

FROM SOURCE TO TAP:
The south east strategy for water



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Section 1: Review

Welcome

Welcome to “From Source To Tap: The south east strategy for water”.

This document is the culmination of ground-breaking collaboration and technical work to develop an **affordable, sustainable** and **resilient** regional strategy for water – one that delivers for customers, society and the environment.

The aim of our work is simple; to find better or new ways of sharing water by using existing sources, pipes and treatment works and developing new sources of water and bigger, longer pipelines to move it further around our region.

Equally important is our work to reduce the amount of water that is lost or wasted so there is more to go around – whether it’s finding and fixing more leaks on the pipe network, or encouraging customers to use less through metering programmes and ambitious water efficiency initiatives.

That’s important, as much of the south east region is officially designated as being in serious water stress.

It’s also a region where there are potentially greater pressures and challenges than those faced by other regions in the UK – more people in expanding towns and cities; relatively low rainfall but higher water use by people; and environmental pressures to keep more water in its natural home e.g. our rivers, rare chalk streams and underground aquifers.

However, everyone responsible for securing water supplies in the south east realises the scale of the challenges but also the potential opportunities.

That’s why our latest strategy – which looks 60 years ahead and at a range of plausible “what if?” scenarios – drives even greater collaboration, particularly among water companies, to deliver the region’s needs for water. We really are all in this together.

As a result, we have identified a mix of long-term solutions that will offer the best value for customers, society and the environment. Please read on to find out how we are planning ahead to keep our taps flowing and our water habitats healthy – whatever the challenge, whatever the weather.



1. Ian McAulay, Chief Executive Officer, Southern Water
2. Paul Butler, Managing Director, South East Water
3. Simon Cocks, Chief Executive Officer, Affinity Water
4. Anthony Ferrar, Managing Director, SES Water
5. Steve Robertson, Chief Executive Officer, Thames Water
6. Neville Smith, Managing Director, Portsmouth Water



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KEY FACTS



Supporting economic growth:

The south east region is worth £627 billion to the UK economy (30% of total) and has the highest employment rate (79%) of all the UK regions.



Business-focussed region:

London and the south east have nearly two million businesses, almost as many as all the other UK regions combined. But the commercial landscape is changing too, with over 150 English Wine Producer Member vineyards now taking root.



Popular tourist destination:

From cities and cultural centres to dramatic coastlines and downland the region has it all – which is why over 30 million visits were made in 2016, generating over £5.5 billion for the tourist economy.



Investing in water:

Having the right infrastructure services is a vital enabler for economic and social health. Over the last 20 years the region's water companies have invested many billions of pounds – and will continue to invest to support the delivery of services to 4.1 million more people by 2045 living in the south east.



Making water go further:

Over one billion litres of water is moved every day through 82,000km of pipes; and over 100 million litres of that is already shared between water companies.

Setting the scene

Water Resources in the South East is a sector-wide partnership that, over the last 20 years, has been developing a south east strategy for water. Our work is refreshed, and the strategy updated, every five years.

We were formed in 1996 as a direct result of a recommendation from the old Monopolies and Mergers Commission which (in reviewing a proposed merger of two small water companies in Kent) suggested there should be better regional co-operation when it came to sharing water.

Water Resources in the South East identified where, when and how water could be shared and moved around. The result? Four brand new transfers between water companies sharing up to 33 million litres of water a day.

Today we are still going strong. Water Resources in the South East has expanded to include London and the Home Counties with six water companies – Affinity Water, South East Water, Southern Water, SES Water, Portsmouth Water and Thames Water – working alongside the Environment Agency, Ofwat, the Consumer Council for Water, Natural England, the Department for the Environment, Food and Rural Affairs (Defra), the Canal and River Trust and the Greater London Authority.

The group also looks further afield, working with neighbouring regions of the UK and their water companies to explore inter-regional water transfers.

Crucially, Water Resources in the South East has been the catalyst for the region now having its very own water grid with almost 60 transfers – within and between water companies – moving over 100 million litres of water every day.



We have also supported the industry's efforts to reduce demand for water through metering, leak detection and water efficiency initiatives; and become an exemplar of best practice collaboration and consistency in planning for water.

