



from  
Southern  
Water. 

Welcome

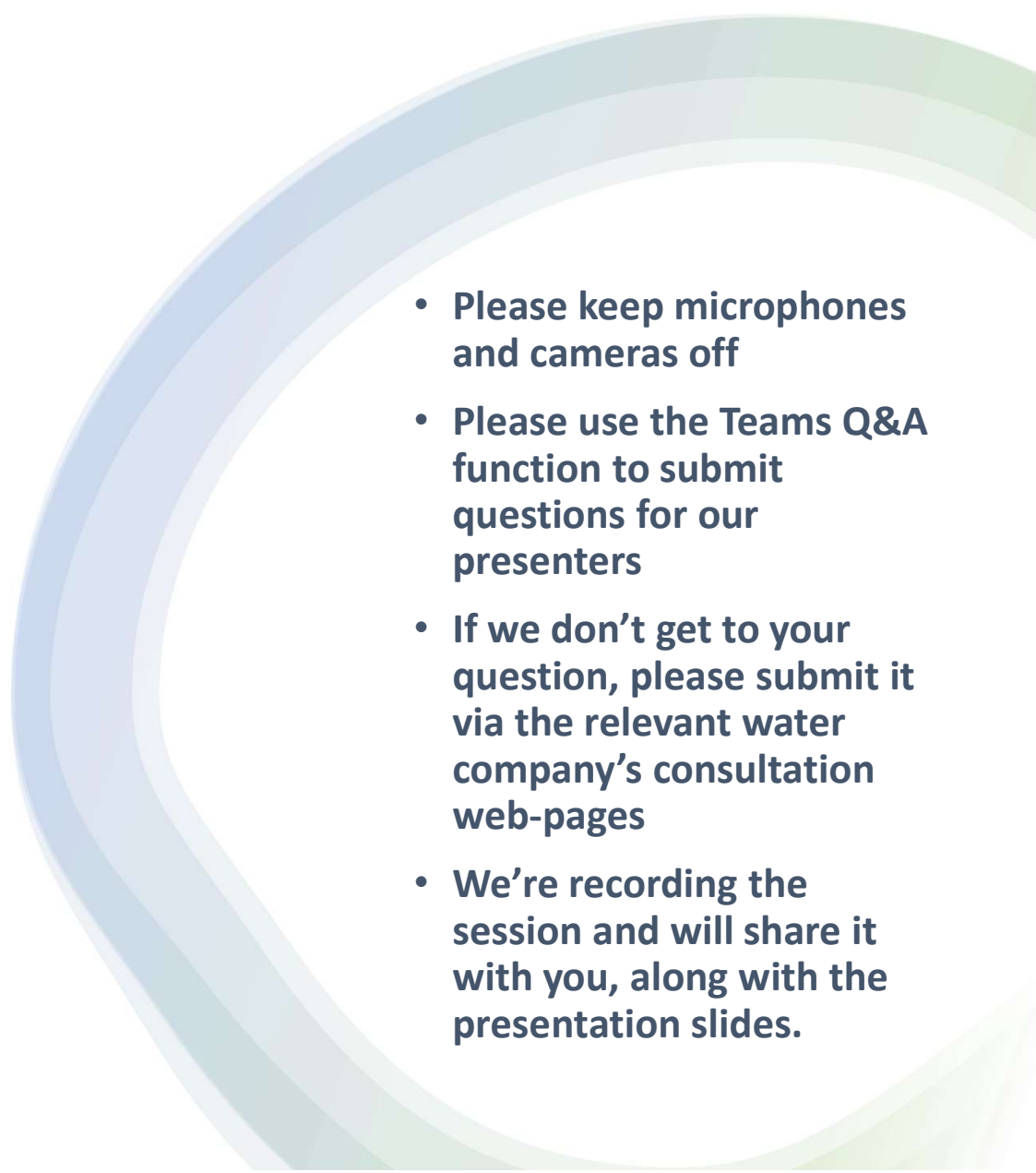
The webinar will start  
shortly after 1.30pm

**Portsmouth  
Water**



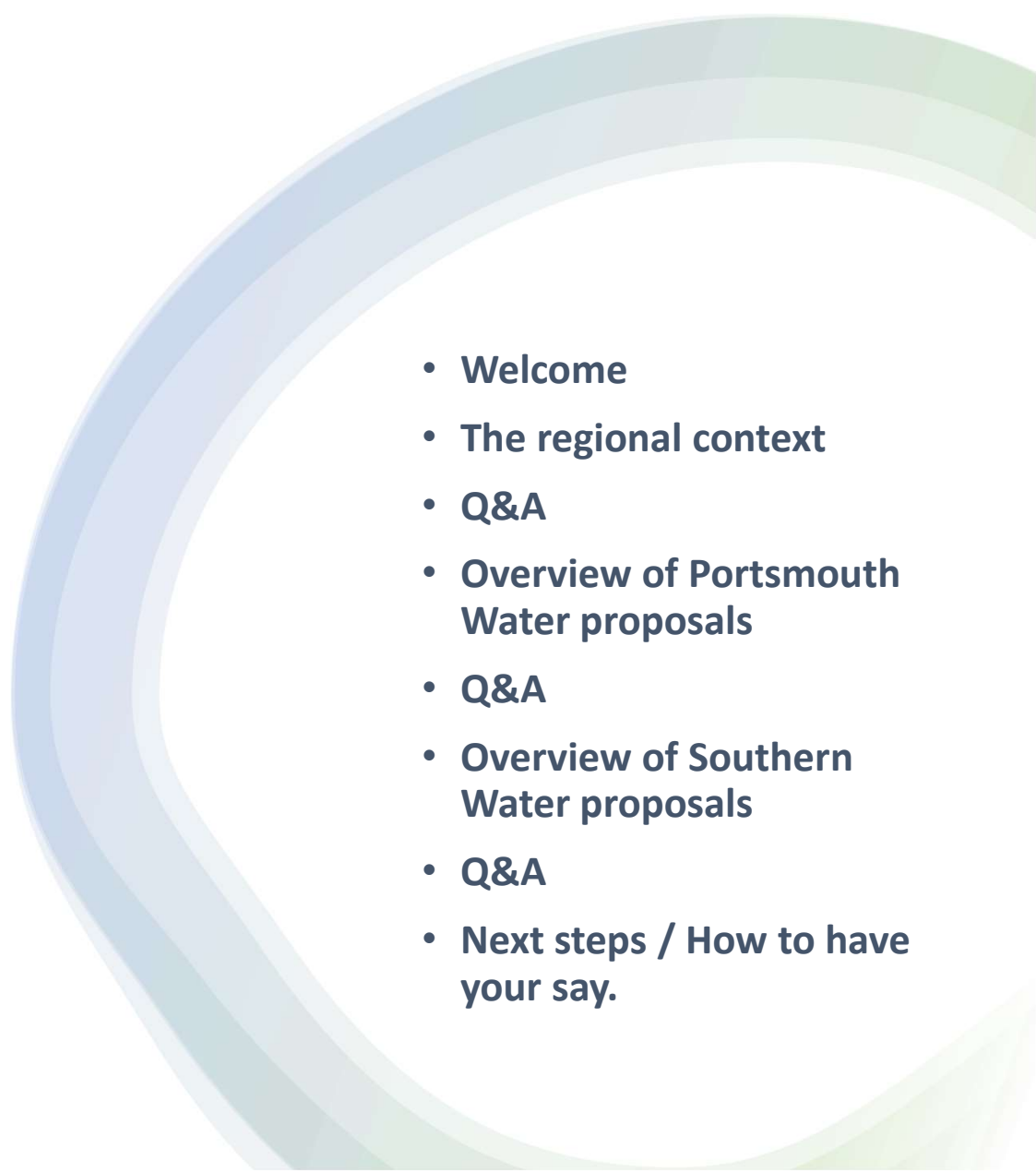


# Housekeeping

- 
- **Please keep microphones and cameras off**
  - **Please use the Teams Q&A function to submit questions for our presenters**
  - **If we don't get to your question, please submit it via the relevant water company's consultation web-pages**
  - **We're recording the session and will share it with you, along with the presentation slides.**



