Our Draft Water Resource Management Plan 2019

WATER: FUEL FOR GROWTH

Customer and Stakeholder Summary

love every drop
anglianwater

RESPONSIBLE BUSINESS OF THE YEAR 2017
BUSINESS IN THE COMMUNITY

WELCOME

Water resources in the East of England are under increasing pressure from a rapidly growing population, climate change and environmental needs. As a result, we know we need to work to maintain an appropriate supply demand balance and increase our region's resilience to severe drought.

In addition to these challenges, there remains a significant level of uncertainty over the scale of sustainability reductions required of water companies in 2025 to protect the amount of water available for the environment.

As such, we need to ensure that our proposed Water Resource Management Plan (WRMP) is flexible enough to be adapted to meet unknown future needs, including possible future exports to support neighboring water companies.

To do this, we have created two planning scenarios: the 'Principal Planning Scenario' and the 'Adaptive Planning Scenario'. The Principal Planning Scenario includes confirmed impacts of sustainability reductions as well as the forecast impacts of growth, climate change and severe droughts. The Adaptive Planning Scenario builds on this, and includes the additional uncertain impacts of future (2025) sustainability reductions and possible exports.

Both of these scenarios present us with a significant challenge that we have to address. The Principal Planning Scenario highlights an impact of 307million litres a day, nearly 30% of the amount we supplied each day in 2017. The additional impact in the Adaptive Planning Scenario is 165million litres, taking the total to 472million litres a day – around 43% of our daily supply in 2017.

To meet this challenge, we will continue to focus on significant demand management across our region. We are proud of our track record in this area, putting less water into supply today than in 1989, despite a 34% increase in properties served. This has been achieved through water efficiency and behaviour change campaigns, metering, and industry leading leakage reduction.

Our proposed ambitious, cost beneficial demand management strategy will allow us to meet customer and Government expectations for leakage reduction, save water that would otherwise be abstracted from the environment, mitigating deterioration risk, and ensure the reliability, sustainability and affordability of water resources over the long-term.

Nevertheless, the scale of the challenge we face is so significant that we need a twin-track approach; we need to invest in building new water supply capacity. Our WRMP includes strategies for trading water with neighbouring companies (Affinity Water and Severn Trent Water), increasing connectivity and extending our current network of large capacity mains to create a strategic grid, and the development of new resources.

We have also set out solutions to allow for the treatment and transfer of surplus water in North Lincolnshire to deal with deficits in other parts of our system. These solutions include new treatment processes, transfer mains and pumping stations, and new storage reservoirs.

Our WRMP makes the best use of available water before developing new resources and significantly increases our resilience to severe drought. In practical terms, this means that, by 2025, in a 1:200 year drought event no customers in the Anglian Water region will be at risk of severe restrictions.

This summary document sets out the key strategies in our draft WRMP and enables you to have your say on the future of this region's water supplies. We have choices in some areas about the pace at which we meet the challenges facing our region and we welcome your views in response to the consultation questions at the back of this summary.

Jean Spencer

Jean Spencer, Executive Director, Strategic Growth and Resilience

OUR PLAN IS AFFORDABLE...

Our customers told us...

- That whilst they are prepared to accept bill increases for service improvements that they value, many of our customers are feeling under financial pressure

Government expects companies to...

- Ensure that water supplies are affordable.
- Take a strategic approach to water resources planning that represents 'best value' over the long-term.
- Consider every option, including those outside of company boundaries, collaborating with other sectors, inter-company transfers, and trading.

Our Plan...

- Identifies the 'best value' solution through a combination of:
  - Cost-benefit assessment to help determine the preferred demand management strategy
  - Least-cost optimisation to determine the preferred programme of supply-side investments
  - Including limited investment for 'pre-planning' options that may be required in the future, and
  - Minimising potential for stranded assets, by determining our preferred programme of supply-side investments in the Principal Planning Scenario, and then testing it in the Adaptive Planning Scenario.
- Ensures that investment not driven by statutory requirements is kept within a range affordable for all customers:
  - Additional revenue from new properties offsets the cost of demand management
  - Investment to increase resilience is modest, and equates to approximately £2.20 p.a. on the average household bill by 2025.
  - In total, our Plan will add £12.30 p.a.to the average household bill by 2025.

