</td>
</tr>
</tbody>
</table>
In response we adopt a wholesale cost of capital of 3.7% and widen the scope and scale of reward and penalty mechanisms so that:

• the innovative nature of our plan is rewarded commensurate with the additional associated risk
• there are additional incentives for further innovation at the margin over the AMP6 period.

We set out further detail on this in section 3.8.

**Retail margins**

The plan we published in December proposed underlying retail margins of 0.7% for retail household and 0.9% for non-household.

Ofwat’s guidance on risk and reward set out margins of 1.0% for household and 2.5% for non-household. We accept these, noting Ofwat’s view that a higher margin for non-household will result in greater competitive pressure so we can expect the value of this to the company to reduce over time.

We also made allowance in our retail margins for risks associated with cost escalation above the out-turn level in 2013-14, leading us to propose margins in both price controls of 1.8%. Ofwat’s assessment of margins in its risk and reward guidance does not consider likely cost escalation.

We have refined our assessment of the likely level of cost increase and productivity improvement for an efficient retail company and we have incorporated the resulting 2.0% per annum increase in retail costs into our plan.

Our approach takes into account the fact that we have substantially separated the bulk of our retail services for some time and delivered the efficiencies associated with this. We are substantially below the average cost to serve compared to our peers but equally have comparatively less scope for future efficiencies. We have also taken into account wider market evidence for levels of cost in comparable retail sectors where this is available.

**Financeability**

The board is committed to retaining a solid investment grade credit rating which delivers continued ready access to financial markets on efficient terms and ensures resilience to potential cost shocks.

Wessex Water Services is currently rated A3 by Moody’s, A- by Fitch and BBB+ by S&P. It is the board’s policy to avoid a credit downgrade, which would raise the company’s cost of borrowing, to the ultimate detriment of our customers, and could also trigger an early repayment clause in our substantial EIB facilities. In addition, some fixed income investors may be required to sell Wessex Water bonds and/or be prevented from buying new ones.

However, the board also accepts the need to match its commitment to sound financing with its commitment to keeping bills affordable for customers in these difficult economic times.

Accordingly, after a period of substantial outperformance, the plan envisages a significant reduction in dividends paid to the shareholder, and a reduced dividend yield on regulatory equity of 4.6%. Despite this reduction in distributions, the financial ratios presented in this plan are considerably tighter than in previous plans. Indeed, credit metrics decline to such an extent that towards the end of the period they are indicating a possible downgrade to BBB from S&P. This will put further downward pressure on dividends.

Overall, the board considers that this plan approaches the limit of prudent financeability, and that the declining trend in financial ratios will need to be halted post-2020 to ensure that the business continues to be financeable in the longer term.

<table>
<thead>
<tr>
<th>Ratios (before AMP5 adjustments)</th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
<th>2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moody’s gearing</td>
<td>71%</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
<td>69%</td>
</tr>
<tr>
<td>Moody’s AICR</td>
<td>1.8</td>
<td>2.0</td>
<td>2.0</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>S&amp;P’s FFO:debt</td>
<td>8.6%</td>
<td>9.7%</td>
<td>9.1%</td>
<td>8.6%</td>
<td>8.8%</td>
</tr>
<tr>
<td>S&amp;P’s FFO:interest</td>
<td>2.9</td>
<td>3.0</td>
<td>2.9</td>
<td>2.7</td>
<td>2.8</td>
</tr>
<tr>
<td>Fitch gearing</td>
<td>71%</td>
<td>71%</td>
<td>71%</td>
<td>70%</td>
<td>69%</td>
</tr>
<tr>
<td>Fitch AICR</td>
<td>1.8</td>
<td>2.0</td>
<td>1.9</td>
<td>1.7</td>
<td>1.7</td>
</tr>
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</table>
3.8 Allocating risk and reward and sharing outperformance

We have a strong record of sharing outperformance with customers and over the past three regulatory periods have reinvested £100m of efficiency savings in additional improvements.

In AMP5:
- we invested an additional £20m beyond our regulatory commitments in outcomes that matter to customers, such as further reducing leakage, providing real-time monitoring of combined sewer overflows and providing debt advice
- we chose to forego any increase in customers’ bills to recover more than £30m of unfunded investment in private sewers
- we cut bills in 2014-15 below the level set by Ofwat in our 2009 determination, giving cash back to customers now.

