

Reaching Target 100 – how do we secure supplies of water in a climate changed world?

Ben Earl – Head of Water Efficiency



from
**Southern
Water** 

The Southern Water logo graphic consists of three stylized, wavy blue lines of varying lengths, positioned to the right of the text.

Our business



Our area of operations

-  WATER AND WASTEWATER TREATMENT AREAS
-  WASTEWATER TREATMENT AREAS ONLY
-  WATER SUPPLY ONLY AREAS
-  RESERVOIRS



Water



0.9 million
metered
properties



2.5 million
people
served

Wastewater



2 million
properties
served



4.6 million
people
served



Water crises are a global issue...

8th and 5th

Ranking of likelihood & impact of water crises according to WEF

50

Litres per day Cape Town residents were restricted to

90

Days Cape Town was from 'Day Zero'

70%

Of global freshwater abstraction used for agriculture

12.35 million

Acres of land burned across Australia

785 million

People without access to safe drinking water



...our national challenges aren't limited to 'dry' areas...

WATER RELIEF Hosepipe ban CALLED OFF by United Utilities just three days before it kicked in after weekend deluge... despite oncoming heatwave

North West water supplier United Utilities had planned the ban for seven million households from August 5

LATEST

Health, Education and
2 Aug 2018, 9:26 | Updated: 2 Aug 2018, 9:40

[Twitter](#) [Facebook](#) [Comment now](#)

A HOSEPIPE ban affecting millions of Brits has been called off after the parched UK finally got deluged by rain.

North West water supplier United Utilities had planned the ban for seven million households from August 5.



The barren edges of Salton Reservoir, in County Durham, where water stocks were visibly depleted. Credit: Mark H. Reeves/Pictures

But they announced today the "recent rainfall has gone some way to helping with water supplies".

UK farmers allowed to take more water from rivers as heatwave continues

Environment secretary holds drought summit with farmers to address series issues of crop failure and lack of fodder for animals



▲ Dry fields seen from Clentisbury Tor in Somerset, England. Photograph: Matt Casley/Getty Images

Reservoirs almost half empty as heatwave brings massive surge in water use across Yorkshire



Water levels at Yorkshire Water's reservoirs are down, on average across the region, by 10 per cent compared to normal levels at this time of the year. At Swinsty Reservoir, where Tom Underwood, the company's media advisor is pictured, the water level is at 60 per cent capacity. Picture by Jon Willmott/Gawthorpe.



