



# **Water Industry Strategic Environmental Requirements (WISER) Report**

---

Affinity Water Limited

August 2018

## Contents

1	Introduction .....	1
2	Introducing Our Business Plan .....	1
3	Our Environment .....	2
4	Enhancing the Environment .....	3
5	Excellent Performance .....	6
6	Improving Resilience .....	7
7	Innovation in Implementation .....	10
8	Our Commitment to Partnership Working and our Communities.....	10
9	Our projects.....	11

## 1 Introduction

- 1.1. We understand that our ability to continue to supply high quality drinking water to customers is dependent on having a healthy and resilient environment to abstract that water from. This report sets out how this understanding and the Water Industry Strategic Environmental Requirements (WISER) have informed and shaped our Business Plan for AMP7.
- 1.2. We introduce our Business Plan in section 2. We then explain how we operate within that environment to balance the needs of people, wildlife and the economy (section 3). Our main tool for doing this is our Water Resources Management Plan (“WRMP”) and this section also explains how our WRMP aligns with our Business Plan.
- 1.3. Our Business Plan includes significant investment to enhance the environment (section 4) and will ensure our environmental performance is excellent (section 5). We outline how we will maintain and improve our resilience in section 6. We will seek to be innovative in our delivery (section 7). We know that we can achieve much more if we work in partnership and we will cement and build on our existing partnerships during AMP7 (section 8) including through delivery of innovative environment and resilience community pilot projects (section 9).
- 1.4. This report is intended to provide a comprehensive overview of our Business Plan’s delivery for the environment but we cannot cover all we will do in this short report. We have included boxes to signpost where in our Business Plan more detailed information can be found.

## 2 Introducing Our Business Plan

- 2.1. Our Business Plan has four high-level outcomes:

**Outcome 1:** supplying high quality water you can trust;

**Outcome 2:** making sure you have enough water, while leaving more water in the environment;

**Outcome 3:** providing a great service, that you value; and

**Outcome 4:** minimising disruption to you and your community.

- 2.2. Our performance commitments will allow us to measure our progress throughout AMP7; we have seven performance commitments out of a total of nineteen that are central to our delivery for the environment:

Outcome	PCs	By 2025
Making sure you have enough water, while leaving more in the environment	1. Leakage (%)	15.1%
	2. Per capita consumption (l/p/d)	129 l/p/d
	13. Environmental innovation	8 community pilot schemes
	15. River restoration	28 large projects and 28 small projects (equivalent to 84 project units)
	16. Sustainable abstraction management	36.3 MI/d (33.71 MI/d in Central region +2.6 MI/d in East region)
	17. Abstraction Incentive Mechanism (AIM) (MI/annum)	0 MI/annum
Minimising disruption to you and your community	2. Risk of severe restrictions in a drought (% population 1:200 year drought)	41.1%

**Find out more about our outcomes and performance commitments:** see Chapter 4 of our Business Plan.

2.3. We have selected investments for inclusion in our Business Plan that will enable us to deliver on our performance commitments and our statutory obligations. For the purposes of this report our Business Plan investment can be divided into the following categories:

Category	Description	Example
Base or Maintenance Investment	This is our investment that maintains current levels of service and meets the statutory obligations we already have. These are marked “S” or “S+” in WISER.	A proportion of our expenditure on leakage.
Enhancement Investment	This is money we will need to invest to meet new environmental requirements. These are marked “S” or “S+” in WISER <sup>1</sup> . It includes delivery of all the WINEP3 schemes in the timescales specified.	Delivery of green and amber sustainability reductions included in WINEP3.

2.4. Sections 4-8 of this report explain how WISER requirements are embedded within our Business Plan. We have included summary tables where appropriate to clearly identify the outcome, performance commitments and investments relevant to delivery of WISER.

### 3 Our Environment

#### *Our Supply Area and Operations*

3.1. We have three supply regions and eight geographical communities. Our Central region has globally significant chalk streams within the Chilterns AONB and we work hard to improve and protect these. Our Southeast region is notable for the North Downs and the White Cliffs as well as the Dungeness SSSI and SPA. Our East region contains Dedham Vale AONB.