OUR PLAN IS RELIABLE...

Our customers told us...

- We should be planning for the long-term and taking preventative action to address foreseeable future challenges, including drought.
- They support investment to increase resilience.

Government expects companies to...

- Take a long-term, strategic approach to the development of the WRMP.
- Enhance the resilience of public water supplies.
- Identify an appropriate level of service based on meaningful engagement with customers.

Our Plan...

- Is resilient against the median climate change scenario and severe drought (approximately 1 in 200 year return period), meaning that we will be able to maintain supplies to customers without the need for rota-cuts and standpipes.
- Increases our resilience to unforeseen events by reducing demand and increasing system connectivity to fully integrate our northern, eastern and western systems, creating a strategic grid.

OUR PLAN IS SUSTAINABLE...

Our customers told us...

- They generally prefer options that make best use of existing resource and infrastructure.
- Leakage reduction continues to be a priority.

Government expects companies to...

- Protect and enhance the environment, acting collaboratively.
- Promote the efficient and effective use of available resources, including reducing levels of leakage.
- Value nature in decision-making..

Our Plan...

- Makes best use of existing water resources before developing new ones. It does this through:
- An ambitious demand management strategy, that will more than offset growth in demand
- Fully integrating our northern, eastern and western water supply systems, allowing us to move water to where it is needed, and, Trading with Affinity Water and Severn Trent
- Provides sufficient water to support housing targets in the South and East of England.
- Protects and enhances the environment by meeting all statutory environmental obligations, including sustainability reductions
- Mitigating unacceptable environmental impacts and identifying opportunities for enhancement through the Strategic Environmental Assessment and Habitats Regulation Assessment processes
- Our demand management strategy and the creation of a strategic grid meet our short-term needs, whilst giving us the capacity to meet uncertain future needs.
- By undertaking pre-planning work we will be able to meet any additional statutory deadlines associated with sustainability reductions required by 2030.

GETTING THE BALANCE RIGHT

MANAGING DEMAND

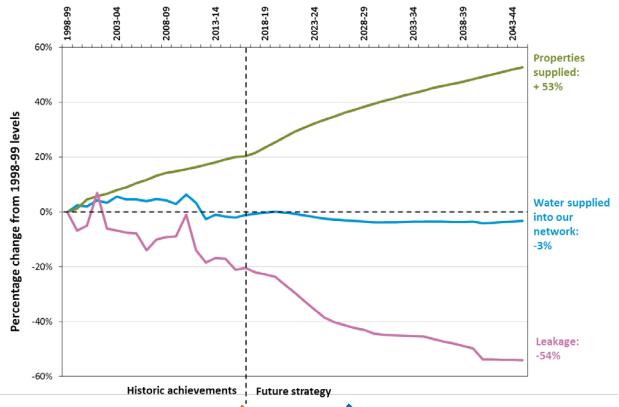
We put less water into supply today than in 1989, despite an increase in properties in our region of more than 34%. Our leakage performance is the best in the industry. What's more, by 2020 we aim to have 93% of households metered and 86% paying measured charges.

We are proud of this record but know that we need to continue to build on these past successes to meet the challenges of the future. Our draft WRMP focusses on collaboration and engagement with our customers, as well as utilising the latest technology and innovation to deliver water savings of 123milion litres a day by 2045.

We agree with Government, and our customers, that demand management has to be our priority and we will always look to make better use of what we have before exploring new supplies.

"We have been greatly successful at offsetting the impacts of growth in our region. Our draft WRMP goes further than ever before and sets out a truly ambitious approach to continued reductions in demand."

Our leakage performance is the best in the industry, with a **further 23% reduction planned by 2025**



OUR STRATEGIES TO REDUCE DEMAND

Smart Meters

Between 2020-2025 we will invest **£180million** installing **smart meters** across our region, saving **23 million litres** a day by 2045.