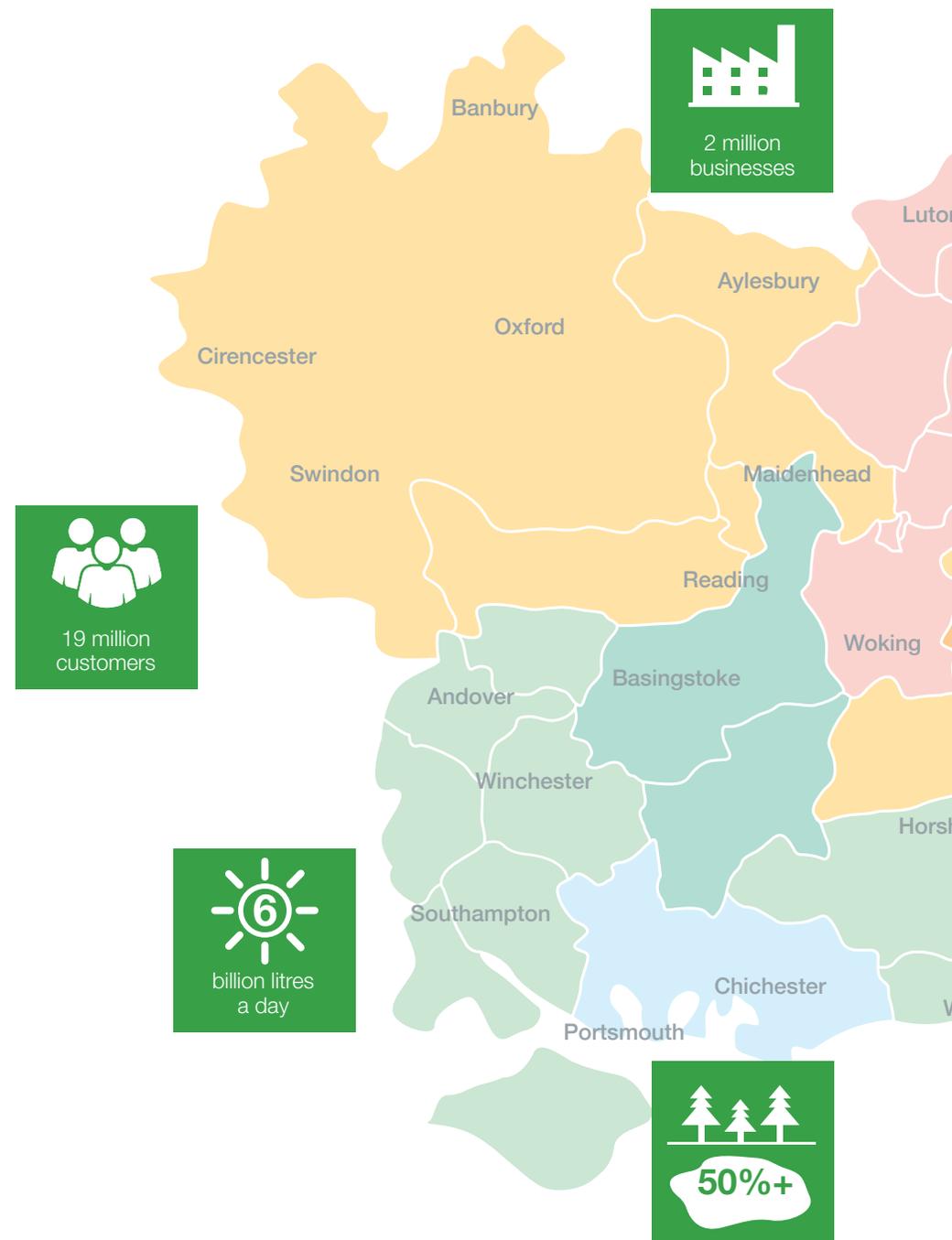
Section 1: Review

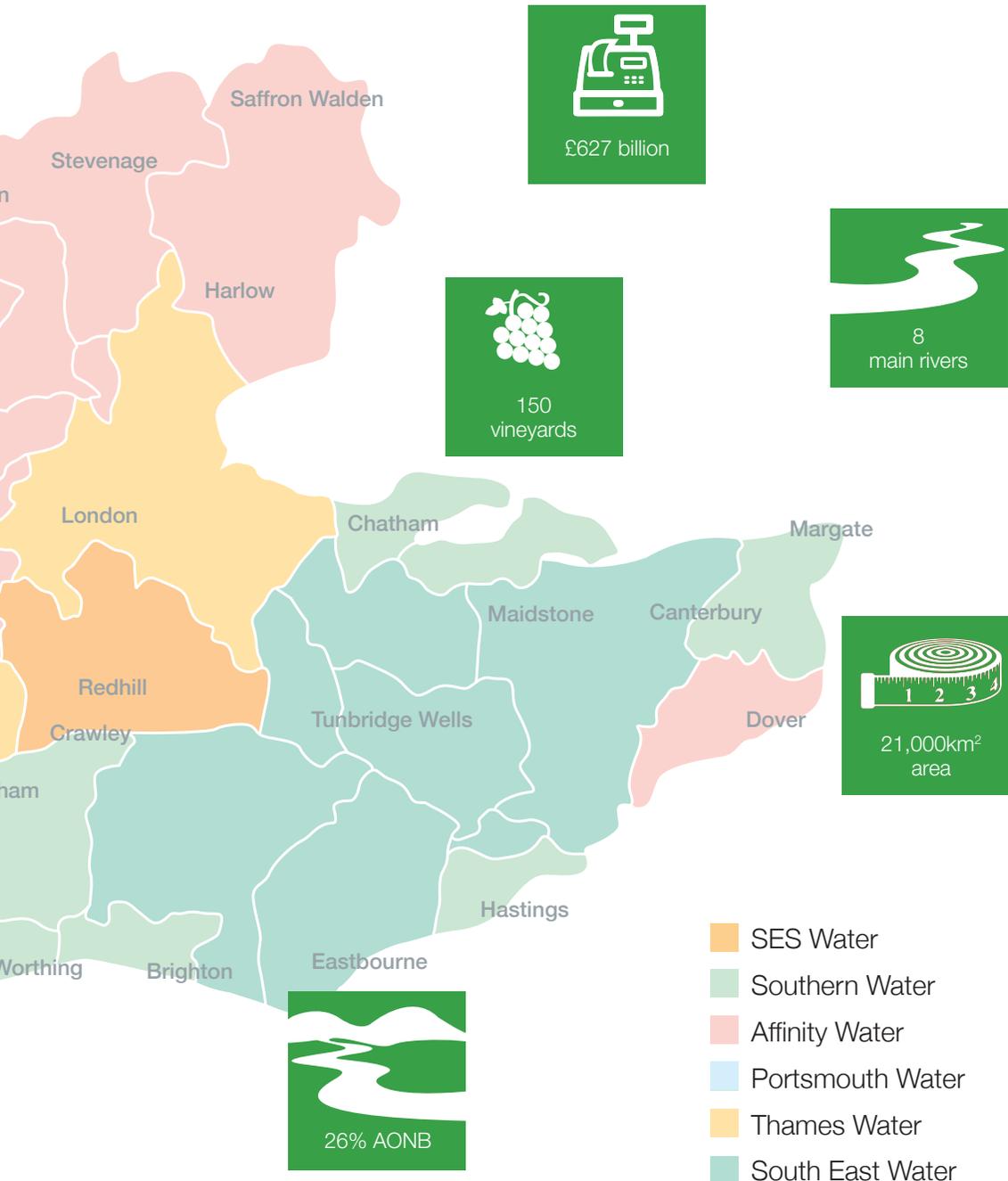
Where we are now: the south east region at a glance

The south east is one of the fastest growing regional economies; culturally rich and diverse with its major cities, seaside towns and rural hamlets; and is where farming and the natural environment are intimately linked.