**Figure 1: Our supply area and communities**

<sup>1</sup> We note that in the context of the Water Framework Directive, WISER uses S and S+ to denote environmental objectives and measures included in River Basin Management Plans (“RBMP”), or which may be included in future RBMPs. We are required by regulation 33 of the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 to have regard to the RBMP.

- 3.2. Our area is one of sustained economic growth and we anticipate that population will increase by approximately 7.8% during AMP7. We have nationally important infrastructure in our area including three major airports: Luton, Heathrow and Stansted and two major ports: Dover and Harwich. We expect to see construction of further infrastructure during AMP7 including HS2 and preparation for a third runway at Heathrow.
- 3.3. Our supply area has been designated an area of serious water stress and climate change means we are facing an increasing risk of drought. Our water sources remain under threat from many sources of pollution including agricultural pesticides and historic industrial use.
- 3.4. Our operations are different to those of some other water companies. We have little raw water storage and limited capacity to store treated water. We need to continuously abstract from our groundwater and surface water sources and make minute-by-minute adjustments to our operations. We have become increasingly adept at this; we will have voluntarily reduced our abstraction from the environment by approximately 20 Ml/d from 1993 to 2015 and then a further 42.1 Ml/d in the last 3 years, equivalent to about 7% of our resource base. This this has driven us to need to learn more about how to operate our supply system and how our sources respond to the changes we make.

***Our Water Resources Management Plan (“WRMP”)***

- 3.5. We are still working on our WRMP, which takes into account Defra’s Guiding Principles for water resources planning. Our consultation on our draft WRMP has closed and we are currently considering the responses that we have received and will be publishing our statement of response on or before 31 October 2018. We will be setting out in our final WRMP how sustainability reductions and the other measures included in Water Industry National Environment Programme 3 (WINEP 3) can be delivered. Our final WRMP will plan to balance supply and demand into the future without developing any new groundwater from chalk aquifers in our Central region. All WINEP3 sustainability changes have been incorporated into supply forecasts.
- 3.6. In considering how our plan should change in response to the representations we have received, we have prioritised identifying and costing the investments needed to deliver our final WRMP. We are therefore confident that we have included in our Business Plan all the investments we need to deliver our WRMP during AMP7.

**Find out more about our Water Resources Management Plan:** see Chapter 5 of our Business Plan.

***Our natural capital***

- 3.7. We are keen to better understand the social and economic value of the environment in our supply area and to use that information to inform our future planning and decision making. During AMP7, we will be adopting a natural capital accounting approach and ecosystem services assessment towards calculating the benefits realised by selected pilot schemes. We anticipate these schemes will allow us to use these techniques in preparing our business plan for the next price review.

**4 Enhancing the Environment**

---

- 4.1. We have included in our Business Plan significant investment targeted at protecting and enhancing the water environment. This investment meets all environmental requirements included in WINEP<sup>2</sup> within the timescales specified and will enable us to meet our statutory obligations, identified as “S” or “S+” in WISER.

---

<sup>2</sup> We will be carrying out an investigation and options appraisal of the impact of our abstraction on the River Brett in the East Region. The Environment Agency has indicated that the volume of sustainability change may be required over and above that included as an amber measure in WINEP3. Our Business Plan does not include investment to deliver this.

- 4.2. We recognise the benefits of an early start programme and we are planning to begin feasibility studies, options appraisal and detailed design before the end of AMP6<sup>3</sup>. We will prioritise programmes where the AMP7 programme would otherwise be particularly challenging.

**Water body status (Water Framework Directive)**

- 4.3. We are planning for £425.78m of investment during AMP7 to contribute to achieving the environmental objectives of the Water Framework Directive by 2027. Our delivery of sustainability reductions will be in tandem with increasing our water resources resilience (see further section 6 below).