...and our region has some unique challenges

851.6 million

Potential deficit across London and the South East

4.1 million

More people across the South East by 2045

400

SSSIs in the region we serve

140km

Of chalk streams in the South Downs

£8,601

Government spending per person in the South East

83

Bathing waters in the region we serve

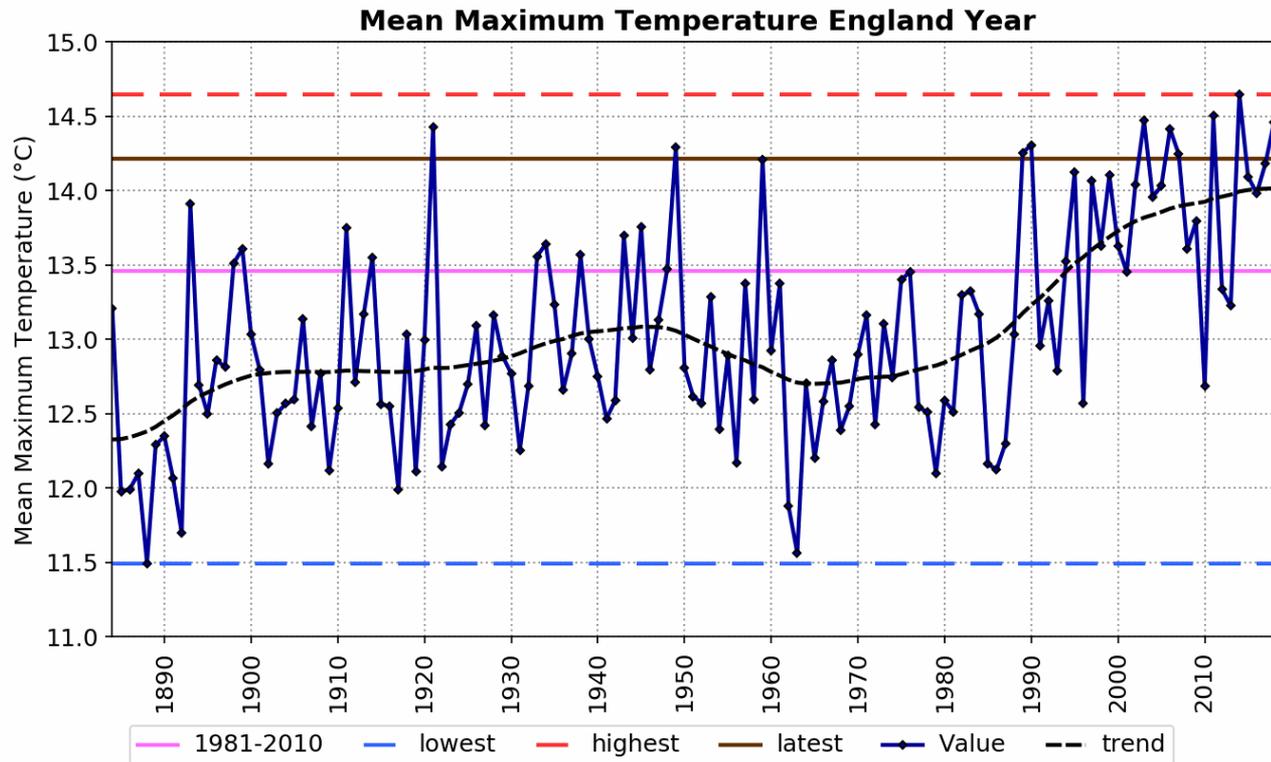


Temperatures are rising...



Source: HadUK-Grid 01/01/2020 14:05

© Crown copyright



...and Summers will get hotter and drier



Summer rainfall change

41% drier to 9% wetter

57% drier to 3% wetter



Summer temperature change

No change to 3.3 °C warmer

1.1 °C warmer to 5.8 °C warmer

**Greater chance of
summers being hotter
than 2018 in future**

Low emission scenario High emission scenario

*All results are for the 10th-90th percentile range for the 2060-2079 period relative to 1981-2000



Our journey



88%
of customers
now on a
meter



16.5%
reduction in
water use across
our region



13,000
customers
received home
visits over the
last two years



Behaviour change
information and
water saving
reports emailed
to each customer



Leaking toilets
fixed, water
butts installed,
service valves
adjusted



98%
of customers
gave top marks
for the service



from
Southern
Water 

Target 100

Meeting the scale of
the challenges ahead



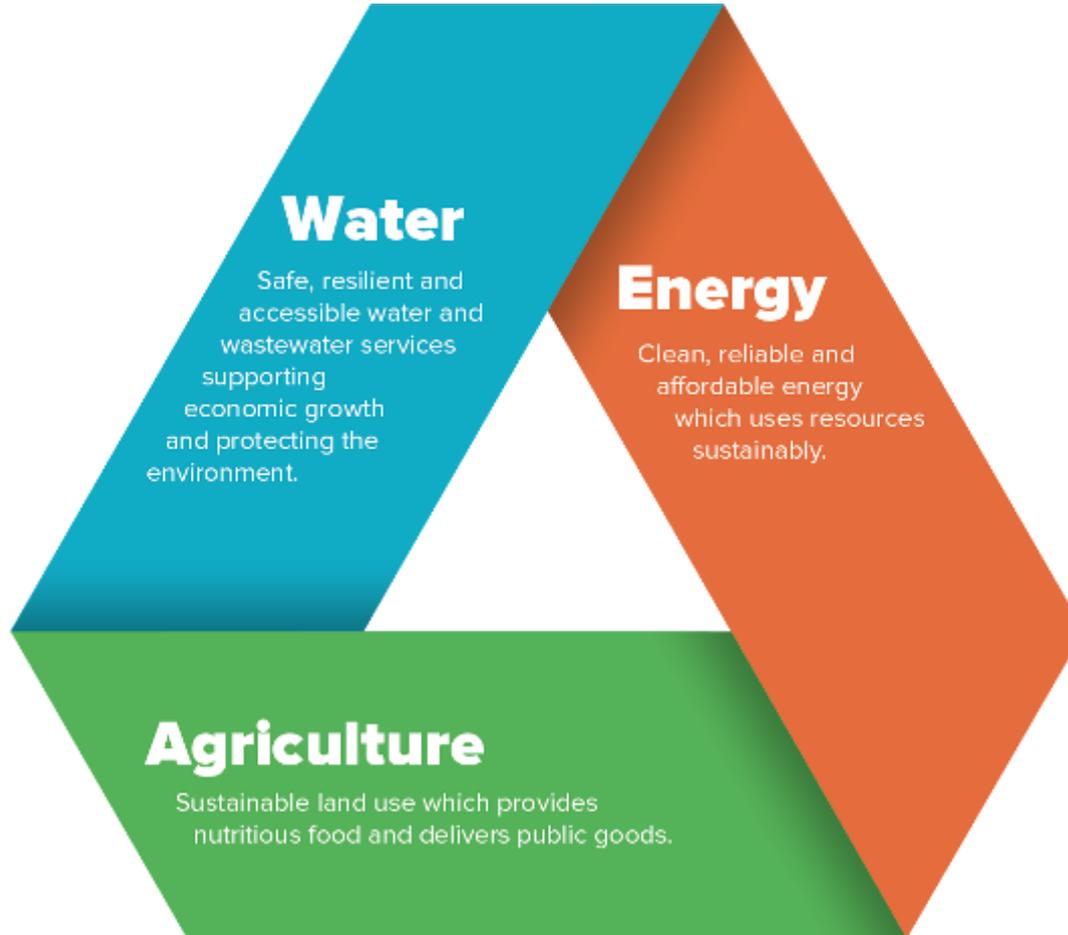
We face big challenges in Hampshire...