This plan increases our commitment and our transparency to sharing outperformance by setting out in advance a range of mechanisms for sharing gains with customers and compensating them should we fail, as summarised below.

Customer promise
If we fail in our individual responsibility to an individual customer we will compensate them at the time through the guaranteed standards scheme and through our industry-leading customer promise.

Outcome delivery incentives
If we fail in the delivery of our outcomes, we will face financial penalties via a reduction in allowed revenues at the start of the next price control period so that customer bills would be lower than they otherwise would have been.

Our plan delivers nine outcomes for our customers and the environment. We have agreed 29 measures of success by which our achievement of those outcomes will be judged.

These include regulatory mechanisms such as the Service Incentive Mechanism (SIM) as well as additional incentives developed in consultation with our customers and the customer scrutiny group. Full details of all 29 measures of success are included in technical appendix T1.

Around two-thirds of the measures of success have financial penalties resulting in customer rebates at the start of the next price control period. In addition, other regulators could fine us for poor performance or require us to put things right at our expense. Failure will also lead to reputational damage, eg, as would happen if we failed our leakage target.

Totex cost efficiency incentives
The new totex menus will ensure any totex savings are shared with customers. If we deliver savings, these will be shared with customers. If, conversely, costs rise, we will still deliver the agreed outcomes and will bear a proportion of the additional costs.

We will also continue to re-invest efficiency savings on issues that customers tell us matter to them, such as reducing leakage and solving sewer flooding, and commit to consulting with the new Customer Advisory Panel on this investment.

Where totex is reduced by an event outside management control – for example because of a change by a quality regulator – or by our failure to deliver an investment agreed as part of our price control, we will pass that saving on directly to customers in the form of lower bills.

Price control re-openers
Our plan limits the potential for our price controls to be re-opened mid-period to those mechanisms required by our operating licence, ie, IDoKs and substantial effect determinations.

In the case of the substantial effects clause, we add a third-party assessment of any windfall gains instead of the current Ofwat-led assessment. This would allow the new Customer Advisory Panel or a statutory consumer representative to assess whether we had received a windfall gain.
Mechanisms related to inflation, tax and interest – not proposed

In formulating this plan, the board considered mechanisms to share windfalls gains or losses caused by significant movements in inflation, in tax and in interest rates to those assumed when prices were set.

The board rejected a pain-gain mechanism related to inflation. The inflation hedge provided by indexation is fundamental to the UK water sector and should not be diluted by any sharing mechanism. To do so would reduce the potential pool of investors in the sector and increase the cost of capital. A pain-gain sharing mechanism also runs the risk of higher bills to customers if inflation falls, as happened in 2009.

The December plan proposed a tax pain-gain mechanism that would be triggered if tax paid differed by more than 30% from that assumed in the final determination. Although this mechanism would protect customers if the company paid less tax than assumed when setting prices, it could also result in customers needing to pay more should tax rates rise in the future. The board has therefore removed this mechanism from this revised plan.

The board rejected a pain-gain mechanism related to interest rates. Given historically low interest rates, it is more likely that interest rates will rise in future than fall.

Any pain-gain mechanism is therefore likely to disadvantage customers. After 20 years of falling interest rates, to introduce a sharing mechanism when rates are expected to rise would be a poor outcome for customers.

Catchment innovation incentive

Building on our experience of the smaller scale innovative solutions that we have delivered in AMP5, the business plan we published in December took the lead in developing a progressive and innovative water sector. We are now moving substantially beyond traditional asset-intensive solutions, towards new markets and new ways of delivering for customers and the environment.

Our plan therefore includes up-front dynamic efficiencies associated with catchment services of £107m, reducing bills to customers by c3% compared to a plan that proposed traditional solutions. These efficiencies will be delivered by a variety of new upstream services and markets but will each result in additional risk. The wholesale cost of capital of 3.7% is based purely on an historical analysis of risk in the water sector, and cannot be expected to take into account these additional risks.

We need a model that gives companies appropriate incentives to incorporate innovative (and more risky) approaches into plan submissions rather than developing them piecemeal during the subsequent AMP. We therefore propose a reward mechanism that compensates the additional risk of these new solutions. This increases our post-tax revenues in the coming AMP by £40m.