# Agenda

- 
- **Welcome**
  - **The regional context**
  - **Q&A**
  - **Overview of Portsmouth Water proposals**
  - **Q&A**
  - **Overview of Southern Water proposals**
  - **Q&A**
  - **Next steps / How to have your say.**

# Our draft Regional Plan

Meyrick Gough, Technical Director, Water Resources South East (WRSE)

# WRSE is an alliance of the 6 water companies in South East England.

Together they supply **6 billion litres** of water each day.

We're planning **50 years** ahead to provide enough water for the future through a regional plan.

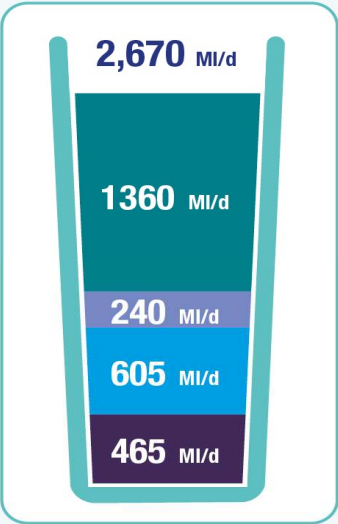
We're also planning for the needs of other sectors such as agriculture, industry and power.

## If we do nothing, we could face a shortfall of nearly 2.7 billion litres of water per day by 2075.

### More water is needed to:

- Improve the environment by leaving more water in rivers, streams and underground sources
- Address the impact of climate change
- Supply a growing population
- Make our water supplies more resilient to droughts

The future is uncertain, so our regional plan can adapt, depending on what might happen.



## Our draft regional plan shows how resilient and sustainable water supplies could be provided for the future.\*

Reduce leakage by at least **50%** and lower water use by **40 litres** per person per day (on average) by 2050.

### Between 2025 and 2035 we need to:

- Complete the construction of **1** new reservoir in Hampshire and start building **3** more in Oxfordshire, Kent and West Sussex
- Use the Grand Union Canal to transfer water from the Midlands to South East England
- Develop **6** water recycling schemes in Kent, Sussex, London, Hampshire and the Isle of Wight to supplement our water supplies
- Build **1** desalination plant on the Sussex coast
- Develop new transfers so we can move up to **600 million litres** of water per day around the South East and between other regions

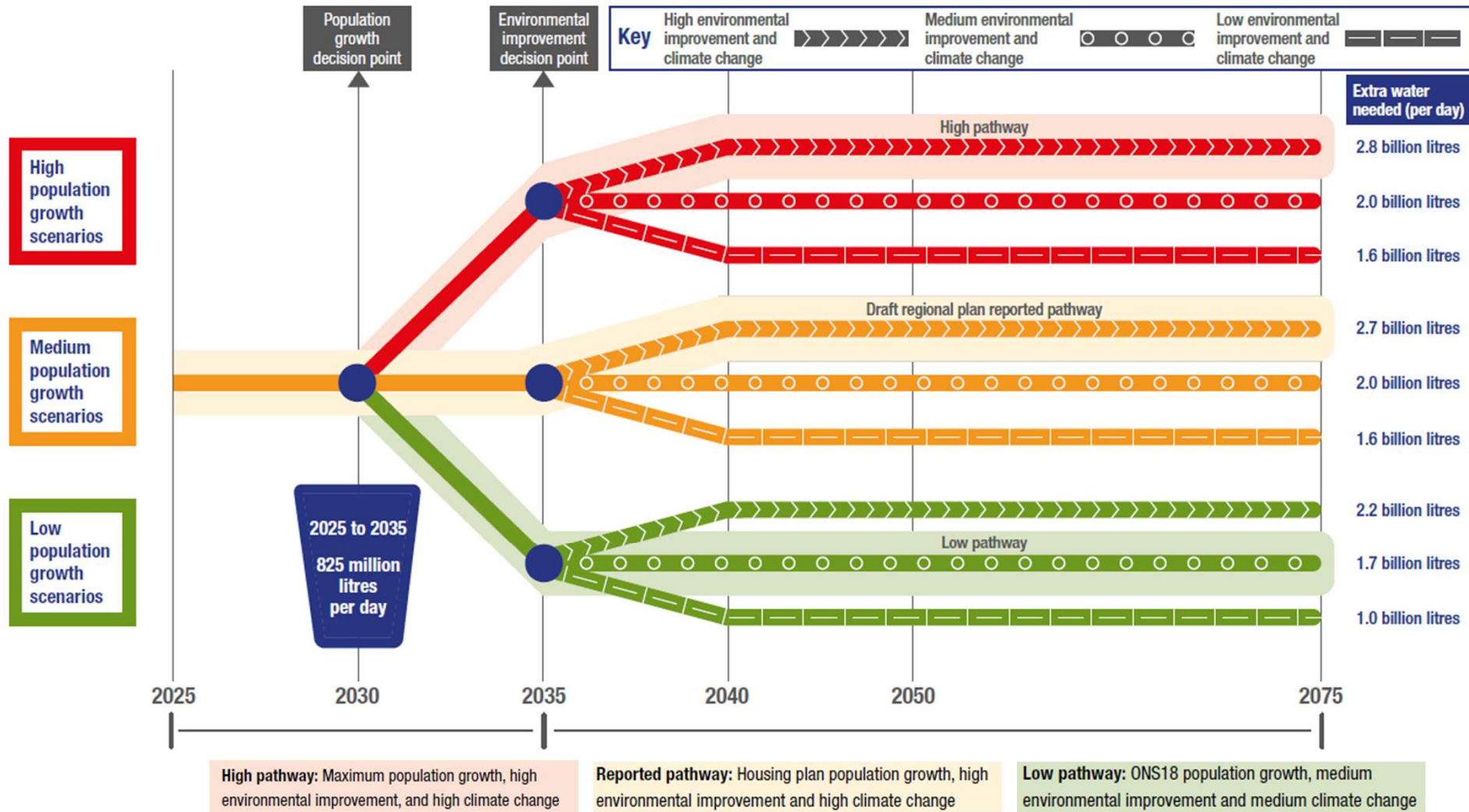
### Between 2035 and 2075 we could need to:

- Develop a further **6** water recycling schemes across the region
- Transfer more water from the Midlands and the North West using the River Severn and the River Thames
- Build desalination plants at a further **5** locations in Kent
- Build **1** new reservoir in East Sussex
- Store extra water underground at **3 sites**
- Develop new transfers so we can move up to **1,400 million litres** of water per day around the South East and between other regions.

Our regional plan could cost **£15.6 billion** to deliver by 2075.