1. Measures to prevent deterioration in current water body status (S)		
2. Measures to improve water body status (S+)		
<b>What our Business Plan delivers</b>	<p>33.71 Ml/d (deployable output) sustainability reductions in our Central region.</p> <p>2.6 Ml/d sustainability reduction in our East region.</p> <p>23 investigations and options appraisals.</p> <p>6 catchment investigations and 15 catchment improvement schemes.</p> <p>Programme of morphological works to improve 157km of river extending our existing work on six rivers (Beane, Gade, Misbourne, Mimram, Upper Lea and Ver) and adding seven new rivers (Bulbourne, Upper Chess, Upper and Lower Colne, Brett, Ivel, Cam). We will also make improvements to the River Dour.</p> <p>Schemes to support river flows in the River Cam and River Ivel.</p>	
<b>Outcome(s)</b>	<p>Outcome 1: Supplying high quality water you can trust.</p> <p>Outcome 2: Making sure you have enough water, while leaving more water in the environment.</p>	
<b>Performance Commitments</b>	<p>1. Leakage.</p> <p>2. Per capita consumption.</p> <p>15. River restoration.</p> <p>16. Sustainable abstraction management.</p> <p>17. Abstraction incentive mechanism.</p>	
<b>Base or Maintenance Investment</b>	Leakage (£90.64m)	<b>£90.64m</b>
<b>Enhancement Investment</b>	<p>Abstraction impact assessments (investigations and options appraisals) (£6.33m).</p> <p>Reducing our abstractions (sustainability reductions) (£58.42m).</p> <p>Catchment management (£7.11m).</p> <p>River enhancement (£19.04m).</p> <p>Conditioning treatment plant (£13.34m).</p> <p>Reducing customer consumption (£140.23m).</p> <p>Upper Thames Reservoir (£18.49m).</p> <p>Strategic supply transfer schemes (£36.67m).</p> <p>Leakage (£35.51m).</p>	<b>£335.14m</b>

<sup>3</sup> We have not included any transition expenditure in our Business Plan as defined in section 9.6 of Ofwat's Final Methodology for PR19.

**Find out more about our contribution to delivery of WFD objectives for water bodies in our supply area:** see Chapter 6 of our Business Plan.

- 4.4. We will invest £9.11m in projects that adopt a catchment based partnerships approach. These comprise our catchment investigations and improvement schemes and our resilience and environmental innovation pilot projects, which are supported by a bespoke performance commitment. We will continue to employ payment for ecosystem services where appropriate and cost beneficial such as product substitution.

### *Biodiversity and ecosystems*

- 4.5. We have significant land holdings across our supply area including statutory designated sites, e.g. Dungeness SSSI, Wraysbury and Hythe End Gravel Pits SSSI and sites of local conservation importance like Stockers Lake and Hilfield Park Reservoir. We have developed a programme of work to manage our sites safely, and to enhance and protect biodiversity. It includes bird box monitoring, species and habitat monitoring and land management including at SSSI sites and lakes.

<b>1. Measures that contribute to meeting and or maintain conservation objectives of Natura 2000 sites (S)</b>		
<b>2. Measures that contribute to meeting and/or maintaining favourable condition targets for SSSIs (S, S+)</b>		
<b>3. Measures that contribute to priority habitats and species outcomes as well as other biodiversity actions and measures to enhance ecosystem resilience on your own land or in the catchments within which you operate (S+)</b>		
<b>What our Business Plan delivers</b>	Contribution to favourable condition targets for SSSIs. Improvements to biodiversity on our landholdings.	
<b>Outcome(s)</b>	Outcome 2: Making sure you have enough water, while leaving more water in the environment.	
<b>Performance Commitments</b>	N/A	
<b>Enhancement Investment</b>	The investment we make in preventing deterioration of water bodies and contributing to achievement of good status will support meeting favourable condition. Specific biodiversity investment programme - £3m.	<b>£3m+</b>

**Find out more about how we will contribute to biodiversity during AMP7:** see Chapter 6 of our Business Plan.

### *Sustainable Fisheries*

- 4.6. We have completed fish screen installation with an agreed exception for the intake at Walton Water Treatment Works (“WTW”) and Heron Lake and Queensmead Lake. We will address barriers to the passage of fish in our morphological projects during AMP7. Our contribution to the “salmon 5 point approach” consists of planning to deliver sustainability changes and through our morphology projects.