In return customers benefit from the lower bills generated by these lower-cost solutions, plus a double-lock of protection:

- first, in the event that the innovation fails to deliver the required environmental obligations in the long run, the customer is protected from us seeking new funding for more traditional solutions in a future AMP period, and
- second, the reward will be subject to scrutiny by two new independent assurance panels (see Part 4 of this document) and will be returned to customers if we do not make good on our commitments to take innovative approaches.
Calibrating our incentives
To help calibrate our incentive and sharing mechanisms we have modelled a range of scenarios over AMP6 and assessed the impact on the return on regulated equity.

In addition to the potential impact of our outcome delivery incentives we have calculated the impact of differences around our base assumptions of the following items:
- household growth
- industrial demand
- input prices
- productive and dynamic efficiency
- rainfall
- RPI.

Taken together the likely range of returns over the five-year period is between +3.5% and -3.7% from the midpoint, although within any particular year the range is wider as we expect gains or losses in revenue from changes in demand for our services will be corrected through the average revenue controls in subsequent years.

Likely range of AMP6 return on regulated equity

Equity rewards for outperformance in service delivery are lower than the potential penalties for underperformance, reflecting customers’ views about rewards and penalties in our sector. Similarly our plan incorporates productivity improvements of 1.0%. This is towards the top-end of historical productivity growth rates in the economy, implying that the risk of under-performing this target is greater than outperforming it.

We consider the final range to strike an appropriate balance between the need for affordable bills and the preservation of some incentive to outperform. It is a balance that is grounded in what our customers have told us. Where uncertain or less likely events occur our sharing proposals for tax, fortuitous gains and for price control reopeners will ensure that gains will be shared with customers and that customers pay for investment only if it is needed.
3.9 Revenues, bills and financial projections

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<tbody>
<tr>
<td>Retail</td>
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<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>190</td>
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<tr>
<td>Wholesale water</td>
<td>n/a</td>
<td>169</td>
<td>169</td>
<td>165</td>
<td>162</td>
<td>159</td>
<td>824</td>
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<tr>
<td>Wholesale sewerage</td>
<td>n/a</td>
<td>286</td>
<td>289</td>
<td>292</td>
<td>290</td>
<td>290</td>
<td>1,447</td>
</tr>
<tr>
<td>Total revenues</td>
<td>493</td>
<td>493</td>
<td>496</td>
<td>495</td>
<td>490</td>
<td>488</td>
<td>2,461</td>
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<tbody>
<tr>
<td>Water</td>
<td>£253</td>
<td>£246</td>
<td>£243</td>
<td>£240</td>
<td>£236</td>
<td>£232</td>
<td>£229</td>
</tr>
<tr>
<td>Sewerage</td>
<td>£231</td>
<td>£227</td>
<td>£224</td>
<td>£224</td>
<td>£223</td>
<td>£221</td>
<td>£220</td>
</tr>
<tr>
<td>Combined</td>
<td>£483</td>
<td>£472</td>
<td>£467</td>
<td>£464</td>
<td>£459</td>
<td>£453</td>
<td>£448</td>
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Our key test for affordability of charges at the macro level is to assess our expected bills as a proportion of expected average household disposable income.

Based on the Office for Budget Responsibility (OBR) forecasts of household incomes we expect our bills to decline as a percentage of household disposable income so that by 2020 they are lower as a proportion compared to 10 years previously.
While the great majority of customers are able to afford their water charges, in recent years a growing minority has struggled to pay. Of households in our region 11% spend more than 3% of their income on water charges and there is evidence that affordability issues not only affect households on means-tested benefits.

Our tap affordability programme which includes the social tariff, Assist, is available to all households who are struggling to pay, and operates in partnership with the debt advice sector in our region. Currently 15,000 households benefit from the tap programme and the recent extension of our social tariffs mean that we expect an additional 10,000 households to benefit in future. We will continue to offer tailored assistance to households in financial distress and with the assistance of our independent advisory group we will update our offering through the period to respond to new challenges as they emerge.

Bill smoothing
Customers have consistently told us that they want steady changes in bills from year-to-year, rather than volatile movements.

Our modelled bills show some variation from year-to-year. We have therefore smoothed bills, so they decline steadily in real terms, by varying the return over the period. We have done this on an NPV-neutral basis.