\*Schemes shown are based on the reported pathway of our draft best value plan

# Planning for uncertainty

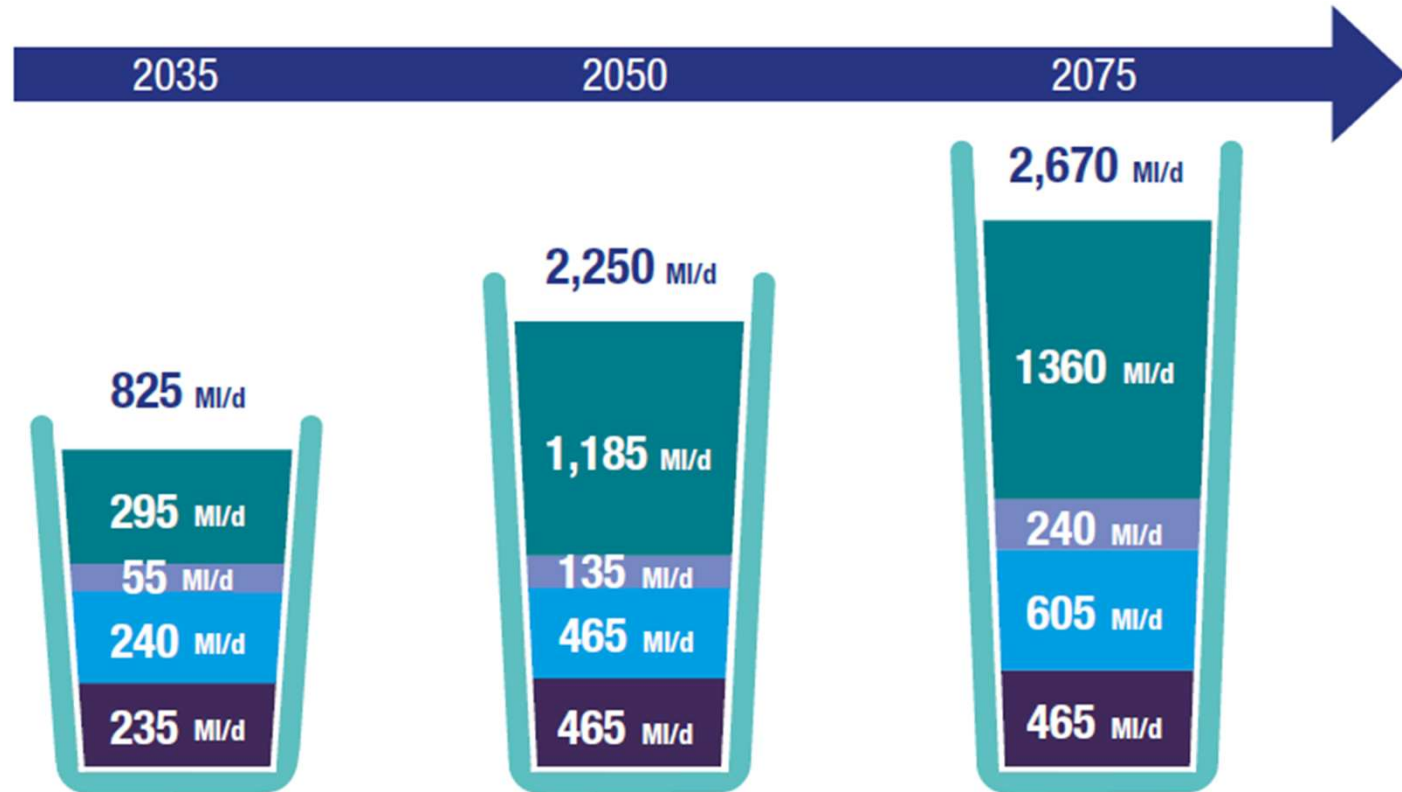




# Mind the gap

## Key

-  Environmental improvement (through abstraction reduction)
-  Climate change\*
-  Population growth
-  Drought resilience (includes replacing environmental drought orders and permits after 2040)



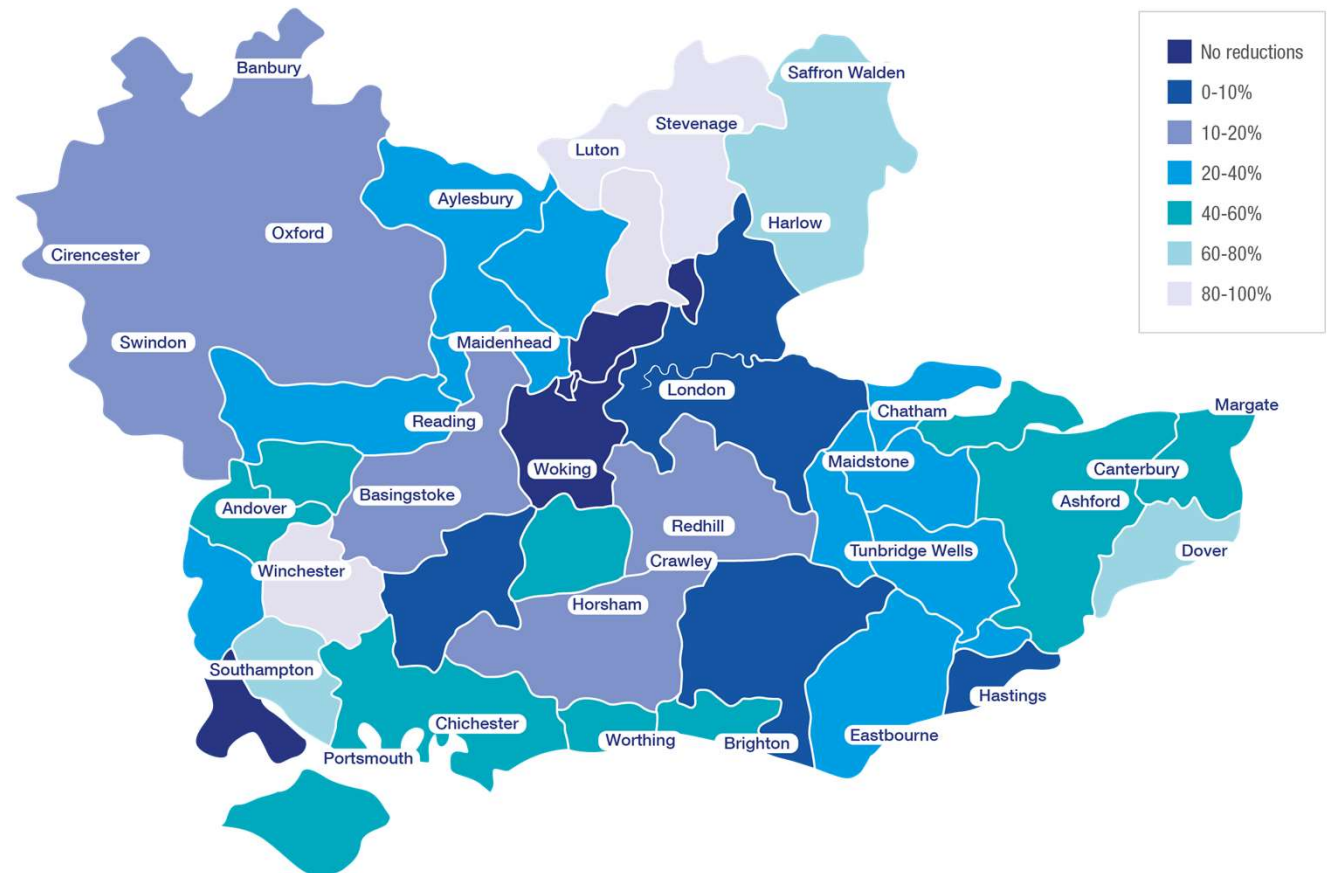
\*Climate change represents how much water will no longer be available from our existing water sources. The impacts of climate change are also included in the three other areas.