### *Invasive non-native species (“INNS”)*

- 4.7. We will continue to manage INNS into AMP7. We do not currently have any cross-catchment transfers of raw water and any future transfers will be assessed in accordance with the Environment Agency’s guidance and mitigation included where necessary. Our teams will maintain biosecurity procedures to prevent the spread of INNS. We will work with Herts and

Middlesex Wildlife Trust to address INNS with volunteering days such as ‘balsam bashing’. A proportion of our biodiversity investment programme relates to management of INNS.

### Drinking Water Protected Areas

- 4.8. We will invest £7.11m in catchment measures to prevent deterioration in water quality and to reduce the need for additional treatment and support achievement of WFD good status in groundwater bodies. Our catchment management programme has been developed using a risk-based approach with an emphasis on identifying the source(s) and pathway(s) for contaminants that threaten the quality of water at our abstraction sites. We are expanding our catchment management programme to reduce the effect of nitrate and pesticide pollution on our water resources.

<b>1. Catchment measures to prevent deterioration in water quality and to reduce the need for additional treatment (S).</b> <b>2. Catchment measures to improve water quality and to reduce the level of existing treatment (S+).</b>		
<b>What our Business Plan delivers</b>	6 catchment investigations and 15 catchment improvement schemes.	
<b>Outcome(s)</b>	Outcome 1: Supplying high quality water you can trust.	
<b>Performance Commitments</b>	N/A	
<b>Enhancement Investment</b>	Catchment management (£7.11m).	<b>£7.11m</b>

**Find out more about our catchment management programme:** see Chapter 6 of our Business Plan.

- 4.9. A key issue for us is third party contamination of our sources. We plan to spend an additional £1m in developing and implementing a contaminated land strategy to work with the Environment Agency and others to secure clean-up of polluted groundwater sources. This will support delivery of environmental objectives under the WFD. Our long-term aim is to return these to use. We will consider the use of agreements under section 164 of the Water Industry Act 1991.

## 5 Excellent Performance

- 5.1. We will ensure that we comply with the conditions of our abstraction licences and our environmental permits during AMP7 through our systems of compliance monitoring. We will continue to hold our ISO 9001, 14001 and 18001 accreditations during AMP7 and our external assessors have confirmed our asset management practice is consistent with ISO55001 accreditation. In addition, our treatment programme includes investment to replace existing assets where this is necessary to ensure continued compliance with our permits.
- 5.2. Our operations generate waste. We hold 3 permits and have 15 registered exemptions in respect of waste activities. Our ISO accreditation will support our compliance with our permits in this respect. In addition, we will ensure contractual arrangements with third parties for supply of waste services to us includes robust audit rights to ensure that we comply with our duty of care in respect to the waste that we generate.
- 5.3. We have measures in place to ensure that our activities do not pollute the environment and to respond to accidents and operate a policy of proactive reporting should any pollution incident occur. Our processes and procedures reduce the risk of an uncontrolled event such that the incidence is limited to occasional events only thus operating with a ‘zero’ target each year.

## 6 Improving Resilience

- 6.1. Our Business Plan will ensure that we maintain and enhance resilience in line with government expectations and with customers' priorities to protect people, businesses and the environment from changing climate, flooding and drought. It will do this by acting in concert with our WRMP, which is our long-term plan for our water resources and our Drought Management Plan ("DMP").
- 6.2. Our Business Plan includes a resilience assessment that was carried out by Arup using the framework of "Resilience in the Round" published by Ofwat in September 2017 that has allowed us to assess our current level of resilience and to identify the improvements we will make in AMP7.