- Potential shortfall of **190 million litres per day by 2030**
- Abstraction restricted to protect world-renowned chalk streams – supplying water to more than 700,000 people
- Licence reductions already in place



A problem to solve, an opportunity to exploit – or both?



Independent research

Water bills will increase unless UK cuts its water use

Recently announced reductions to water bills will be cancelled out by the rising costs of dealing with long term water shortages unless the UK gets better at using water.



New research by the think tank Green Alliance has concluded that water efficiency could save households as much as **£78 a year**, equivalent to **20 per cent** of the current combined water and wastewater bill.



from
Southern
Water 

Target 100

Smart meters

Introducing meter communication for the customer and monthly readings linked to incentives

Customer contact

Fully integrated initiative to drive long-term behaviour changes



Home visits

Streamline water and leakage visits through a single joined-up contract

Incentives

Build on our River Itchen Challenge to offer personal and community rewards



Effort to save water is shared proportionately by ability to contribute, impact and influence change



We can't afford to waste water

-  **Take the 4-minute shower challenge** – switch from a bath to a shower and save around £60 a year on your bill.
-  **Never wash up again** – modern dishwashers use less water than washing up by hand, as long as it's full up before you switch it on.
-  **Brush with your tap off** – you'll save six litres of water a minute – that's 35 cups of tea!
-  **Can your sprinkler** – a sprinkler can use 1,000 litres of water an hour – more than an average family of four uses in two days! Switch to a watering can.
-  **Plants love secondhand water** – washed the veggies or dishes? Don't throw it away, why not water your house plants?
-  **Sun's out, butts out** – fill up your water butts this winter and there'll be plenty of rainwater to keep your plants happy come summer.

Visit southernwater.co.uk/save-water to find out more about using less.

Target 100 is a commitment to our customers – we'll equip 100k homes to reduce personal water usage by an average of 10% from 1 per day to 24% with no extra charge to 40%.

from Southern Water



'Hydraloop'



Greater Brighton City Region



Greater Brighton has unique challenges and opportunities...