Here are some of the things that make the south east region what it is today:

- Six water companies supply water to **19 million customers** and **2 million businesses**
- Normal demand for water is five billion litres a day – but can go up to nearly **six billion litres a day when it's hot**
- More than half of the region's water – and **up to 85% in some places** – comes from underground aquifers. These rely on there being enough winter rainfall to fill them up to meet higher demand for water the following spring and summer
- **Over a quarter (26%)** of the region is designated an Area of Outstanding Natural Beauty; while National Parks make up 8% of the region
- There's **700 miles of coastline**
- The region has **eight key rivers** – the Thames, Lee, Medway, Great Ouse, Rother, Arun, Uze and Itchen which support dozens more smaller tributaries and streams.





SERIOUS WATER STRESS DESIGNATION

In 2007 most of the south east was officially designated by the Environment Agency as being in serious water stress.

That means current **and** future demand for water makes up a significantly high proportion of the rainfall that we can expect to fill our rivers and underground aquifers, ready to meet that demand for water. Consequently, it's a tight balancing act to meet the water needs of the region's customers, society and the economy without over-exploiting the environment where that water comes from.

The designation also reflects the reality of the region's recent past and present; the south east has experienced more droughts – albeit different in type, duration and seriousness – than other parts of the UK. These droughts happened in 1972-73, 1975-76, 1984, 1989-91, 1995-97, 2003, 2005-06, 2011-12 and 2017 (in some parts of the region).



Section 2: Resilience today

The challenges we face in the south east

Housing and population growth

The south east region is growing rapidly and the demand for housing has never been greater. This is great for making the region an 'economic powerhouse' but more houses and more people mean a higher demand for water – unless of course we all start using less.

The latest projections show there will be 4.1 million more people (up 21%) in the south east region by 2045.

Taking less water from the environment

The south east region is a beautiful place to live and work, and is home to stunning coastlines, rolling hills, globally-unique chalk streams, ancient woodlands, Areas of Outstanding Natural Beauty and National Parks. Large parts of our region are, quite rightly, protected by national and European laws.

That environmental protection extends to the region's natural water habitats to ensure our wildlife, flora and fauna is also protected from customers' and society's demands for water.

The six water companies are currently working with the Environment Agency and Natural England to identify where, when and how, they can reduce the amount of water they take from the environment.

This could result in 100 million litres a day more water being left in its natural home – which means finding smarter ways of making up any shortfall in the water we also need for homes and businesses.

Impacts of climate change

Climate change is a global issue which has local impacts. Not only will it affect the demand for water, but the amount of water that is available in our rivers and underground aquifers.

In the UK there are clear signs it is having an impact on rainfall patterns, when and where that rain is falling, and how much of it we get.

The current climate change projections are that the UK will get warmer, have wetter winters and drier summers – with drought conditions more common, putting more stress on the water environment that people, society and wildlife all rely on. This means we must adapt to having less water in the future to meet demand.



What we have achieved so far

Since 1996, we have progressively reviewed and updated our regional water strategy, using complex computer models, to more accurately predict the 'future' reality of the region.

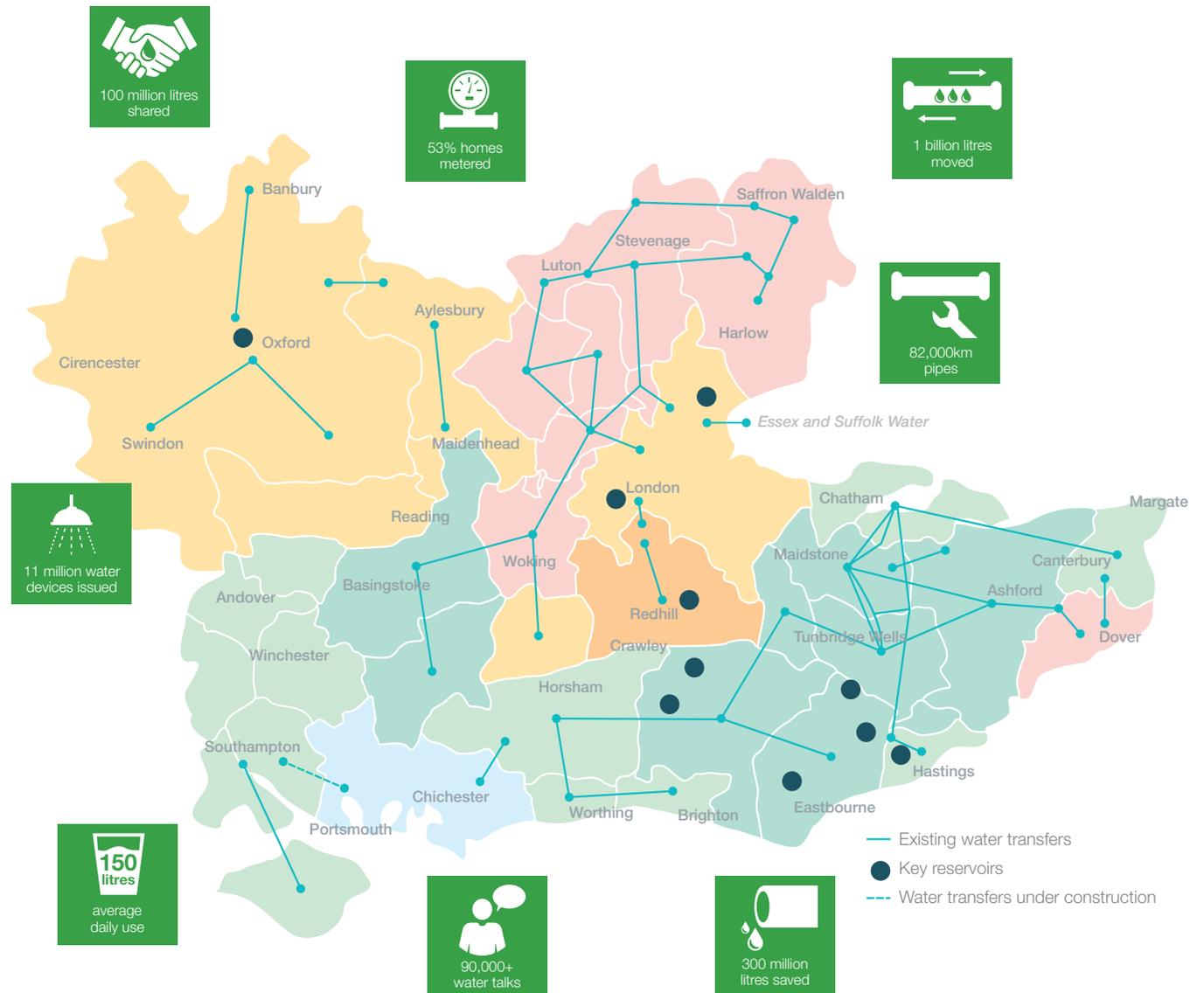
These models looked at hundreds of options that could either save more water; or tap into a sustainable source of existing or new water. They then selected the 'least-cost' solutions which successfully balanced the water needs of customers, society and the environment over 25 years.

