



# An update on Hampshire water resources

# Our Business

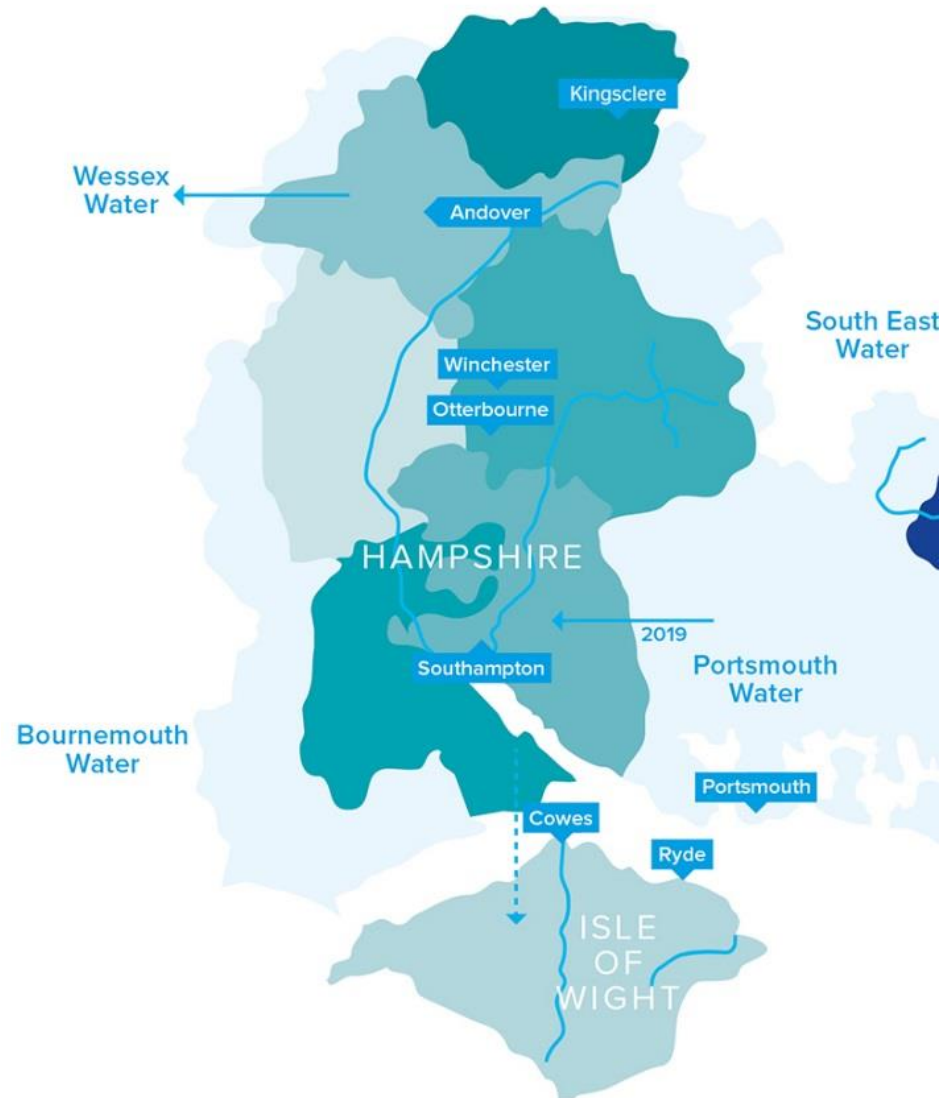
We're proud to provide water and wastewater services to more than 4.6 million people across the South East