# Reducing abstraction to improve the environment

Reducing abstraction is a priority for customers and stakeholders. They wanted us to include a long-term sustainability reductions program.

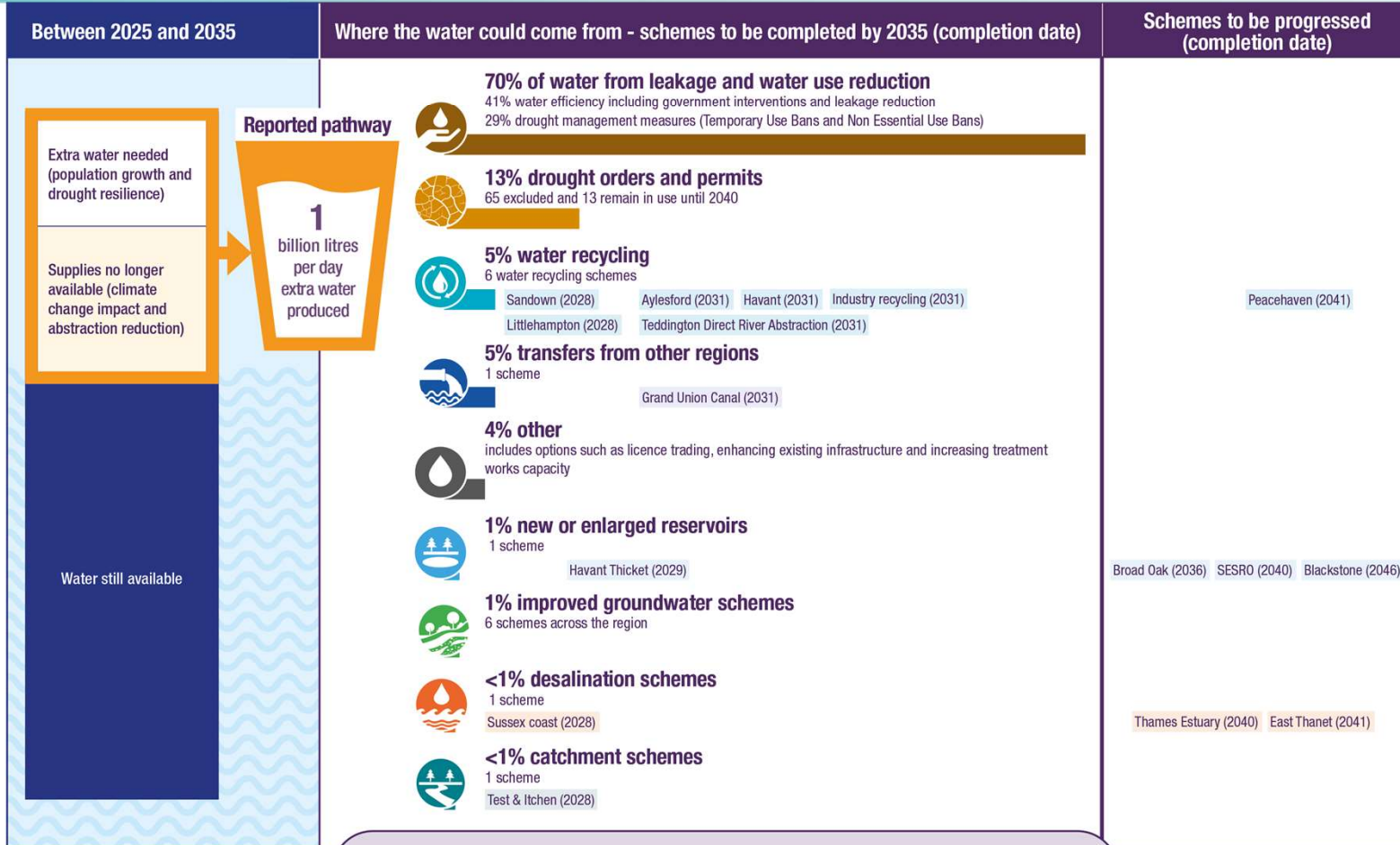
We are working with regulators and stakeholders to develop a framework to prioritise where abstraction should be reduced.

Investigations carried out by water companies over the next 10 years will provide the evidence base for future reductions in abstraction.