These modelling results formed the basis of Water Resources in the South East's regional strategy over successive years; water companies then used the results to inform and guide their own long-term water resource plans. These statutory documents set out what they need to do, where and when, to maintain supplies to existing and future customers, while also protecting the environment.

The result? Leak detection, metering and water efficiency programmes – all ways of actively managing the water we already have – have delivered a step change in our region's water habits and behaviours, saving millions more litres of water a day.

Furthermore, water companies have built new water transfer pipelines, improving the region's resilience by allowing water to be moved from areas where there is a surplus, to areas where there is a shortfall.

The south east now has its own mini water grid – both between companies within the region but which also links up to other parts of the UK too, as the following map shows:



Section 2: Resilience today

What we are doing right now

The Water Resources in the South East's last regional water strategy was produced in 2014, in tandem with the water companies' individual Water Resources Management Plans.

The collective outputs of the regional water strategy and those companies' plans are happening right now, and include:

- Seven new water transfers between companies, capable of moving a further 47 million litres of water a day
- Detailed environmental and engineering investigations to develop new sources of water, for example:
 - extending existing reservoirs or constructing new ones. These types of schemes can take 10 to 15 years to develop, get permission for, build and bring on-line, so work needs to start now
 - investigating the feasibility of re-using highly treated wastewater during long spells of dry weather to replenish river flows and use for drinking water supplies
- Installing more meters, finding and fixing leaks and collaborating on water efficiency programmes.



Case study 1: Making the case for sustainability changes

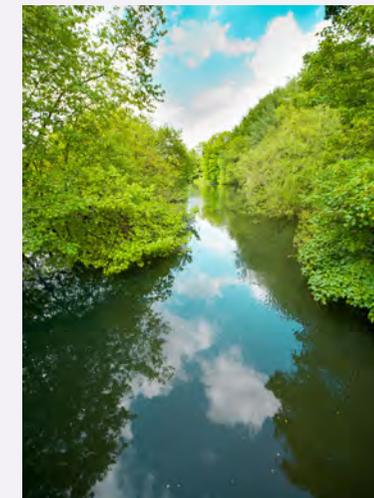
The Water Resources in the South East's regional strategy has inputted to identifying where, when and by how much water companies could – or should – reduce the amount of water they take from the environment to supply homes and businesses.

Called sustainability changes, the regional strategy looked at the impact on water supplies from reducing abstractions considered necessary by environmental regulators.

The Water Resources in the South East group examined the cost – to customers and society – of replacing that water with new schemes. This money would need to be paid for by customers through their water bills.

Faced with the challenge of taking less water from the environment while still meeting demand for water **and** keeping customers' bills affordable, water companies work closely with environmental regulators to define what are the 'certain and likely' reductions needed, in order to find and plan for alternative sources of water.

This will mean more water is being left, or soon will be, in its natural home; while at the same time keeping customers' bills affordable by ensuring the right investments are made when they need to be.



Case study 2: Looking for environmental impacts

Water companies always assess the potential environmental impact of their Water Resources Management Plans. The Water Resources in the South East group has helped this work by identifying – at a regional level – where there might be environmental impacts caused by a combination of things happening all at once, or in the same location, from the actions of more than one water company.

We've assessed the potential for these “cumulative effects” to happen and identified both the options and locations which are at greater risk of them happening. The affected water companies can then address how they will manage, and mitigate for if necessary, any impacts in their Water Resources Management Plan.



Case study 3: Understanding and changing water use behaviour

Water companies continue to try and drive down customer demand for water. Water use in the south east has significantly reduced as a result, from an average of 161 litres per person per day to 150 litres per person per day.

This positive downward trend is helping water companies meet the Government's aspirations to get everyone's daily water use down to 130 litres a day by 2030 – in fact, some water companies are already there and are targeting even greater reductions.