# Western Area

## Western water sources

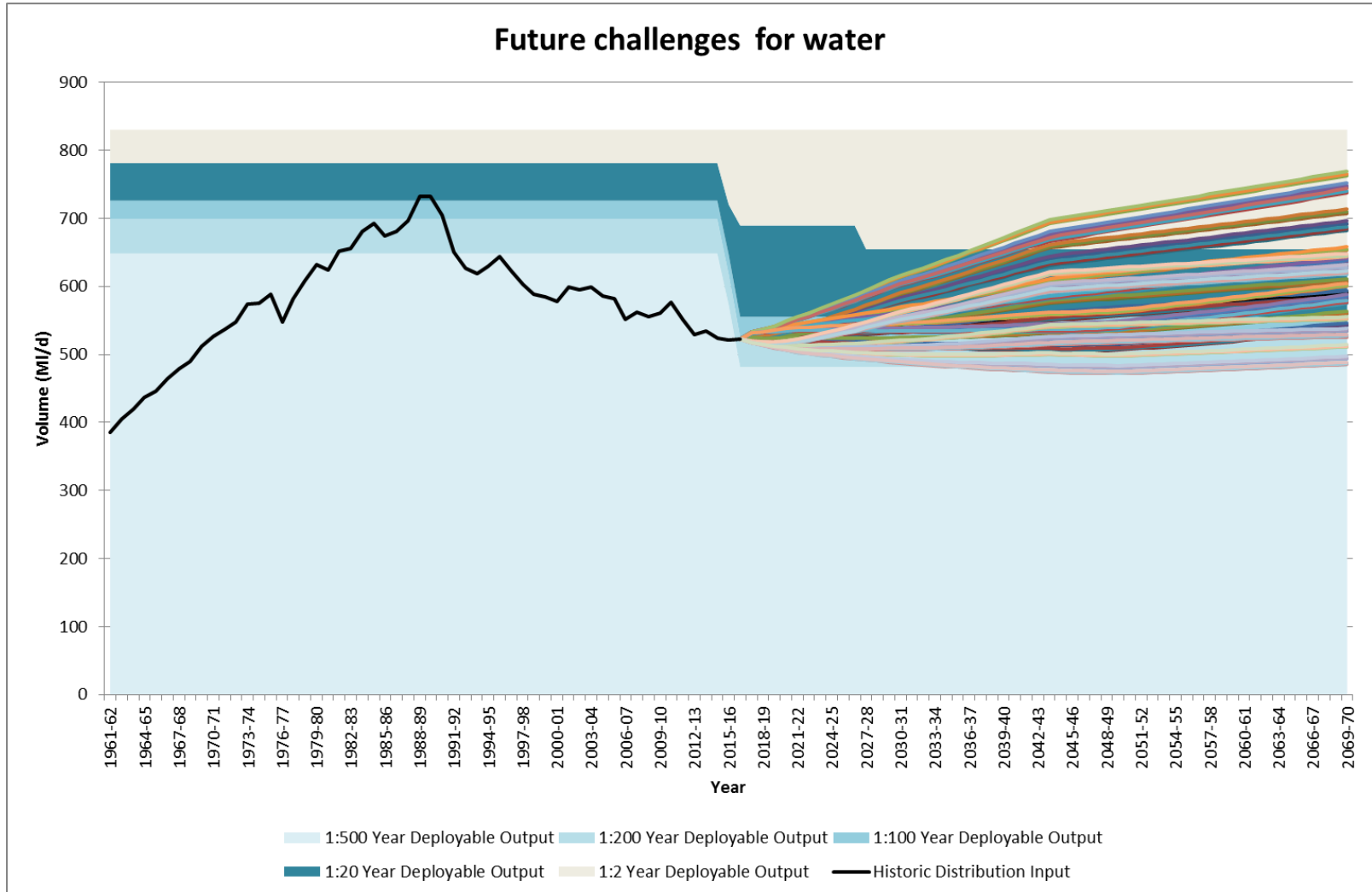
- Hants Kingsclere**  
100% groundwater
- Hants Andover**  
100% groundwater
- Isle of Wight**  
47% groundwater,  
23% river, 30% transfers
- Hants Rural**  
100% groundwater
- Hants Winchester**  
100% groundwater
- Hants Southampton East**  
52% river,  
48% groundwater
- Hants Southampton West**  
100% river