# Our plan – 2025 to 2035

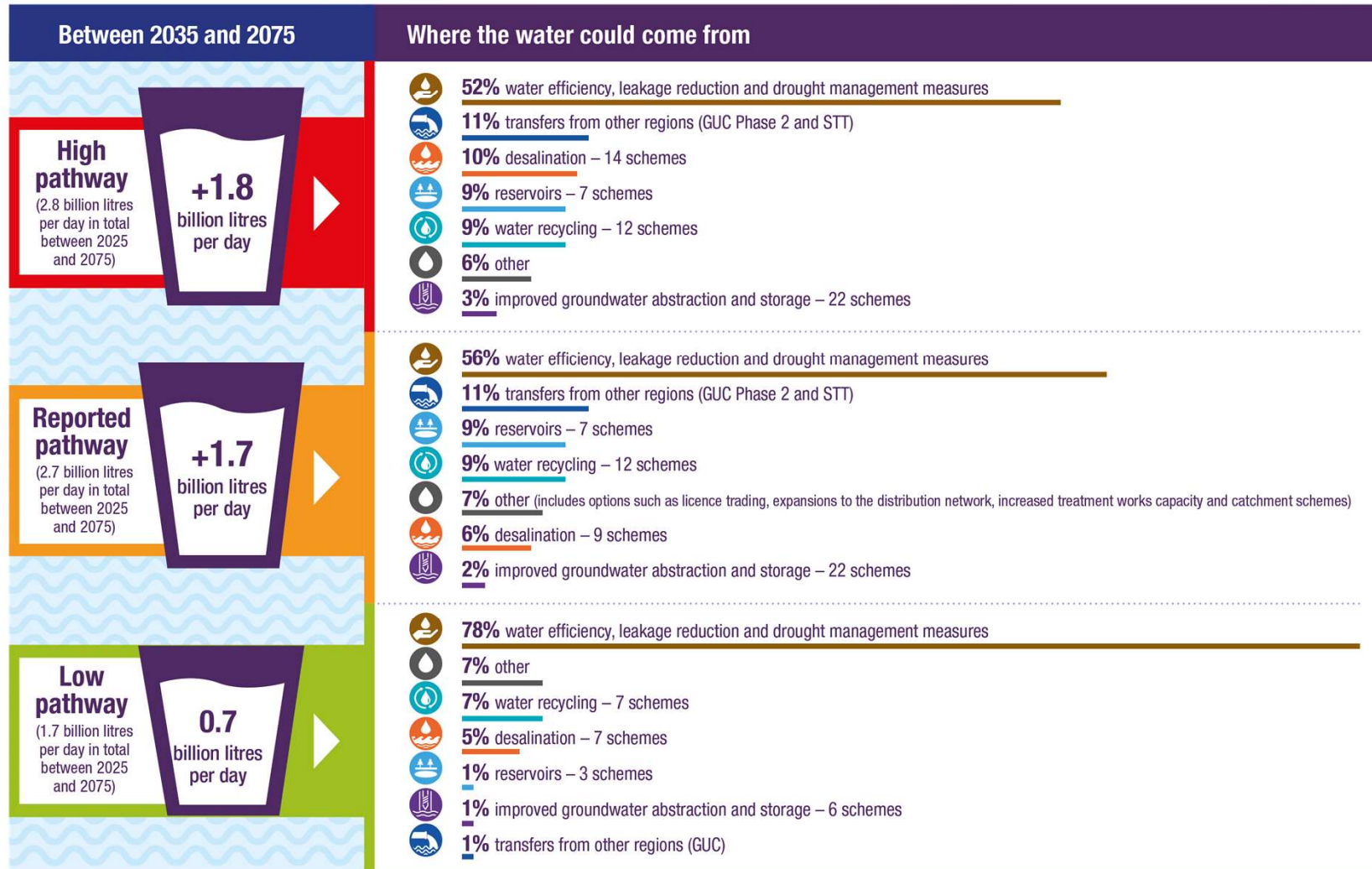


600 million litres of water per day



could be moved around the WRSE region and between other regions

# Our plan – 2035 to 2075



# Q&A

Portsmouth Water Limited

Draft Water Resources Management  
Plan 2025-2075

Delivering excellence for our customers, our people and our environment



## Our water resources plan

- Securing **safe, reliable drinking water** for the next 50 years
- Our most **ambitious and collaborative plan**
- Our area is now classed as ‘**seriously stressed for metering**’ by the Government
- We are part of the Water Resources South East **wider regional plan**
- Delivers **most benefit** to people, business, environment and society
- Summary and engagement platform – **consultation until Feb 20, 2023**

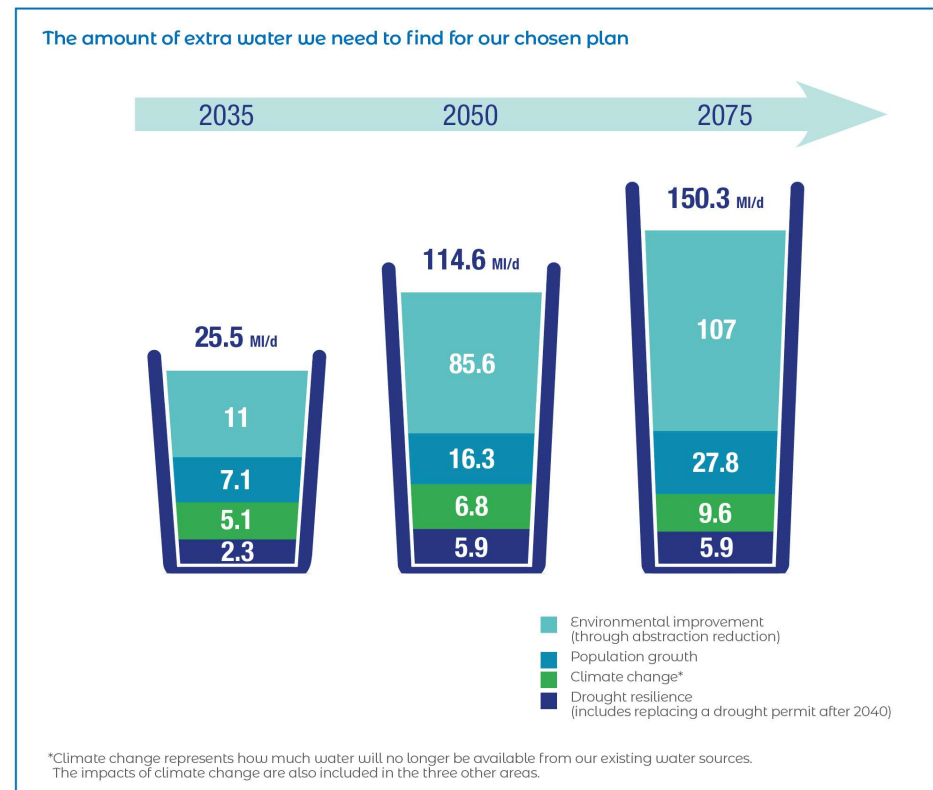


## The challenges ahead

We may have **40% less water available** by 2075. We need to **increase daily supplies** from 175 million litres to 201 million litres – to cater for around **130,000 extra homes and business**.

### Key challenges:

- Environment
- Population and housing growth
- Climate change
- Drought resilience





## What we've done so far

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### Leakage

Great success in reducing leakage – extended target to reduce further to 24 million litres per day by 2025.



### Havant Thicket Reservoir

Gained planning permission to build Havant Thicket Reservoir and pipeline. Work underway and reservoir will supply water by 2029.



### Metering

More than 5,500 meters fitted at homes and launched a trial of smart meters. Programme delayed by restrictions during the Covid pandemic.

### Groundwater

Detailed investigations have shown planned upgrades to boreholes are not able to deliver additional water as expected – exploring other options.

## What our customers say

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- Fixing leaks on pipes is one of the highest priorities for everyone
- Strong support to help homes and businesses save water
- Metering is supported ahead of water recycling, desalination or water transfers
- 45 per cent strongly support metering and 28 per cent tend to support it, particularly when the extra benefits of finding leaks and saving water and energy are highlighted
- Concerns metering will make water less affordable for some and a need for vulnerable customers to be protected against higher bills
- Securing reliable water in long term and avoiding environmental damage are more important than keeping bills as low as possible
- Most customers support water recycling at Havant Thicket Reservoir as a reliable source of water – with some concerns on quality and safety
- Local groups want to see abstraction around the Rivers Ems reduced to protect flows.



## Overview of our plan – saving water



Halve leaks on our network by 2050 and reduce them by a further 2% every five years after.



Install smart meters in most of the homes we supply by 2035 and replace existing meters with smart ones by 2040 to encourage water saving, find leaks and introduce fairer bills.



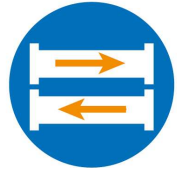
Support everyone to reduce their water use to an average of 119 litres per person per day by 2050 (160 litres on average today) through community rewards, water-saving devices and home audits.



Reduce non-household water use through assessments and leak detection for hundreds of high-water users, such as schools, colleges and businesses.

Benefit from Government action including the introduction of water efficiency labelling on devices and appliances which use water to further reduce average use to 110 litres per day.

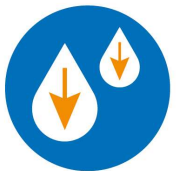
## Securing water and drought resilience



Upgrade a **pumping station** to make it easier to move supplies to where they're needed by 2030.



After 2039 our plans for **emergency droughts orders** will move to a **likelihood of once every 500 years on average**. We'll also **no longer plan to use a drought permit** to take more water from a West Sussex source.



From 2040, our **transfer of supplies to Southern Water in Hampshire** will **reduce significantly** and may stop altogether by 2049. **A supply to West Sussex is likely to continue but in varying amounts**. This is possible because Southern Water will have new sources coming into operation.



From 2049, we are planning to **receive water supplies from Southern Water**, into the west of our region in Hampshire. If this transfer is not possible, it could be replaced with **increased use of recycled water** (highly-cleaned wastewater) into Havant Thicket Reservoir to boost supplies.

## Costs and consultation

Our plan is designed to provide safe, reliable water at a price everyone can afford

Need to invest around £243 million:

- will add £5 to bills from 2025 to 2030
- increasing to £14 from 2046 to 2051

One of the most efficient water companies and current average bill is £109 – the lowest in England and Wales.