However, changing behaviour to reduce water use needs to be permanent and sustainable if it is to increase our resilience to drought and support the environment.

A 2017 poll of 3,000 customers by Affinity Water revealed the nub of the issue and the ongoing challenge – it's people, not water efficient appliances or devices, that use water.

Despite extensive efforts by water companies and partners to promote water efficiency and incentivise customers to use less, the poll revealed:

- A surprisingly high lack of thought around water use
- significant numbers admitted they sometimes waste water
- few have bothered to fit/use water saving devices
- only three in 10 respondents believed their household could use less water if needed.

So, in planning the region's future water strategy, the amount of water homes and businesses plan to use is a significant driver of what water companies need to do, where and by when.



But reducing demand for water can't be the only water strategy to meet population and economic growth **and** make our region more resilient to extreme droughts. That's why Water Resources in the South East looks at the greater risk customers and water companies could face if reductions in water use are not sustained, or can't be realised with any degree of confidence.

Inevitably a balance will need to be struck – between future-proofing and developing the water assets and infrastructure in the south east; and solely planning to persuade everyone to use less water.

To achieve that balancing act requires collective effort. While water companies use tools like metering and different tariffs to lower demand for water, there are other players in the wider water economy who can ensure the region's water strategy is rooted in sound, sustainable water policies.

Local planning authorities, government, regulators, housing developers, appliance manufacturers, consumer and environmental bodies and digital service providers all have a role to play in driving the change in water use behaviour that is expected.

Section 3: Resilience tomorrow

Future proofing the region's water supplies

The way future water supplies are planned is based on a simple equation.

First, there needs to be an assessment of how much water will be available; and second, how much water will need to be supplied over 25 years or more. The result is either a surplus or a shortfall of water.

In conventional planning, each water company works this out for its own area.

For most water companies in the south east, the process results in a shortfall of water in the long term; this is because the region is already water stressed but has a growing population and high demand for water.

To manage this, each water company then develops the solutions in their own area to meet that shortfall, by either reducing demand or increasing water supplies.

What has Water Resources in the South East done?

Over the last few years we've pioneered a different approach. The water companies that make up Water Resources in the South East have ignored their geographical areas and looked across the region and even further ahead – right up to 2080 – to work out what needs to happen, when and where.

This allows solutions to be considered that are better value for customers, more environmentally sustainable and offer greater resilience for the region even if they don't sit within an individual company's supply area.

In taking this approach we've addressed the following challenges:

- By 2080 there could be an extra 10 million people living in the south east – that's the equivalent to 10 new cities the size of Birmingham moving in
- Our climate is changing – more severe droughts are forecast in the future due to the impacts of climate change
- Our water abstractions must be sustainable – so we may need to leave more water in the environment than we already do
- How best to work with customers to help them use water efficiently over the long term – so we can conserve more of this precious resource and help them reduce their bills too.

What did we learn?

If we do nothing, by 2080 the region will face a significant shortfall of water – potentially from 1.5 billion litres a day to 2.6 billion litres a day, depending on how the future pans out.

How can we fix this problem?

There are two ways we can solve the shortfall in water, often referred to as the 'twin-track' approach.

1 We can make the best use of the water we've already got by:

- Installing more meters – evidence shows customers on a meter can use around 16% less water as they become more aware of what they use
- Helping customers to use less water, permanently, by providing more water efficiency advice and devices; and encouraging developers to build more efficient new homes
- Reducing the amount of water leaks from pipes
- Transferring any surplus water to areas with a greater need – within the region and from other parts of the UK too.

2 We can develop new water supplies such as:

- Reservoirs
- Desalination plants
- Water re-use schemes.

What did we do next?

We looked at a lot of “what ifs?” such as different population numbers, different demand for water and different climate change impacts, to produce 144 possible futures. A computer model was then used to help the group’s members identify what the best solutions are to fix the shortfall in water.

STEP 1

We put over 1,000 potential new options across the region – from reducing leakage, increasing water efficiency and metering, to making better use of existing sources, or building new storage reservoirs and new water transfer pipelines – into the model.

STEP 2

We examined the range of our 144 possible futures to select nine different but plausible scenarios to put into our computer model.

STEP 3

For each of these nine different futures, the model picks a portfolio of best-value options that can meet any predicted shortfall in water – and crucially options that can flex and adapt whatever the future might be.
P.S. Best value means that, overall, an option (or group of options) offers the most benefits for the cost and over a long time too - in some cases this could be over 100 years.

STEP 4

Some of the 1,000+ options are such good value they will appear in most portfolios. This helps us to narrow down which ones make the most sense to be developed further.

Section 3: Resilience tomorrow

The big challenge: planning for an uncertain future

The further into the future you look, the more uncertainty there is about what the supply, the demand and the shortfall of water could be; and what might need to be done in response.

It's important any future plans are adaptable over the long term to what could be big changes – for example in economic and population growth, to climate change, or to the nature of industry and agriculture in the region.

There are some ideas and solutions that can be delivered quickly, while others will take longer to come to fruition.

And who knows what 'disruptive technologies' – advances that will turn on its head the way we treat and supply water – may emerge over the next 60 years?

That's why the planning by Water Resources in the South East and water companies is revisited at least every five years; there's a high degree of confidence in what's going to happen in the short term but beyond the next 10 years, less so. It's vital there is enough time to flex and adapt.

What the future could look like – and the decisions that need to be taken

By examining different possible futures, we can get a better picture of the complex and difficult choices that need to be made for the region.

In this document we explore three of these futures, each of them plausible for the south east region, to give a flavour of what needs to be resolved.