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</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>2.4%</td>
<td>3.5%</td>
<td>3.7%</td>
<td>4.3%</td>
<td>4.6%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Sewerage</td>
<td>3.9%</td>
<td>4.3%</td>
<td>3.5%</td>
<td>3.4%</td>
<td>3.3%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Weighted average</td>
<td>3.4%</td>
<td>4.0%</td>
<td>3.6%</td>
<td>3.7%</td>
<td>3.8%</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

Without this smoothing, supply bills would rise markedly in 2015-16 and remain above the smoothed value for two years as result of the significant expenditure on the water supply grid in the first half of 2015-20. Conversely, sewerage bills would be cut in 2015-16 and then rise significantly due to expenditure on quality and capacity outcomes, which increases over the AMP.
Part 4 – Governance and assurance of future delivery
Strategy is a matter reserved for the board – as such, both executive and non-executive members of the board have been fully engaged with the PR14 business plan’s development since work began in January 2012.

The board approved the development of our nine long-term outcomes in November 2012 and our overall revised long-term vision Water – the way ahead, which was published in December 2012.

Business planning is part of day to day management processes within Wessex Water and the business planning management team took responsibility for the development of the PR14 business plan. This team is chaired by Andy Pymer, director of retail and customer services, and includes David Elliott, director of environment and assets.

These directors also attended and reported to the customer scrutiny group meetings throughout the development of this plan. Gillian Camm, non-executive director, has been fully engaged in the customer and stakeholder engagement process and chaired the customer and community liaison panel, which was represented on the customer scrutiny group. Peter Costain and David Barclay, as non-executive directors, also attended meetings of the customer scrutiny group during the second half of 2013.

Our wider engagement on the business plan has also been informed by a sustainability panel chaired by another of our non-executive directors, Dame Fiona Reynolds, and of which Gillian Camm and David Elliott are also members.

The development of the PR14 business plan by the business planning team was aligned to and integrated with the company’s financial planning processes through the company finance group, chaired by Mark Watts, finance director and treasurer.

Business plan proposals were considered at full board meetings during 2012, 2013 and the first half of 2014. This final version of our plan was formally approved for submission at a board in June 2014.

At the June meeting the board considered a report from the company audit committee, comprising all four independent non-executive directors, which had scrutinised and approved the internal governance and controls processes.

The audit committee recommended to the board that it could have confidence that the submission:

- contains accurate and complete data
- correctly represents expenditure and performance levels during this AMP period
- contains forecasts and estimates that have been arrived at appropriately, reasonably and independently from other water companies, including competitors, other than where we are dependent for charging purposes on the metering policies of the water-only companies operating in our area
- meets statutory and regulatory requirements.

The board also considered a report from the customer scrutiny group on:

- the quality of the customer engagement carried out
- how well the proposed outcomes, commitments and delivery incentives reflect the customer engagement and wider consumer views and priorities
- whether there are differences in views, including in relation to environmental obligations.

The executive summary of this report is included in Part 5 of this document.

Further details of governance and compliance arrangements, including how the company currently meets the requirements of the corporate governance code and the Ofwat principles for board leadership, transparency and governance, are contained in Chapter G1 Governance and Compliance.
Assuring future delivery

Wessex Water has a strong record of delivering on its commitments.

However, customers and regulators need additional assurance that this will continue, particularly as we move away from output based regulation towards an outcome focused approach and now that we are proposing financial rewards for performance in line with Ofwat’s risk and reward guidance.

In our December business plan we proposed a new customer advisory panel that would monitor and report on our delivery of all aspects of the final regulatory settlement. Members will be independently nominated by major customer organisations such as Citizens Advice, Which?, CCWater and Advice UK and will elect its own chair. The panel will:
- provide advice and challenge the company on areas such as affordability, tariffs, customer engagement and the company’s preparation for the next price review
- scrutinise and assess our delivery against our outcomes and measures of success
- assess the impact of any substantial fortuitous financial effects during the period
- assess and challenge any claim made by the company under the IDoK process.

We also propose a new independently chaired catchment panel that will:
- provide advice and guidance on our innovative catchment-based approaches related to our proposed innovation incentive
- review the delivery of our environmental outcomes and measures of success
- assess and challenge any claim made by the company under the IDoK process and the appropriateness of any shortfall adjustments under the NEP.

The chair of the catchment panel will sit on the customer advisory panel to ensure that this panel can take a holistic view of company performance.