Studies show that customers with smart meters save more water than those using conventional meters. This technology also allows us to use data like never before to work with customers to help them reduce their use.

Smart meters are also a vital tool in helping to identify leaks.

Engaged Customers and Water Efficient Homes

Water efficiency campaigns and initiatives have a huge role to play and our **£21million** investment in this area between 2020 – 2025 will see **30 million litres a day saved** by 2045.

Our strategy will see the continuation of our leading efficiency campaigns, Bits and Bobs and The Potting Shed. These free campaigns provide retrofit devices for use in customers' homes and gardens to help save water.

We will also be using pioneering behavioural economics to look at reward mechanisms for water efficient customers and financial incentives for customers who want to replace larger fixtures and fittings in their homes – like toilets – with more efficient ones.

Going further still, we will be working with developers to ensure new houses are as water efficient as possible, using new technology like greywater reuse and rainwater harvesting to save 80 litres per person a day in new developments.

Driving Down Leakage

In our 2020-25 business plan, a further **£50million** will be spent to **drive leakage down a further 23%** by 2025.

Using the very latest technology and innovation, we will transform the way we manage our water networks.

We will be further developing our award winning Integrated Leakage and Pressure Management System, bringing together more data to make it easier to find and fix leaks. We will also use cutting edge pressure management to prevent burst from occurring through our network.

As well as new technology, we will continue to invest heavily in our intensive Leakage Detection Teams , who scour the region to find difficult-to-detect leaks and target areas with ageing infrastructure.

EXPLORING NEW SOURCES OF SUPPLY

Despite our ambitious demand management strategy, the scale of the challenge our region faces is so large that we still need carefully targeted investment to increase supply-side capacity.

Our supply-demand balance methodology shows that, even with our investment in further demand reduction, as many as 15 of our 28 Water Resource Zones could be in water deficit by 2045.

Our preferred programme of supply-side solutions looks to address this, ensuring there is enough water available across our region to meet the needs of communities, the environment and the economy. We have also 'future proofed' our draft plan against potential impacts of future environmental regulations (like sustainability reductions) by increasing option capacity.

As well as looking at new supplies, a key strategy in our draft WRMP is to increase the connectivity of our current resources, fully integrating our northern, eastern and western systems to creating a strategic water grid. This will allow us to transfer water from areas of surplus to need, without having to secure new supplies.

Working with our neighbours

Before looking at new sources of supply, our draft WRMP has identified options to work with our nearest neighbours to better utilise resources and explore opportunities to trade water.

By working with Affinity Water and Severn Trent Water, we can significantly increase the amount of water available for our customers – with one trade with Affinity Water freeing up 18million litres a day at our Grafham Water Reservoir.

As well as increasing water availability, these trading options avoid the need for significant capital investment in new supply assets.

By trading with neighbouring companies in our WRMP, **we are saving over £124million** that would otherwise have to be spent on new supply options.

OUR STRATEGIES TO SECURE NEW SUPPLIES

Water Reuse for Non-Potable Use

This innovative scheme will see us invest £75million to install enhanced treatment at our Pyewipe Water Recycling Centre. This advanced treatment will allow treated water from Pyewipe to be sent through a new pipeline to the South Humber Bank, where it will be used to support vital industry.