All of the futures we've looked at have varying pros and cons. What is consistent is the trade-offs that need to be made between cost, the reliability of the solutions, having the additional water when we need it and where we need it, and the impacts on the environment and society.



| FUTURE A: What we've planned for | | | What we have assumed | What is the shortfall in water? |
|--|---|---|---|--|
| <p>Planning for a severe drought = 1 in 200-year event</p> <p>Which means: No drought permits or drought orders allowed</p> | <p>Taking less water from the environment = 98 million litres a day less</p> | <p>Baseline demand for water = 6.8 billion litres a day</p> <p>Taking into account (by 2080): Population increase of 52% Non-household water use up 5%</p> | <p>A high level of water efficiency: reduction in water use per person to 110 litres per day by 2050 and 15% reduction in leakage by 2025</p> | <p>910 million litres a day</p> <p>See page 16 for possible solutions</p> |
| FUTURE B: What we've planned for | | | What we have assumed | What is the shortfall in water? |
| <p>Planning for a severe drought = 1 in 200-year event</p> <p>Which means: No drought permits or drought orders allowed</p> | <p>Taking less water from the environment = 98 million litres a day less</p> | <p>Baseline demand for water = 6.8 billion litres a day</p> <p>Taking into account (by 2080): Population increase of 52% Non-household water use up 5%</p> | <p>Continued progress in water efficiency: reduction in water use per person aiming for 135 litres per day by 2080 and 15% reduction in leakage by 2025</p> | <p>Over 2 billion litres a day</p> <p>See page 17 for possible solutions</p> |
| FUTURE C: What we've planned for | | | What we have assumed | What is the shortfall in water? |
| <p>Planning for a severe drought = 1 in 500-year event</p> <p>Which means: No drought permits or drought orders allowed</p> | <p>Taking less water from the environment = 431 million litres a day less</p> | <p>Baseline demand for water = 6.8 billion litres a day</p> <p>Taking into account (by 2080): Population increase of 52% Non-household water use up 5%</p> | <p>A measured level of water efficiency: reduction in water use per person aiming for 135 litres per day by 2080 and 15% reduction in leakage by 2025</p> | <p>Over 2.6 billion litres a day</p> <p>See page 18 for possible solutions</p> |

Section 3: Resilience tomorrow

FUTURE A SOLUTIONS

Fast-tracked, ambitious demand management – greater uncertainty and high cost

This future is all about delivering lots of demand management activities, very quickly, to try and save more water through leakage, metering and water efficiency options.

In this future we are forcing the model to reduce leakage by a further 15% by 2025 and asking it to assume that daily water use will drop by around 25% – from the current 150 litres per person, per day, to 110 litres per person, per day, by 2050.

The model is then picking lots more expensive water-saving options that, in principle, can deliver 1.4 billion litres of existing water, every day, to help fix the shortfall. This is then topped up by a further 1.5 billion litres every day of 'new water' from options like groundwater sources, reservoirs and desalination plants to secure the region's water needs.



The cost:

Over £26 billion – of which two-thirds (£17 billion) are water-saving options.

The debate:

To achieve this future, water companies need to spend a lot of money up front on water-saving options – but a key dependency on them being able to achieve these water savings is customers' support to rapidly reduce their water use, permanently, so that less investment in water infrastructure is needed.

Water companies also need to consider the impact on bills if they decide to adopt a fast-track, high-cost, but potentially more risky approach to managing water supplies.

Similarly, what can be achieved, in practice, to meet more ambitious leakage reductions without placing the region's water supplies at even greater risk if these options don't deliver what they're expected to?

More, smarter meters and new leak detection technology will play a key role in determining what water companies can realistically achieve around demand management, and by when. Meeting these goals will also need action from others too, such as political support for more compulsory metering and better building regulations so new homes are more water efficient.

FUTURE B SOLUTIONS

A longer-term twin-track approach – less uncertainty, lower cost

This future is about making the best use of water already available while also developing new water resources when they're needed – but takes more time to deliver. Unlike Future A it expects a more measured reduction in water use by customers while developing the water infrastructure needed over a longer timeframe.

We're still expecting leakage to be reduced by a further 15% by 2025. We've also assumed that daily water use will drop 10% from the current 150 litres per person, per day, to around 135 litres per person, per day – but by 2080.

That said, a lot can happen in 60 years, so those leakage and water use reductions, and potentially more, could be achieved in the medium term too e.g. the next 10, 15 or 20 years. The model may assume the pace of change but that doesn't mean the companies can't progress more ambitious reductions through their five-year business plans, particularly if their customers expect them to do so (which incidentally is what some water companies are already considering).

The model is then picking a mix of cost-effective, longer-term options that save water e.g. metering, leakage and water efficiency options to deliver 567 million litres every day of existing water to help fix the shortfall. This is then topped up by a further 1.8 billion litres every day of 'new water' from options like reservoirs and desalination plants to secure the region's water needs.



The cost:

£17.6 billion – of which two-thirds (£12 billion) are options that deliver 'new water'.

The debate:

More time – to change customers' water-using behaviour via metering and water efficiency initiatives and to develop the technology to achieve greater leakage reductions – means less risk. This future expects customers to reduce their water use by less than half the amount, and not as quickly, as Future A.

It also ensures new water options have enough lead-in time to be properly investigated and built in the event lower water use by customers isn't or can't be realised. In practice, this twin-track approach means customers are likely to be at a lower risk of experiencing water use restrictions too.

So, while the reduced risk is spread more equally between customers and companies, is the ambition and pace of change around saving water good enough in a water-stressed region where there are already impacts on the environment? Should more be done, and quicker, regardless of cost?