# Water efficiency and leakage

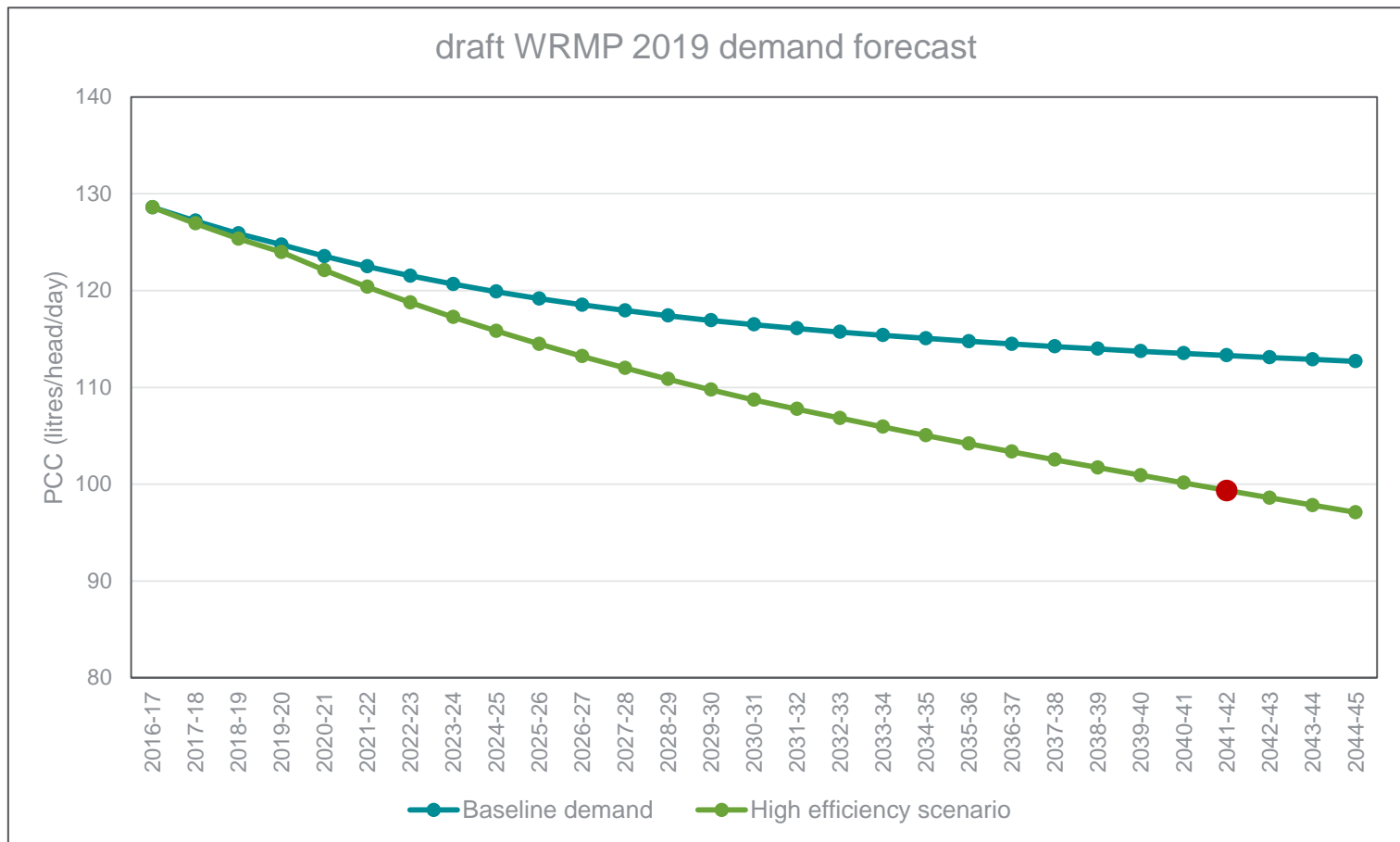
- Since privatisation in 1989, we've reduced the amount of water put into supply across our region by about a third, from 750 MI/d to 510 MI/d.
- Our current leakage target is 88 million litres a day – we've promised to reduce this to 86 million litres by 2020.
- Metering has already helped customers in Hampshire use 16.5% less.
- Our water efficiency programme aims to help reduce this by a further 10% (15 litres per person per day) by 2020.
- New leakage options are being reviewed as part of WRMP and PR19.
- Target 100 – we're also actively pursuing a reduced per capita consumption of 100 litres a day.