Consultation open to February 20, 2023:

- Engagement forum at <https://haveyoursayportsmouthwater.uk.engagementhq.com>
- Email Defra at [water.resources@defra.gov.uk](mailto:water.resources@defra.gov.uk)
- Contact us at [water.resources@portsmouthwater.co.uk](mailto:water.resources@portsmouthwater.co.uk) with questions.

1. Do you support the balance between saving water from leaks, metering and water efficiency, and water being supplied from new sources?

2. Do you support our plans to reduce leaks by half by 2050?

3. Do you support our plans to help homeowners and businesses to save water?

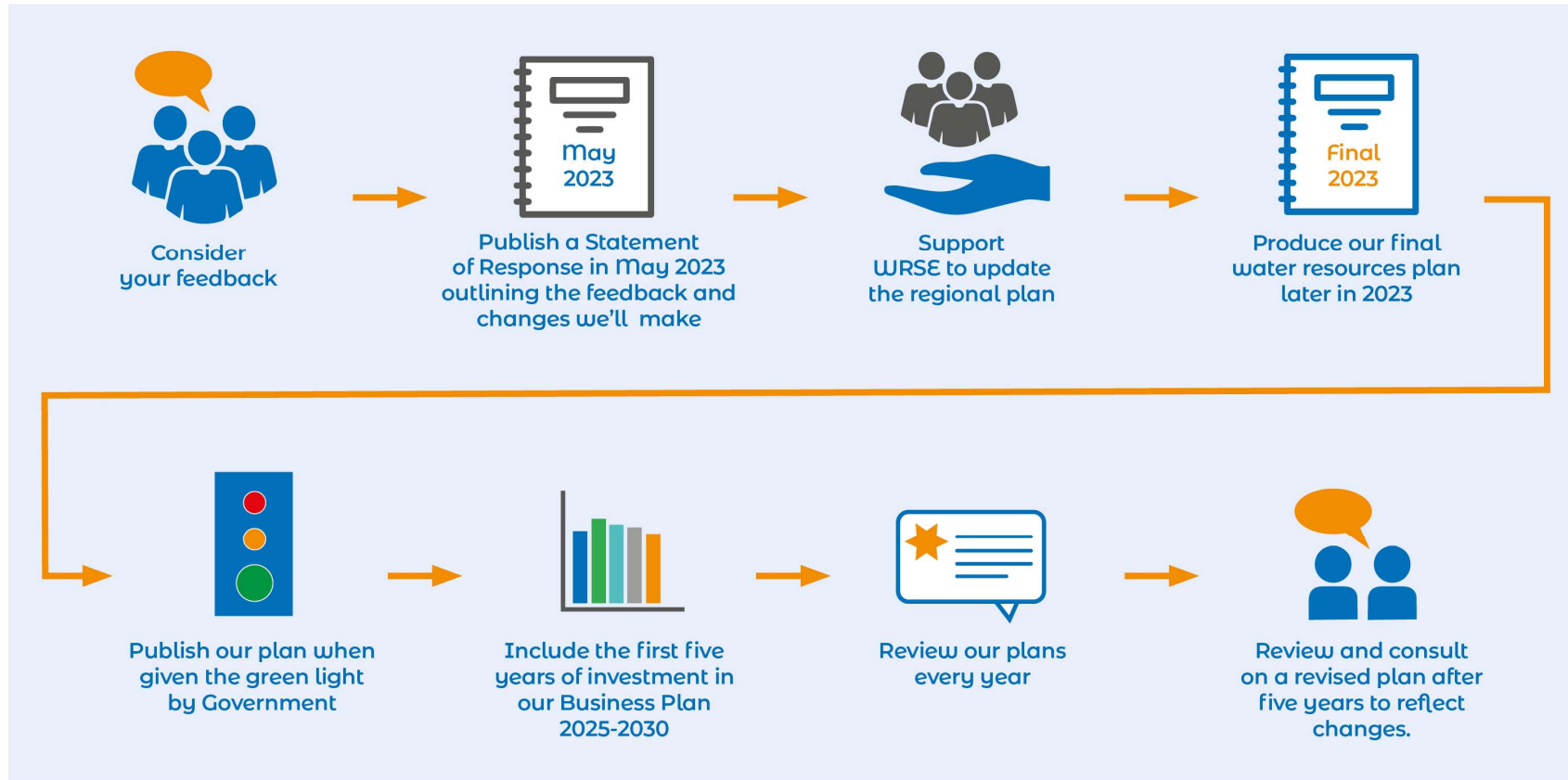
4. Do you agree water bills based on the amount of water a household uses would be fairer than bills based on rateable value (the estimated rent of a property)?

5. Do you support our plans to install meters at most homes we supply to encourage water saving and find more leaks?

6. Do you support the use of smart meters? (So customers can track their water use and spot leaks)

7. How did you hear about our consultation on our water resources plan?

# Next steps





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# Q&A

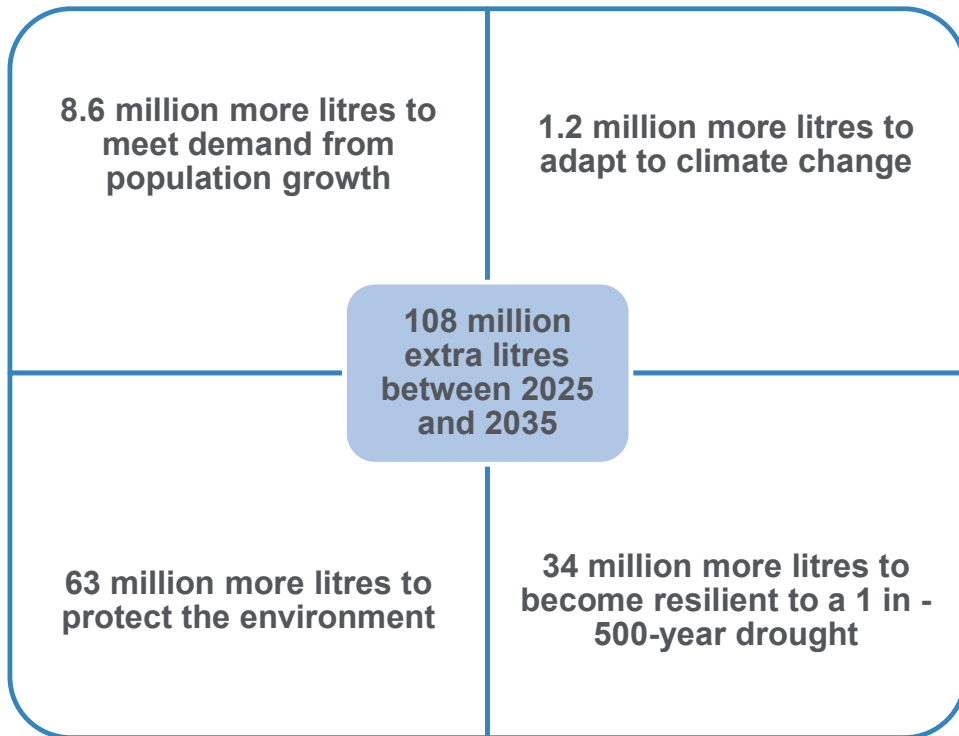
# Our draft Water Resources Management Plan