We will publish the customer advisory panel’s assessment of our progress in delivering our performance commitments at the same time as we publish our annual review.

Our annual review will also set out the financial rewards and penalties that arise from our performance and the board will make a statement on when and how it expects to apply the financial rewards and penalties.

The existence of independent panels does not imply the company board has transferred responsibility for assuring that the performance of the company is accurately reported. The new arrangements are an addition to, not a replacement for, our existing processes and seek to give stakeholders additional assurance on our performance levels.
Board sign off

This plan for the period up to 2020 was unanimously approved for submission to Ofwat as part of the PR14 price determination process by the Wessex Water Services Ltd board.

The board was able to approve the submission having sufficient confidence to assure Ofwat and other stakeholders that the proposed plan continues to be of the highest quality in that it:

- is based on effective customer and stakeholder engagement
- contains accurate and complete data and in particular has represented expenditure and performance levels during this AMP period accurately
- contains forecasts and estimates that have been arrived at appropriately, reasonably and independently from other water companies, including competitors
- includes target credit ratings that are consistent with the company’s licence obligations, assesses financeability on both a notional and actual basis, and, in all material respects, correctly calculates financial ratios and the stress testing of those ratios in data tables A8 and A20
- does not seek to ‘game’ the regulatory process
- continues the company’s proven reputation for efficiency in operations and delivery.

If accepted by Ofwat in all material respects the whole board will fully own and be accountable for this plan up to 2020. It has confidence that the plan:

- will, through its performance commitments, enable the company to fulfil its current statutory, licence and regulatory obligations, in all material respects, as evidenced by the statements from the Environment Agency, Drinking Water Inspectorate and Natural England included in the customer scrutiny group report
- will facilitate the fulfilment of likely changes in these obligations up to 2020, in all material respects
- will ensure a long-term sustainable future for the company by meeting the interests of current and future customers and other stakeholder expectations in the best way possible so as to deliver good outcomes for customers and the environment and achieve the company’s overall aims
- contains an appropriate balance of risk and reward between customers, investors and other stakeholders with an emphasis on ensuring bills are affordable in these difficult economic times
- identifies the key risks to the plan and proposes mitigation of these risks where appropriate
- makes appropriate allowance for payments of taxation
- remains financeable by investors
- is affordable for customers.

On behalf of the full board:

Tan Sri Dato’ (Dr) Francis Yeoh
Chairman

David Barclay
Senior independent non-executive director

Colin Skellett
Chief executive
The customer scrutiny group has produced two independent reports on the company’s engagement with customers and other stakeholders and the extent to which the results of that engagement are reflected in our plan. The first report focused on the plan that we published in December and the second on our final plan that we are now publishing. Copies of the executive summaries of both are reproduced overleaf.
The purpose of this report is for the Wessex Water Customer Scrutiny Group (CSG) to provide assurance and opinion to Ofwat in connection with its review and challenge of Wessex Water’s 2015 – 2020 Business Plan entitled Water – a new direction and its 25 year strategy.

As a result of its work, the CSG is able to confirm:

- Wessex Water’s 2015-2020 Business Plan appropriately incorporates the views of its customers. A large majority of the Company’s customers have accepted the Plan.

- The Company’s customer research on its Plan has taken account of characteristics of good engagement set out by Ofwat and CCWater and has reached a wide range of its household and non-household customers, both current and prospective.

- The Plan is focused on a series of outcomes that reflect a sound understanding and reasonable balance of different customer and stakeholder views and priorities as evidenced by its research.

- The phasing, scope and scale of activities contained in the Plan are designed to deliver the outcomes in ways that are socially, economically and environmentally sustainable and to maximise acceptability to customers.

- The Company has given adequate consideration to both the short and long term in its planning and the 2015-2020 Business Plan represents the first steps on a longer journey particularly in asset maintenance and environmental improvements.

- Wessex Water has considered and included innovative and sustainable approaches in its Plan that are designed to deliver its stated outcomes.

- The Company intends to meet its statutory obligations and its overall Plan strikes a reasonable balance between maintaining current levels of service and maximising affordability and value for money for customers.

- Wessex Water is proposing additional and appropriate measures to assist those customers who are struggling to afford their bills.

- The Company will be using a suite of performance measures that are appropriate to monitor progress against its stated outcomes.