**Find out more about our resilience assessment and how we will improve our resilience in AMP7:** see Chapter 9 of our Business Plan.

### *Water resources and security of supply*

- 6.3. Our revised WRMP will provide a comprehensive plan for how we will manage our supply-demand balance for the 60-year period from 2020-2080 and ensure our future plans support achievement of environmental objectives under WFD. Our WRMP and Business Plan adopt a twin-track approach of reducing demand while looking to develop sustainable future sources of water. It provides for £425.78m of investment to deliver environmental enhancement and resilience (see paragraph 4.3 above).
- 6.4. We will ensure we maintain the resilience of our supplies by:
- investing in treatment that allows us to make full use of our existing transfer from Grafham WTW maintaining supplies in areas where we will be making sustainability reductions;
  - providing for strategic transfers to move water from the Thames further north in our Central region;
  - optimising our other transfers with South East Water and Southern Water to ensure the best use of available resource;
  - making improvements to local level assets such as pumps, mains upgrades and service reservoirs to enable us to move water where we need it;
  - investing in new service reservoirs to provide additional surplus treated water capacity to mitigate turbidity and flood risk; and
  - planning in partnership with Thames Water for delivery of a new regional reservoir in 2037 to support flow in the River Thames enabling new abstractions from the river.
- 6.5. Our WRMP and Business Plan will promote trading of water through identifying opportunities for water transfers. For example, we are planning to import additional water from Thames Water to replace sources we are unable to use during construction of HS2. We will also support future trading through development of more transparent transfer pricing and supporting trading platforms in regional partnerships (WRSE and WRE).
- 6.6. A key feature of our Business Plan includes investment to achieve a 1 in 200-year return period drought resilience from 2025 onwards without use of drought orders and permits. We will be laying the foundation for eradication of any need for rota cuts and standpipes under any drought condition by 2030.
- 6.7. We will continue to actively plan for how we will manage our supply in droughts. We undertook a drought "sprint event" with Water UK and other WRSE water companies in April 2018 in order to plan for an extreme drought event and we will develop that work further during AMP7. This event

demonstrated that companies must work with all sectors to raise awareness and preparedness for extreme drought and to mitigate the effects on the environment and the economy.

- 6.8. Our “reducing customer consumption” investment programme will seek to reduce demand through a range of innovative demand management options. We will include the use of “fast data” (see paragraph 7.2 below, community water efficiency schemes and a water re-use scheme to provide a rainfall harvesting system at a large commercial airport.

<b>3. Measures to reduce demand and per capital consumption (NS)</b>		
<b>What our Business Plan delivers</b>	129 l/day/capita consumption in a normal year.	
<b>Outcome(s)</b>	Outcome 2: Making sure you have enough water, while leaving more water in the environment.	
<b>Performance Commitments</b>	2. Per capita consumption (l/p/d).	
<b>Enhancement Investment</b>	Reducing customer consumption (£140.23m).	<b>£140.23m</b>

- 6.9. We will continue to deliver our target of 26 MI/day of leakage reductions that we will have made by 2020 whilst targeting a further 24.5 MI/d by 2025. We will achieve our target by investing in capital maintenance and our operational “find and fix” programme.

<b>4. Achieve a downward trend for leakage with rates at or below the sustainable economic level of leakage (NS)</b>		
<b>What our Business Plan delivers</b>	15% reduction in leakage during AMP7.	
<b>Outcome(s)</b>	Outcome 2: Making sure you have enough water, while leaving more water in the environment.	
<b>Performance Commitments</b>	1. Leakage – 15.1% reduction by 2025.	
<b>Base or Maintenance Investment</b>	Leakage (£90.64m)	<b>£90.64m</b>
<b>Enhancement Investment</b>	Leakage (£35.51m).	<b>£35.51m</b>

- 6.10. We already have in place a universal metering programme, which will continue during AMP7.