December 2022



from  
**Southern  
Water** 

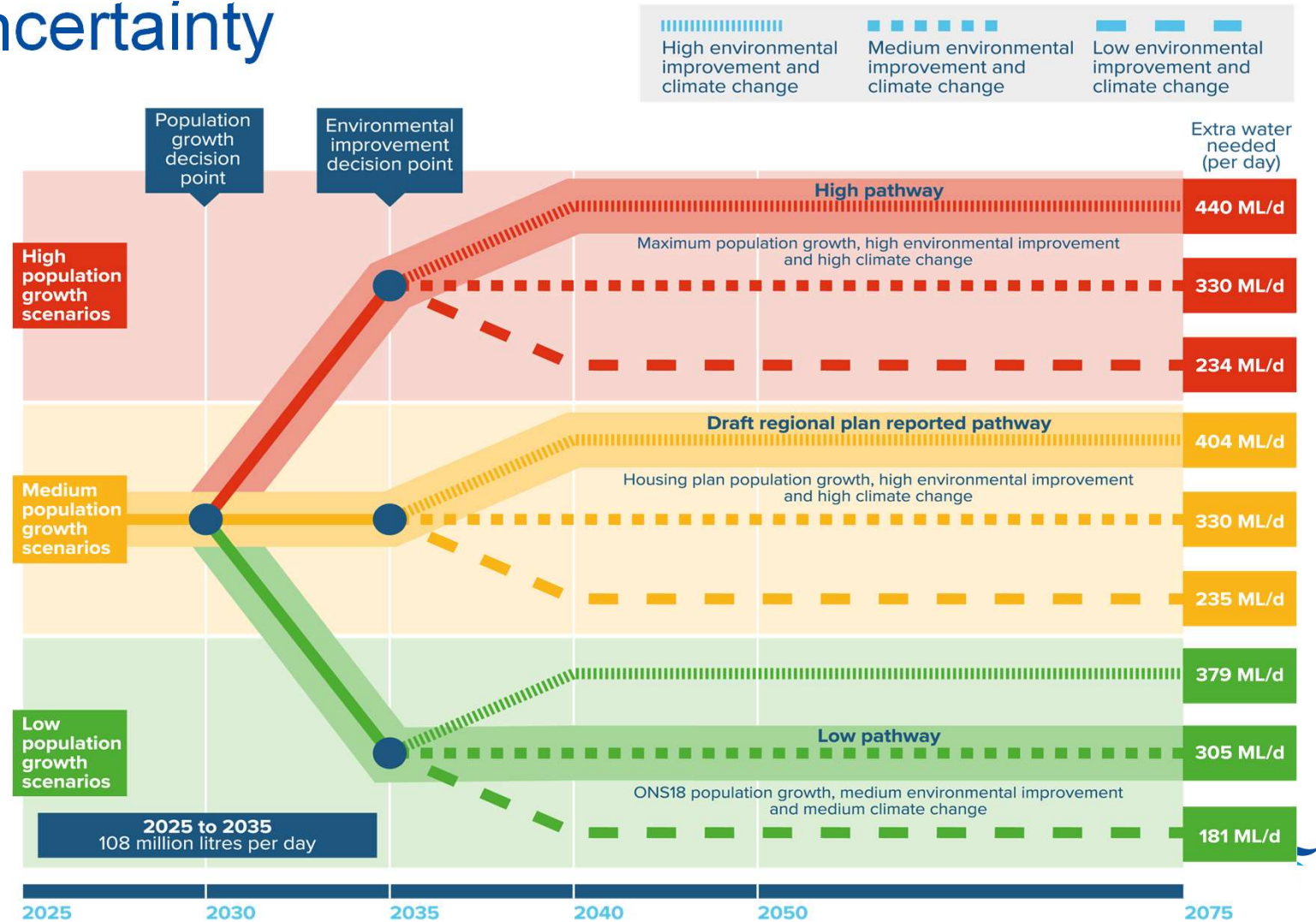
# Our challenge



- Climate change and population growth mean we need to find more water
- The biggest challenge we face is leaving more in the environment to protect and improve it
- If we do nothing, we could face a shortfall of 569 million litres per day by 2070.

# Planning for uncertainty

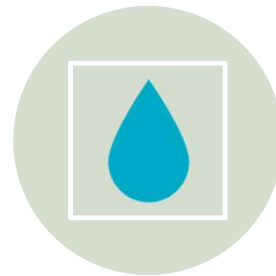
- This chart shows our **nine adaptive pathways** and **four decisions points**
- Which pathway we follow, depends on the challenges we face at each decision point.



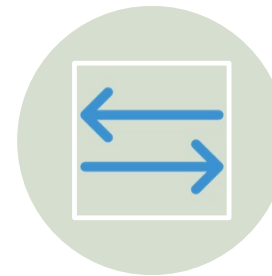
# How we'll provide water



**Efficient use of water and minimal wastage across society**



**New water sources that provide sustainable and resilient supplies**



**A network that can move water around the region**



**Catchment and nature-based solutions that improve the water environment we rely upon**



# Efficient use of water and minimal wastage across society

We'll help customers reduce average daily use **to 109 litres** per person, per day by 2040 by:

- Using smart meter data to better target advice and support
- Trialling innovative water-efficiency incentives
- Supporting tighter water efficiency policies and standards

Our WRMP includes a target of 109 litres per person per day by 2040. We're committed to our Target 100 programme and are asking stakeholders for their support.

We'll **at least halve leakage** by 2050 by:

- Replacing old water mains
- Introducing smart metering
- Improving how we use data to help find, prioritise and fix leaks.





# A network that can move water around the region

- Sharing water with our neighbours is crucial for our resilience
- We're working with other water companies to build on our existing connections and develop new ones
- By 2030, we'll receive 21 million litres per day from Portsmouth Water, enabled by Havant Thicket Reservoir – and this amount could increase in the future
- Longer term, we're investigating a strategic transfer from Thames Water into Hampshire.



# Catchment and nature-based solutions that improve the water environment we rely upon

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Using catchment and nature-based schemes will protect and improve the environment we rely upon

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These schemes don't generate much new water, but increase the resilience of our existing sources

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We'll work with farmers and other land users to protect 42 of our groundwater sources from nitrate pollution – making them more resilient

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We'll work with partners to understand what could impact the quality of our water sources – and act to mitigate these risks while delivering wider environmental benefits.



# New water sources that provide sustainable and resilient supplies

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**Desalination** turns saline and brackish water into drinking water. It provides a resilient, reliable source but is energy and carbon intensive.

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**Water recycling** is where highly treated wastewater is used to supplement our natural supplies or to top-up reservoirs before being treated

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**Improving groundwater abstraction and storage** is a cost-effective way of securing more water, but it provides smaller amounts and can only be done in a few locations

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**Building new reservoirs or expanding existing ones** can provide long-term, resilient sources of water but can be costly and disruptive

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**Transferring water from other regions** can also provide resilient sources of water, but often depends on new sources being built elsewhere.