- In response to customers' views on rewards, the Company’s Plan does not include rewards for out-performance other than those already in place under the current regulatory regime.

- As a result of the CSG challenges, Wessex Water is proposing to reduce bills by about 1% each year before inflation.

We commend Wessex Water’s 2015-2020 Business Plan and the CSG’s review and challenge process:

Charles Howeson John Savage CBE
Chair CSG Deputy Chair CSG
The CSG was established in December 2011 with an independent Chair and
diverse membership including customer representative organisations, the
statutory consumer, water and environmental regulators, local authorities,
businesses, environment and countryside groups. The CSG has been at the
centre of a wider stakeholder engagement process, which has included the
Company’s pre-existing Customer Liaison Panels.

The CSG’s key objectives over the two years since its formation have been to
advise and challenge Wessex Water on the customer engagement
methodologies it has used for its Business Plan, on its interpretation of the
results of this engagement and on the reflection of customers’ views in the
Company’s strategies and plans. The CSG has also challenged the Company
on the scope, justification, cost-effectiveness and affordability of its plans.

There has been constructive and challenging debate between the different
parties in the CSG and we have worked hard in order to balance their priorities.

The CSG and Wessex Water agreed and implemented effective meeting
processes and protocols to enable the CSG to fulfil its objectives whilst
maintaining its independence. The engagement process involved effective
review and robust challenge of the Company’s customer research programme,
business planning methodologies, assumptions and outcomes.

Wessex Water fully understood and accommodated the role and objectives of
the CSG from an early stage. The Company was proactive in anticipating the
CSG’s areas of focus and was responsive to its challenges. This has meant that
the CSG and the Company have been able to work constructively and
collaboratively in order to achieve their respective objectives.

The CSG has been given adequate and appropriate access to Company
information and personnel throughout the process.

In undertaking its work, the CSG has been fully aware of the need to robustly
and independently challenge the Company and to be able to evidence its
findings and opinions. The extent and detail of the CSG’s challenges are
described in the main body of this report.

In response to the CSG’s challenges the Company willingly changed its plans in
the following key areas:

- Improvements and additions to the wording of the Strategic Direction
  Statement
- The design of Outcomes
- Measures of success relating to value for money, per capita consumption,
  water supply resilience and ease of communication with customers
- The clarity of communication with customers over its plans
- The removal of financial rewards for out-performance other than the existing
  Service Incentive Mechanism (SIM)
• Further reductions in the level of customer bills, and
• Assistance measures for customers who are struggling to afford their bills

Extensive challenging by members of the CSG on the Company’s customer research helped ensure the research was unbiased, gave a fair representation of Wessex Water’s customers views, and was fed into the company’s thinking on future investment.

The CSG recognises that Wessex Water have been one of the best performing water companies over a number of recent years and was keen to ensure that its future plans did not include or risk a reduction in level of service to customers. The CSG has paid close attention to the choices the Company has made in the discretionary areas of its plan to ensure they align with the willingness of its customers to pay for them.

At the same time the CSG accepts that the Company is facing new statutory water quality and environmental obligations and that it has had to strike a balance between meeting these and doing as much as it can to maintain existing service levels. The CSG’s focus has been on ensuring that the work the Company is obliged to do is fully justified, supported by the associated quality regulator and that customers will be paying no more than they have to for it.

The Drinking Water Inspectorate (DWI), the Environment Agency (EA) and Natural England (NE) were represented on the CSG and participated fully in the engagement process. The statutory quality regulators have assessed the Company’s proposals to achieve compliance with its statutory obligations . The DWI, EA and NE have confirmed to the CSG that they do not have material concerns in this respect.

Whilst the majority of the Business Plan is an evolution over its current approach to investment and service delivery, the CSG has welcomed the Company’s proposals to adopt new and innovative ways of working to deliver its service to customers in both the short and longer terms and the beneficial impact these innovations are intended to have on customer bills. The CSG has been assured that any risks resulting from adoption of innovation will be borne by the Company and not its customers.

From an early stage the Company shared with the CSG its plans for a real term reduction in average customer bills over the 2015 – 2020 period. This enabled the CSG to challenge the Company extensively on whether the proposed innovations were soundly based and that the risk of them not working would be borne by the Company and not by its customers.