From non-potable to potable

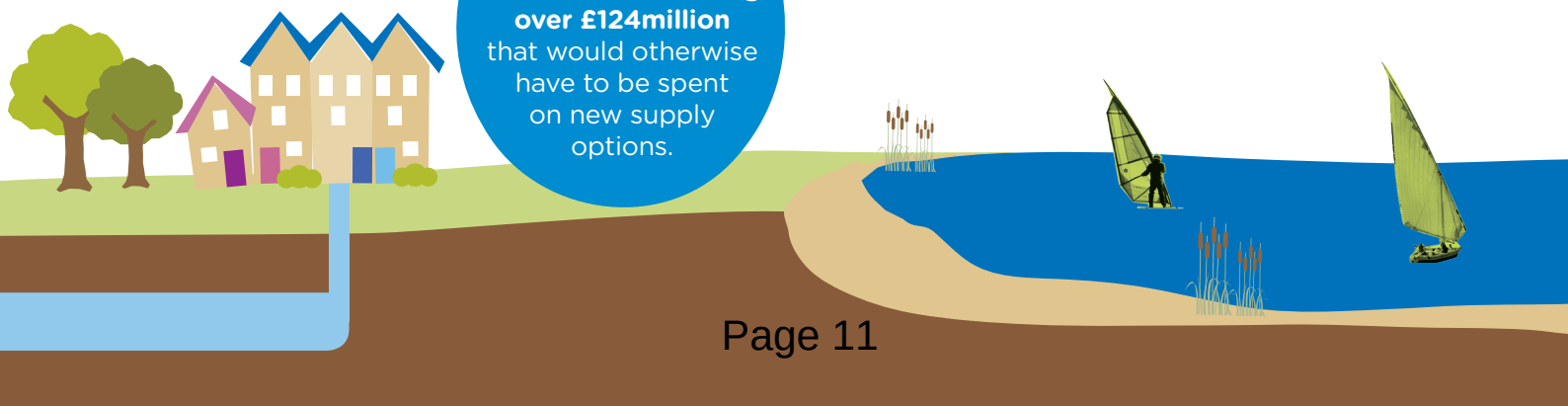
We currently have a water treatment works at Elsham that supplies non-potable water to industrial customers on the South Humber Bank. In the future, part of this industrial need can be met by our water reuse strategy (above).

We will be investing £160million to install and upgrade our Elsham Water Treatment Works to treat this water to potable standards. In addition, we will be developing a new transfer from the works to South Lincolnshire, allowing millions of litres of clean, safe drinking water to be supplied to customers in Greater Lincolnshire, and further south if needed.

PLANNING FOR THE FUTURE

There is still a great level of uncertainty about the future, and what demands this will bring. To ensure we are prepared for this, our draft WRMP sets out plans to carry out pre-planning activity for new supply options that may be needed in our 2024 WRMP. These options include:

- New storage reservoirs in South Lincolnshire and Fenland
- Desalination plants in Felixstowe and the South Humber bank
- Further water reuse at Ipswich Water Recycling Centre



WE'VE BUILT THIS PLAN TOGETHER

CUSTOMER ENGAGEMENT

Ensuring all of our plans represent our customers' priorities is so important to us and we've done all we can to embedded customer engagement into every aspect of our business .

Since 2017, we've carried our a range of extensive, robust and innovative engagement activities, involving over 45,000 customers so far. What's more, to ensure that our approach to engagement is meaningful, we involved customers at the very outset to help us to co-create our engagement strategy – making sure we would be speaking to people about the things that mattered and using a medium they connected with.

We have also actively sought to explore differences of opinion, experience and behaviours between different groups of customers. This is particularly important when considering the potentially different needs and preferences of customers in vulnerable circumstances.

Views on water resource management have been gathered from our Love Every Drop Online Community, the Anglian Water Summer Tour Bus, the H2OMG Water Festival, targeted research across customer segments and societal valuation surveys.

FORMAL PRE-CONSULTATION

At the end of last year (2017) we undertook a formal pre-consultation process on our draft WRMP, engaging with regulators, other water companies, local authorities, environmental and conservation groups and catchment partnerships. Our pre-consultation reached over 150 key stakeholders and outlined the challenges we are addressing in our WRMP, as well as information about how to get involved in the consultation of our Draft WRMP 2019, once published.

We have worked closely with all of our regulators in the development of this plan, holding over 20 meetings with the Environment Agency, Ofwat and Natural England.

REGIONAL AND NATIONAL STAKEHOLDER ENGAGEMENT

The challenges we have outlined in our draft WRMP (drought, climate change, growth, environmental needs) are shared amongst a broad range of stakeholders, not just us as a water company.