Section 3: Resilience tomorrow

FUTURE C SOLUTIONS

More extreme droughts and climate-driven events - more certainty and resilience, but higher cost

This future expects there to be much less water available due to very severe droughts – a 1 in 500-year drought which, incidentally, is even worse than the 1 in 300-year drought experienced by Cape Town’s three million residents in early 2018 (and which has never been experienced in the UK). Such serious, prolonged droughts could have severe economic impacts too – the cost to London’s economy from the effects of emergency drought measures is estimated at more than £300 million a day.



This future also expects even greater environmental protection of the region’s rivers and aquifers meaning that less abstraction can occur.

In this future we are still expecting to achieve the same reductions in leakage and daily water use, as in Future B.

The difference is that with such severe droughts happening the model is having to pick more ‘new water’ options that deliver big volumes to fix the shortfall – so we see more desalination plants and reservoirs being needed. These ‘new water’ options deliver 2.3 billion litres of water a day to secure the region’s water needs, while options that save water e.g. metering, leakage and water efficiency, are delivering 621 million litres a day.

The cost:

£28 billion – of which three quarters (£21 billion) are options that deliver ‘new water’.

The debate:

Should we be taking a balanced investment approach to the region’s water needs now, so that we avoid possibly even higher costs and impacts because we didn’t heed the warnings about this future?

The potential downside is new water infrastructure may not be used to its maximum capacity for many years if the future turns out not to be so severe after all, and it would still need to be run and maintained. Is it right to take a “just in case” investment approach when it could have significant cost and environmental impacts?





Section 3: Resilience tomorrow

What are the potential options for the south east?

There are 419 options which commonly feature in some way across the range of plausible futures we've looked at.

These 419 options appear in Futures B and C. The table below summarises what these are:

| Type of option | Number |
|---|------------|
| Water Treatment Works | 1 |
| Water transfers from outside the region | 3 |
| Groundwater sources | 25 |
| Demand management | 332 |
| Reservoir and surface water options | 16 |
| Desal, water re-use and Aquifer | 10 |
| Storage and Recovery options | |
| Water treatment works expansion | 4 |
| Water transfers within the region | 28 |
| Total | 419 |

Of these 419 prevalent options, there are 48 'big ticket' schemes that deliver at least five million litres a day.

What are these 'big ticket' schemes?

At least two-thirds of these 'big ticket' schemes (67% by count, but 88% by the volume of water those schemes produce) are aligned with what water companies' draft Water Resources Management Plans include, and which are being consulted on now. Take a look at the map on page 21 to see those schemes which deliver larger volumes of water.

How is this informing what happens in the region?

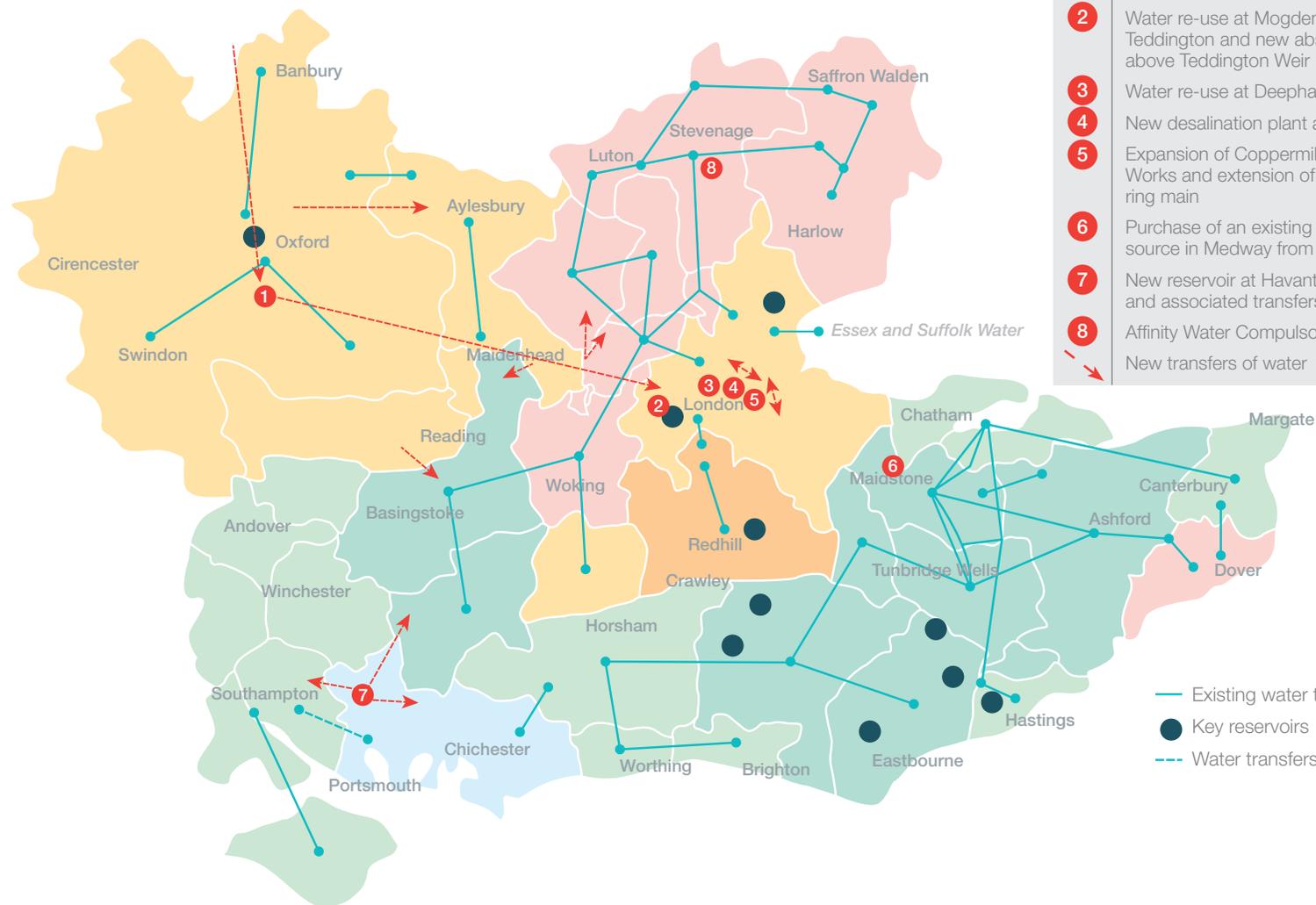
All the different futures we have looked at help us to work out what could be best for the region as a whole.