Whilst the CSG welcomed the Company’s proposals to limit price rises to below inflation it remained committed to challenging it to do more to reduce its costs and create more affordable bills. This was particularly important to the CSG because, whilst it doesn’t have the highest combined water and sewerage bill in
England and Wales, its bill for water supply is the highest and the CSG wanted to see the Company leading the industry in reducing bills whilst still delivering its good service to customers and meeting statutory obligations. The CSG noted however that, whilst customer bills on average will be going up less than inflation, this wasn’t a price reduction in cash terms. The CSG was keen to ensure customers were aware of this when they were consulted on the Company’s plans, and that this was properly reflected. However, due to ongoing concerns about the absolute level of bills for Wessex Water’s customers, the CSG challenged the Company on whether they could do more to reduce customers’ bills before inflation. Wessex Water responded to this and is now proposing to reduce bills by about 1% each year before inflation.

The CSG noted the Company’s recognition of the impact of the current economic conditions on its customers and its proposal to implement real-term reduction in prices in 2014-15, a year before its Business Plan comes into force, and the ongoing beneficial impact this will have on bills in AMP6.

Whilst the vast majority of both household and non-household customers find the Company’s plans to be acceptable, the CSG challenged the Company on how it intends to assist those customers who are currently struggling to afford their bills. The CSG welcomes the Company’s intention to extend the reach of its current and industry-leading TAP scheme that assists customers who have affordability problems. Through its engagement with the Company the CSG has observed a real commitment from it to reach more customers who are struggling to afford their water bills and to more effectively engage with them and provide the necessary assistance.

Whilst the CSG supports the principle of incentives to promote efficiency and innovation, it expressed particular concerns to Wessex Water over the inclusion of financial rewards unless customers had been asked for their view on whether financial rewards were acceptable to them.

The CSG welcomed the Company’s decision to consult its customers on the principle of financial rewards for good performance in response to this challenge.

The CSG supports the Company’s decision not to propose financial rewards other than the SIM in its plan as a result of the research findings that showed that customers did not want the Company to include financial rewards in its business plan.

The CSG is also supportive of the Company’s intention to involve customers and other stakeholders in decisions around the use of surpluses arising from investment out-performance and water resources in 2015 - 2020.
Customer scrutiny group report

June plan
Executive Summary

The purpose of this report is for the Wessex Water Customer Scrutiny Group (CSG) to provide opinion to Ofwat on the key changes to Wessex Water’s 2015 – 2020 Business Plan since its original submission in December 2013 (and reported on by the CSG at that time).

The CSG has functioned and challenged the Company in the same way as it did for the original Business Plan and, as before, the CSG has been given adequate and appropriate access to Company information and personnel.

Wessex Water has made changes to its original Business Plan as a result of challenge and further guidance from Ofwat.

The CSG has reviewed the key changes to the original Business Plan submission as provided to it by Wessex Water up to the date of publication of this report. The revised Plan was subject to the approval of the Company Board at that time.

The CSG has the following comments on the key changes:

Customer bills - The CSG is pleased to note that, as a result of Wessex Water’s revisions to its 2015 – 2020 Business Plan, customers’ bills on average will fall further than was originally planned. The further reduction in bills has been achieved through the Company’s acceptance of tighter margins and returns rather than cuts in the proposed level of investment or delivery of outcomes, which remain the same as in the original Business Plan submitted in December 2013.

Customer engagement – Wessex Water has provided further information on its original engagement process and has undertaken further tracking research. The CSG was heavily involved in the design of the original engagement methodology and was supportive of it. It was not involved with the latest round of image tracking research undertaken by the Company, but understand that the survey methodology was identical to previous surveys on which the CSG has previously commented.

Willingness to Pay - An independent peer review commissioned by the Company confirms the CSG’s original opinion that the willingness to pay research had accounted for inflation, by reminding customers of the impact of inflation and other household bills.

Performance Commitments – In response to challenge and further guidance from Ofwat, Wessex Water has submitted a revised Performance Commitment package which includes additional commitments, modified incentive values and, most significantly, financial rewards for outperformance in nine areas (including SIM) where it considers this is considered possible and there is willingness to pay evidence on the issue.
Individual members of the CSG have expressed their opinions on the adoption of financial rewards and their views are expressed within this report. The CSG has discussed these views and supports them. The CSG’s concerns about financial rewards expressed in its December 2013 report to Ofwat remain, due to the low level (28%) of customer support for rewards.