<b>5. Assess universal metering in water stressed areas (S)</b>		
<b>What our Business Plan delivers</b>	Metering penetration of 78% by 2025.	
<b>Outcome(s)</b>	Outcome 2: Making sure you have enough water, while leaving more water in the environment.	
<b>Performance Commitments</b>	2. Per capita consumption (l/p/d)	
<b>Enhancement Investment</b>	Proportion of reducing customer consumption (£75.22m)	<b>£75.22m</b>

### Service Resilience

- 6.11. We have in place an emergency plan for provision of essential water supplies in the event of a civil emergency. It ensures that we meet our obligation to co-ordinate and share information with category 1 and 2 responders. We will continue to maintain this plan ensuring it incorporates lessons learned from events including the freeze / thaw event earlier this year.
- 6.12. We will continue to deliver on our statutory reservoir safety requirements during AMP7.

### Flood risk management

- 6.13. As a water only company we do not have a formal statutory role in relation to flood risk management. We believe, however, that we do have a role to play in working with others to manage flood risk. We will look to work in partnership with the Environment Agency to assist with local flooding risk, for example through section 20 agreements concerning operation of our abstractions. We have established a mutual aid agreement with Thames Water and South East Water for the purchase and sharing of portable flood barriers that we will continue into AMP7. We also attend local resilience forums and meetings organised by local authorities.
- 6.14. We have protected most of our key assets, including our surface water intakes from the River Thames, to a flood level equivalent to a 1 in 100-year event plus 20% allowance for climate change. Where relevant, an additional 0.3m of protection was added to allow for wave action. Our key risk during a flooding event is being unable to access our water treatment works. We are intending to establish a project to better understand the operation of weir structures on the River Thames. We will look for opportunities to work in partnership to mitigate local flood risk for example through operating agreements that provide for us to abstract when groundwater levels are high. We support proposals for construction of the next phase of the Jubilee Flood Relief Channel which will enhance flood protection to our River Thames abstraction sites.

### Climate Change Adaptation

- 6.15. Climate change is one of the key challenges for our Business Plan. Our main risks from climate change are drought, flooding and meeting peaks in demand. Our WRMP has fully taken into account the need to understand the impact of climate change on our deployable output and on our transfers from and to other water companies. Our plans described above for securing long-term water resource resilience and drought resilience are central to our plan for climate change adaptation.
- 6.16. We have developed a comprehensive sustainable energy strategy to reduce our energy use and our carbon emissions. Our strategy is to increasingly adapt our water treatment processes to maximise the generation of renewable energy with 40% of our energy coming from renewable and alternative energy sources by 2030. This will support achievement of the government's emission reduction targets.

2. Reduce total carbon emissions (S+)		
<b>What our Business Plan delivers</b>	A comprehensive energy strategy to reduce our energy use and our carbon emissions.	
<b>Outcome(s)</b>	N/A	
<b>Performance Commitments</b>	N/A	
<b>Base or Maintenance Investment</b>	Energy strategy (£19.7m)	<b>£19.7m</b>

## 7 Innovation in Implementation

---

- 7.1. Our Business Plan includes innovative approaches and pilot projects to meet our outcomes and performance commitments and to help shape longer term initiatives. We will look for every opportunity to innovate in our delivery of our Business Plan.
- 7.2. We are focusing on two areas of innovation in connection with environmental improvement. The first relates to our proposals for reducing customer consumption. We intend to make use of “fast data”, which combines information from existing Automated Meter Reading (“AMR”) meters with information from our extensive network of data loggers within a hydraulic model to generate a detailed picture of consumption at a more frequent interval than customers normal six monthly bills. We anticipate this will achieve greater water savings than our metering plan would alone. The second relates to our environmental pilot projects and we have described these in section 9 of our report.

## 8 Our Commitment to Partnership Working and our Communities

---

- 8.1. We are committed during AMP7 to working ever more closely with catchment partners in our area but also at a regional level with our neighbouring water companies and at a more local scale with our communities to achieve the wider benefits that can only be realised by working with others.