We have worked closely with our neighbouring water companies and other major water abstractors and users in the region to ensure that we will all have access to reliable, sustainable and affordable supplies in the future.

We are leading a number of pioneering, collaborative water resource planning programmes at a regional and national level. The Water UK National Long Term Planning Framework, chaired by Anglian Water, explores national water supply resilience and sets out a strategy for water companies to work together to build resilience throughout public water supply in England and Wales.

Water Resources East (WRE) and the Trent and Ouse Working Groups consider multi-sector needs (water, energy, agriculture and environment), developing a common understanding of water resource planning issues and identifying cost-effective options for sharing available resources, including transfers and trading.

These regional and national partnerships have informed our thinking and helped to shape the strategies in our draft WRMP.

YOUR CHANCE TO HAVE YOUR SAY

Resilient, secure water resources are vital to communities, businesses and the environment alike. We believe our Water Resources Management Plan is ambitious, sustainable and affordable – providing the right blend of supply and demand management strategies and remaining flexible to any uncertainties of the future.

But do you think we have got the balance right? We want to know you thoughts, especially on the below areas:

1

Growth is a key challenge our WRMP sets out to meet. We have used the latest local authority growth targets to develop our strategy, ensuring there will be enough water to meeting these targets. We have taken this approach because housing growth is regularly cited as a top priority for national and local Government. Of course, targets do not always turn into achieved growth and, currently, local growth targets are not quite being met.

Given this, do you agree with our approach of planning to meet local authority growth targets, or should we switch to an approach of using trend-based projections?

2

We are proud of the ambitious, cost beneficial demand management strategy that we have developed in the WRMP and are confident that this will more than offset the effects of growth in the region. Using the very latest technology and innovation, our strategy will unlock estimated water savings of around 43million litres a day by 2025, and 123million litres a day 2045. This strategy relies on more than just technology though – it requires collaboration with our customers, stakeholders and businesses to help bring down water demand.

Do you agree with this approach? Are we right to prioritise demand management?

3

Studies show that the public are more in favour of the introduction of compulsory water meters than ever before. We believe that this higher level of support reflects the fact that we now have a much larger proportion of customers paying using a meter compared to those who do not. We know there is still little support from customers who still pay unmeasured charges and so we have decided against the inclusion of compulsory metering in our WRMP.

Do you agree with this approach or think that we should consider compulsory metering in our upcoming business plan (2020-25)?

4

We have used Adaptive Planning to identify opportunities to'future proof' our Plan against potential environmental regulations by increasing option capacity. The cost of this future proofing is £88 million, which equates to a cost increase of around £1.70 per year on average customer bills by 2025.

Should we include this additional investment to future proof our plans?

5

Our Plan is designed to increase our resilience to drought, so that no customers are exposed to the risks of rota-cuts and standpipes in a severe drought event. The investment required to increase resilience to drought is, we believe, relatively modest and equates to approximately £2.20 per year on the average household bill by 2025 (assuming the other factors that influence bills remain unchanged).

Do you support this approach?

6

Climate change is one of the key strategic risks our business faces. As a result, we have decided to adopt the Environment Agency's 2017 method for calculating climate change impacts, which results in a large impact in 2024-25.

It would, however, be possible to defer these impacts, and the associated investments, until 2029-30. Doing so would remove approximately £300million from the investment programme between 2020-25, a bill impact of around £6.10 per year on average customer bills by 2025.

Should we defer this investment until 2029-30?

All responses should be sent to:
water.resources@defra.gsi.gov.uk
or Secretary of State for Environment:
WRMP, c/o Water Resources Policy, Area 3D Nobel House, 17 Smith Square, London SW1P 3JR

Any comments on our Draft Water Resources Management Plan should be sent to:

water.resources@defra.gsi.gov.uk

or

Secretary of State for Environment
WRMP
c/o Water Resources Policy
Area 3D Nobel House
17 Smith Square
London
SW1P 3JR