The way Wessex Water has outlined its positive rewards accords with how customers prioritised issues in the willingness to pay research. The CSG is encouraged that that Wessex Water has approached the issue of deciding how to apply rewards and penalties in a way that ensures the Company is only getting rewarded when it has developed an industry leading approach; achieved a industry leading standards; or allows it to finance an environmental requirement that was not known about when the business plans were submitted, such as on river water quality.

Performance measurement and governance – Wessex Water has set out its intention to measure and record its performance in AMP6 and have it independently audited. The CSG welcomes the Company’s plans to establish independent stakeholder advisory boards (possibly in two components) encompassing all stakeholder and customer views. The CSG is pleased to learn that the board will scrutinise and challenge Wessex Water’s performance, and will have influence over the eligibility, quantum and timing of any rewards and penalties associated with Performance Commitments.

The CSG is conscious that the Company has still to finalise in detail the membership and terms of reference of the proposed groups. For the avoidance of doubt, the CSG considers that is important that a monitoring organisation is put in place which will report stakeholder and customer views to the Chairman and board of the Company.

Costs and investment – The Company has responded to challenges from Ofwat on aspects of its cost data including the costs and the justification for schemes such as Durleigh Treatment Works, the WFD RBMP Phase 2 and the North Bristol Sewerage scheme.

CSG recognises that the cost and justification issues relating to these schemes are for the Company and Ofwat to resolve.

Wessex Water has assured the CSG that the schemes described above will remain in its Business Plan and that the cost of any changes required by Ofwat will be at the Company’s risk and will not affect customers’ bills. The CSG welcomes this assurance as it considers the Company’s customers would be unhappy if it was unable to deliver its Plan, which they found overwhelmingly acceptable, and which now they could benefit from even lower bills.
Overall, with the exception of the inclusion of positive rewards, about which the CSG has always had reservations in principle, the CSG is content with the key changes Wessex Water had made to its 2015 – 2020 Business Plan in response to challenges and additional guidance from Ofwat. The CSG is pleased to note that the overall Plan continues to reflect an appropriate balance of the needs of customers and other stakeholders and now includes the potential for even lower bills.

The CSG remains enthusiastic and supportive of the overall Business Plan.
### Context and governance

| C1 | Context of the plan and customers’ and other stakeholders’ views |
| G1 | Governance and compliance |

#### Retail

| R1 | Household retail business plan |
| R2 | Non-household retail business plan |

#### Wholesale water

| W1 | Wholesale water business plan |

#### Wholesale sewerage

| S1 | Wholesale sewerage business plan |

#### Finance

| F1 | Financing the plan |
| F2 | Assessing and improving our efficiency |
| F3 | AMP5 true-ups |

### Supporting documents

#### Wholesale water

| W2 | Maintaining our water services |
| W3 | Balancing the supply and demand for water |
| W4 | Improving the resilience of our services |
| W5 | Maintaining and enhancing drinking water quality |
| W6 | Reducing leakage |
| W7 | Enhancing the water environment |
| W8 | Improving service through real-time monitoring |

#### Wholesale sewerage

| S2 | Maintaining our sewerage services |
| S3 | Increasing the capacity of our sewerage assets |
| S4 | Improving the resilience of our services |
| S5 | Assuming responsibility for private pumping stations |
| S6 | Increasing the amount of renewable energy we generate |
| S7 | Enhancing the water environment |
| S8 | Improving service through real-time monitoring |

#### Technical appendices

| T1 | Outcomes and incentives |
| T2 | Innovation |
| T3 | Cost benefit analysis |
| T4 | Carbon and climate change adaptation |
| T5 | Cost estimating |
| T6 | Business plan manual |
| T7 | Price setting financial model |

### Data tables

#### Wholesale water

| W1-W22 | Data tables |
| W1-W22 | Commentaries |

#### Wholesale sewerage

| S1-S22 | Data tables |
| S1-S22 | Commentaries |

#### Retail

| R1-R5 | Data tables |
| R1-R5 | Commentaries |

#### The appointed business

| A1-A24 | Data tables |
| A1-A24 | Commentaries |

#### August submission

| 1-8 | Data tables |
| 1-8 | Commentaries |

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*Strategic direction statement published in December 2012*