# Our strategy for Hampshire and the Isle of Wight – 2025-35



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3. Apply for a drought order on the River Test

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4. Receive 21Ml/d from Portsmouth Water supported by Havant Thicket Reservoir

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5. Build new pipelines so we can move water around Hampshire

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7. Recycle water from our Sandown site

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8. Develop groundwater sources near Newbury, Romsey and Newchurch

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9. Recycle water at Budds Farm wastewater treatment works in Havant and store it in Havant Thicket Reservoir, before transferring up to 90 million litres through a new pipeline to our Otterbourne water supply works for treatment

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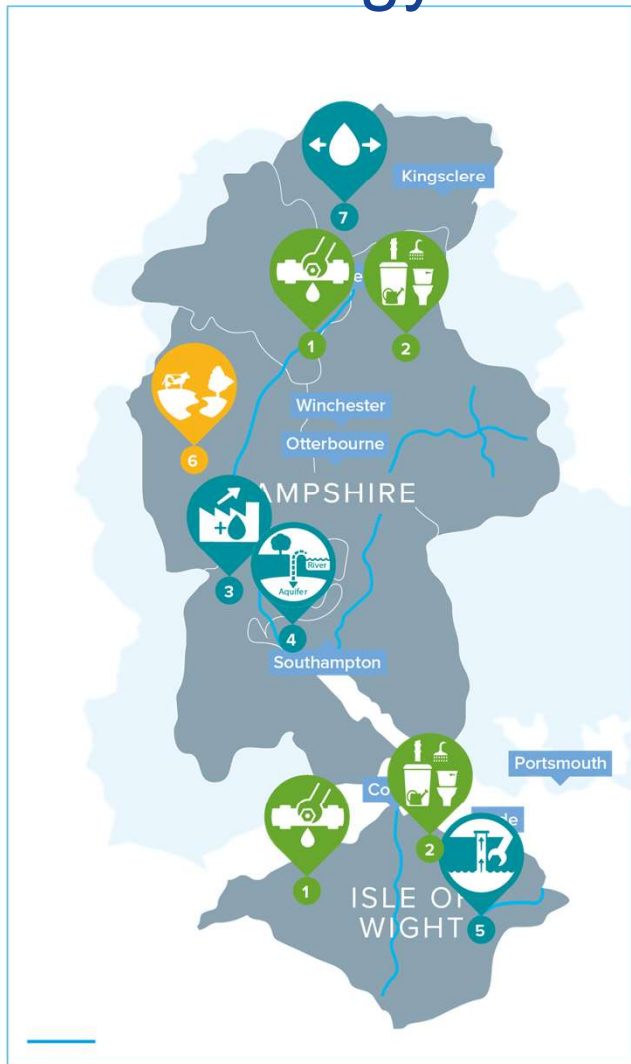
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10. Upgrade two water supply works in Hampshire to enable us to treat more water.





# Our strategy for Hampshire and the Isle of Wight – 2035-50



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1. Reduce leaks

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2. Help customers use less water

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3. Upgrade an existing water supply works so it can treat more water

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4. Take water from the River Test when flows are high in the winter and use it to supplement our underground water supplies

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5. Improve an existing groundwater source on the Isle of Wight

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6. Catchment schemes to improve the resilience of our water sources

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7. Receive up to 120 million litres a day from Thames Water.



# Our strategy for West Sussex and Brighton and Hove – 2025-35



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11. Reduce leaks and 12. Help customers use less water

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13. Recycle water from our Ford wastewater treatment works and transfer it via the River Rother to our water supply works near Pulborough

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14. Apply for drought orders and permits on the River Rother to continue abstracting water during dry weather

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15. Apply for a drought permit on a groundwater source near Worthing to continue abstracting water during dry weather

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16. Catchment schemes to address nitrates and pesticides and improve the resilience of our water sources

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17. Build a desalination plant (or alternative source) on the Sussex coast

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18. Import water from Portsmouth Water, SES Water and South East Water.



# Our strategy for West Sussex and Brighton and Hove – 2035-50



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8. Reduce leaks and 9. Help customers use less water

---

10. Trade licences with farmers and support them to develop additional on-site storage to better use the water available during the winter

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11. Apply for a drought permit on a groundwater source near Arundel to continue abstracting during dry weather

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12. Build a new reservoir in Sussex to store water from the River Adur

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13. Catchment schemes to address nitrates and pesticides and improve the resilience of our water sources

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14. Import water from Havant Thicket reservoir, supplemented by water recycling, to near Pulborough and upgrade our treatment works to supply more water

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15. Develop a groundwater source near Petworth





# What this means for customers' bills

The total cost of our plan is **£1.5 billion** over the first five years. This means customers' bills will increase by around **£85** compared to average bills in 2019 / 20.

Between 2035 and 2040, we expect to invest just over **£2 billion**. This means customers' bills will increase by around **£180** compared to average bills in 2019 / 20.

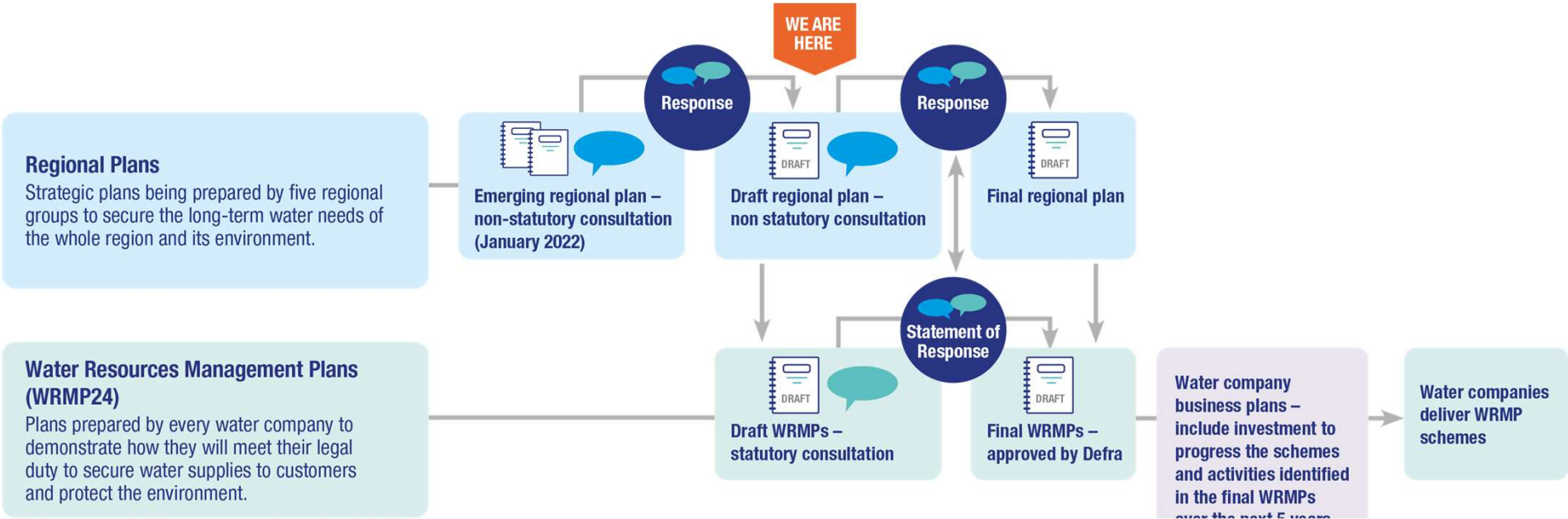
	AMP 8 (2025 - 30)	AMP9 (2030 - 35)	AMP10 (2035 - 40)
Total cost*	£1,529m	£561m	£2,064m
Average increase from customers' bills in 19/20	£84.57	£110.91	£178.14



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# Q&A and next steps

# Next steps





## How to get involved

- WRSE draft regional plan: <https://wrse.uk.engagementhq.com/>
- Portsmouth Water: <https://haveyoursayportsmouthwater.uk.engagementhq.com/>
- Southern Water: <https://www.southernwater.co.uk/our-story/water-resources-management-plan>.