### *Our Catchment Partners*

- 8.2. We believe working with others on a catchment scale will allow us to optimise our investment and thereby improve our efficiency and ensure our actions are sustainable and resilient. We are committed to continuing our strategic partnerships with Hertfordshire and Middlesex Wildlife Trust (HMWT) and further developing Up on the Downs, a landscape partnership that works with communities to celebrate and conserve the landscape and heritage in the Dover and Folkestone area. We also work with the RSPB on the Denge peninsular. We will also continue our work with the Environment Agency, Groundworks, the Misbourne Action Group, Friends of the Mimram, the River Beane Restoration Association and the River Chess Association under the banner of ‘Chalk Streams Partnership’. The Chalk Streams Partnership is currently focused on the rivers Ver, Misbourne, Upper Lea, Gade, Mimram and Beane but the programme will cover an additional eight rivers by 2020.

### *Our Community Partners*

- 8.3. We believe it is very important to help customers value water, manage and reduce consumption and reduce environmental impacts. Our Business Plan adopts a partnership approach with our communities. We believe this will pave the way for a water resilient future for our region. We will measure this in terms of a reduction in per capita consumption as well as changes to perceptions of the value of water. This will allow us to understand customer demand at a level necessary to inform and influence change.
- 8.4. We know that encouraging water efficiency is essential to ensuring that our area can accommodate future development without impacting negatively on the water environment. During AMP7 we will deliver eight pilot projects under our performance commitment for environmental innovation including studies and research projects such as water efficiency for affordable housing, water resilient homes in new garden cities, targeted campaigns on water reuse, grey water recycling and shadow pricing of water (see section 9 below).

<p><b>Find out more about our community strategy:</b> see Chapter 8 in our Business Plan.</p>
-----------------------------------------------------------------------------------------------

### *Our Water Industry Partners*

- 8.5. We work with our neighbouring water companies under two regional projects, Water Resources in the South East (“WRSE”) and Water Resources East (“WRE”) to identify opportunities to maintain

resilience of supply by effective sharing of water. We plan to invest £1.55m in our participation of WRSE.

- 8.6. The WRSE has the potential to develop a single water resources management plan for the region. WRSE could also create a “trading hub” for the South East, increase resilience to extreme weather events and embrace the direction of travel set out by the Defra 25 Year Plan, NIC Water Infrastructure Plan and the proposed Environment Agency National Framework.
- 8.7. We will also continue to participate in the steering group of the Water UK Long Term Water Resources Plan, working with the Environment Agency and other water companies to assess strategic water supply opportunities across the regions.

**Find out more about how we will work with other water companies at a regional level:** see Chapter 5 of our Business Plan.

## 9 Our projects

---

- 9.1. We are investing £2m in resilience and environment community pilot schemes and have included a performance commitment in our Business Plan regarding delivery of these schemes. There will be one scheme for each of our communities, working in partnership with local businesses and environmental groups.
- 9.2. We will use one scheme in the Lee catchment to look at the complete water cycle and focus the remaining seven schemes on particular elements of the water cycle to deepen our understanding of each element. By looking at the elements in concert and individually we will be able to assess what works best to inform our investment programme for AMP8 and beyond.
- 9.3. Our scheme for the Lee catchment will be a flagship project to investigate and influence catchment scale water use. We will work with others to identify opportunities for water recycling afforded by sustainable drainage, decentralisation of sewage treatment and reuse of final treated effluent from sewage treatment works and activities to reduce demand. The scheme will follow the Environment Agency’s concept of catchment system operator.
- 9.4. We will also use the principles of natural capital and eco systems services to evaluate the environmental benefits of taking a whole catchment approach to sustainable water management. The key aims of the scheme will be:
  - looking holistically at the water cycle;
  - reconnecting people with their local water environment;
  - engaging the local community to reduce demand;
  - working with existing stakeholders and partners within the community; and
  - using Citizen Science in support of project evaluation.

**Find out more about our resilience and environment community pilot schemes:** see Chapter 8 of our Business Plan.