Water companies can then compare these different futures with their own detailed understanding of their supply areas and select options that have the same ability to flex and adapt – whatever the future might be.

It is also important that water companies' plans remain affordable for customers and have their support, which is why they are consulting on them.



How the region may look in the future (showing schemes that deliver more than 15 million litres of water per day)



Key to the schemes shown on the map

| | Scheme | Volume of water (million litres per day) | Estimated date when needed |
|---|--|--|----------------------------|
| 1 | New reservoir at Abingdon and associated transfers | 281 million | 2040 to 2050 |
| 2 | Water re-use at Mogden, transfer to Teddington and new abstraction above Teddington Weir | 268 million | 2025 to 2030 |
| 3 | Water re-use at Deephams | 45 million | 2025 to 2030 |
| 4 | New desalination plant at Beckton | 142 million | 2030 to 2035 |
| 5 | Expansion of Coppermills Treatment Works and extension of London ring main | 100 million | 2025 to 2030 |
| 6 | Purchase of an existing groundwater source in Medway from a third party | 20 million | 2020 to 2025 |
| 7 | New reservoir at Havant Thicket and associated transfers | 36 million | 2025 to 2030 |
| 8 | Affinity Water Compulsory Metering | 18 million | 2020 to 2025 |
| - | New transfers of water | | |

— Existing water transfers
 ● Key reservoirs
 - - - Water transfers under construction

Section 4: Re-engaging

In this section we've outlined what you can expect to see and hear about during 2018 as there will be a lot of activity, largely driven by water companies, to get everyone's views about how best to manage water supplies in the future.

But we also want to set out our ideas for the future role of Water Resources in the South East, how it could evolve to better address both regional and national priorities, and the increasing role that a wider set of stakeholders could play.

What happens now?

The regional water strategy – and the water companies' own Water Resources Management Plans – are just the start of the process to determine the region's future water needs.



What water companies are doing

Water companies have published their draft Water Resources Management Plans for 2020-2045. They carry out a three-month public consultation to get customers' and stakeholders' views on what they plan to do, where and when, to secure future water supplies. Their ideas and proposals have been shaped by this strategy and the collaborative work of Water Resources in the South East.

At the end of the consultation, companies review all the representations made on their draft plans and collate their responses to them in a Statement of Response document. This responds to all the feedback they receive and details how the company will change its plan (or not) to reflect those representations. They will then update and submit a final Water Resources Management Plan to the government.

Water companies are then advised by the Secretary of State for the Environment, Food and Rural Affairs whether they can publish their Water Resources Management Plan, so they can start to plan for what needs to be delivered.

What Water Resources in the South East is doing

We have published this document at wrse.org.uk. We will continue to analyse our findings, so they can inform the water companies' final Water Resources Management Plans.

Since the WRSE was set up 20 years ago, its scope and the number of issues it addresses has grown. Other regions have followed suit, establishing regional groups, albeit all have different local issues to solve and these groups vary in structure and membership.

Over the next few months we will be talking to more stakeholders and organisations about our work to secure the region's water supplies, and what else we should be thinking about in the future.



What more do we need to do?

We also need to think about what other questions we could help answer, so that we address a broader set of priorities including:

- How we support national economic and industrial growth policies
- developing a market-based approach to drive innovation in areas such as water re-use technologies, grey-water systems, leak detection and repair, smart metering and water efficiency products
- the needs of large water users such as agriculture and other industries
- how we enhance the environment through a more sustainable abstraction regime
- the development of a regional resilience strategy
- how we take account of the region’s natural capital and use it to inform our decision making
- the development of a “one company” approach, where water companies plan to the same level of service.

This could mean that Water Resources in the South East needs to change over the coming years. Here is some of our initial thinking.

WE COULD:

Establish a standalone body that develops a regional Water Resources Management Plan carrying out all the technical, engagement and consultation work required.

WE COULD:

Develop a market where water companies or third parties bid to implement different parts of the plan. It too could be expanded to cover the drought planning process and response.

WE COULD:

Change the way we are structured and governed by creating an entirely independent body with an independent chair and multi-sectorial board – to provide greater confidence in the group’s impartiality to do what’s best for the region.

WE COULD:

Develop one regional plan that is split up into the companies’ Water Resource Management Plans for them to consult on and deliver.

WE COULD:

Include drought planning processes by expanding our approach so we can co-ordinate the regional response to drought.

WE COULD:

Expand the collaborative nature of our work and get more stakeholders, particularly those who rely on water such as farmers and energy producers, involved. This would better reflect the multi-sector approach the region needs to tackle its water challenges; and has the potential to better protect and manage the “natural assets” we all rely on.

Get involved with Water Resources in the South East

Addressing the water challenges in the south east region is not just the job of water companies – it requires support and action from customers, businesses, regulators, local and national government, environmental and consumer bodies too.

Whether realised or not, we all have a part to play in making sure that the region's water is managed and used in a sustainable way. Which is why we are interested to hear your views.

If you'd like to contribute to how we evolve in the future you can contact Helen Gavin, Project Manager, at Helen.Gavin@wrse.org.uk
More information is also available at wrse.org.uk



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