# The journey so far and the challenges ahead



# Target 100 – how far do we have to go?

- Our 'high water-efficiency scenario' for the draft WRMP19 demand forecast shows the PCC getting to 100 litres / head / day by 2040/41



# Maintaining a balance

- Itchen licence changes were proposed following Review of Consents process applied by the EA under the requirements of the Habitats Directive.
- These proposed changes would limit the amount of water we can take from the River Itchen in times of extreme drought, to help protect the river's ecology.
- In order to comply with the proposed changes, we will need to balance this reduction with an increase in the amount of water taken from other sources (or establish new sources) and do more to manage demand, to provide a better balance for the environment and customers.
- We set up a steering group with various organisations including the EA, Natural England, Hampshire and Isle of Wight Wildlife Trust and the Consumer Council for Water.
- These organisations, and others, led a series of technical working groups to help us explore and refine our plans.
- The discussions helped us identify three schemes to be used in times of drought. It was agreed that a solution would be in place by 2018.

# The three-stage solution

These three schemes were included in our Water Resources Management Plan, which was published in 2014

1. A new bulk supply of up to 15 Ml/d of treated water from Portsmouth Water's Gater's Mill supply works on the River Itchen. This project is under way and should be completed in early 2018.
2. The use of the EA's Candover groundwater abstraction licence to support our abstraction at Otterbourne with water abstracted from the chalk aquifer and discharged via a new pipeline to the River Itchen. This project is on hold.
3. A new 19km pipeline to transfer raw water from the River Test to our Otterbourne Water Supply Works where it would be treated and sent into supply. This project is on hold.



# Delays to progress

- The projects have not proceeded as we had planned:
  - In August 2016, the EA applied to renew its Candover abstraction licence at 5 MI/d rather than 27 MI/d.
  - The EA has sought to implement its proposed River Itchen licence variation with immediate effect.
  - The EA has also proposed changes to our River Test abstraction licence which are much stricter than the voluntary reductions we'd already offered.
  - The Testwood licence changes are proposed to be immediate and would have a significant impact on our ability to abstract and supply water during dry weather / drought.
- We've objected to the above – accepting a reduction in available water without the necessary replacements in place would put us in resource deficit.

# The Planning Inquiry

- A Planning Inquiry will be held in March 2018 to consider:
  - The EA's application to vary our abstraction licences on the River Itchen.
  - The EA's non-determination of our Testwood abstraction licence variation application and the EA's proposed changes to the licence.
  - The EA's application to renew its Candover abstraction licence.
- The primary focus of our objection is the dry / drought year resource deficit resulting from the immediate implementation of the EA's proposals.
- This risk is expected to exist for an interim period of approximately ten years, until we can implement permanent replacement supplies.
- A key purpose of the Inquiry is to establish the mechanism for maintaining supplies in dry / drought years in the interim period.
- We want to establish the most efficient and resilient solutions taking into account the environment and the need to supply water.

# The impact of the proposals on public supplies

- The primary options available to address the deficit brought about by the proposed abstraction licence changes are:
  - Large-scale desalination.
  - Direct (to industrial customer) and indirect water reuse schemes.
  - Bulk supplies from neighbouring water companies.
  - Further supply from Portsmouth Water, dependent on increased abstraction from the lower Itchen.
  - New strategic mains to move water around Hampshire
  - Catchment management options to address rising nitrate levels and improve river habitats.
  - Leakage, water efficiency and metering options.
  - In the short term, frequent reliance on Drought Permits and Drought Orders to maintain supplies.
- The overall cost of solutions could be in the range of £500m to £1bn and would be likely to take at least ten years to implement.



For more information on our water resources planning, please visit:

[www.southernwater.co.uk/water-resources-plan](http://www.southernwater.co.uk/water-resources-plan)