50,000 new homes by 2030

97,000 new residents by 2030

48,000 new jobs by 2030

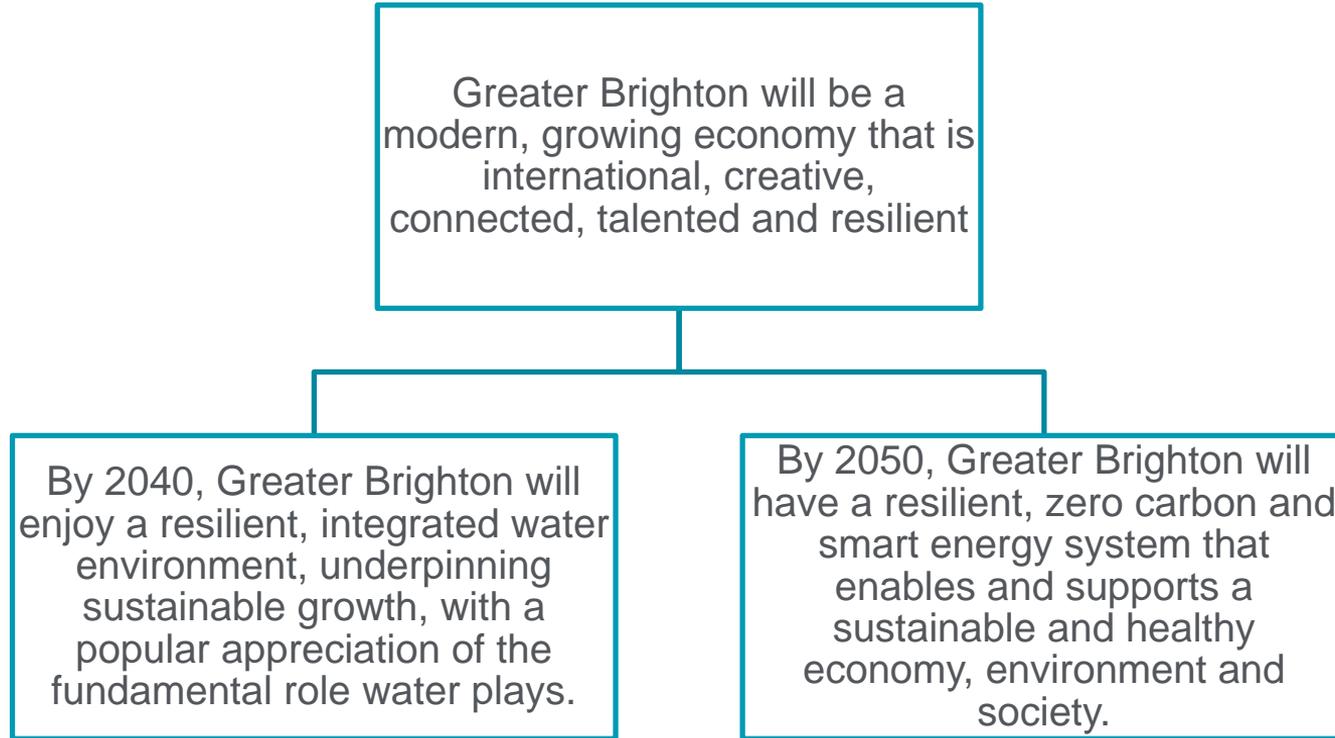
10th busiest airport in Europe and two international ports

One national park, one AONB, 17 bathing waters and over 100 SSSIs

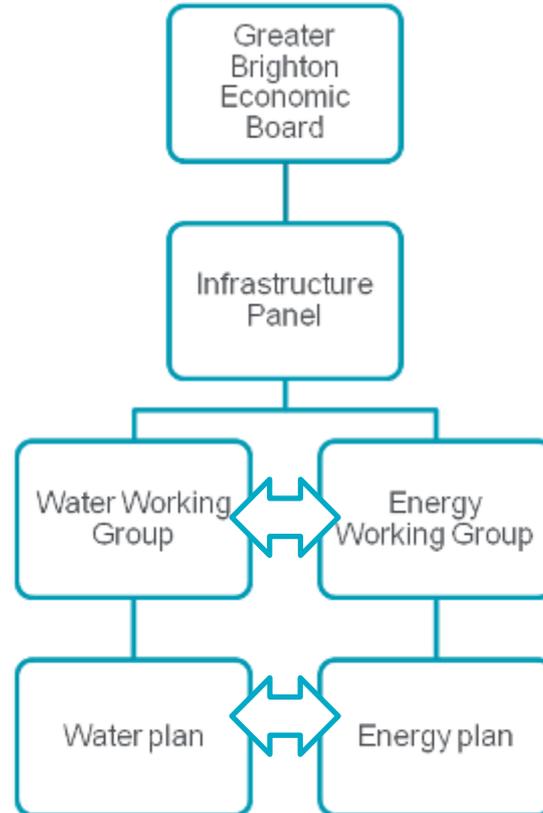
Climate emergencies declared



...with an ambitious vision...



...so an integrated approach is being taken



Key themes emerged from the plans...

Low carbon heating

Energy saving and efficiency

Renewable generation

Smart Energy Systems

Transport revolution

Investing in our natural capital

Engaging and inspiring communities

Catering for sustainable growth

Protecting our water resources



...leading to a series of commitments

Reduce emissions by almost 3,000 ktCO₂

Energy investment company

Expanding partnerships with community energy companies

Upskilling the workforce

Increased renewable generation from public assets

Average water use of under 100 litres per person

More sustainable developments

Increased appreciation of the value of water

Water, energy, affordability and flood resilience home-visits

Natural capital maps and investment programme

Building on existing projects...



Protecting our precious groundwater



European Regional Development Fund.



...to get here in five years

Digital smart energy systems

Energy Investment Company

Greater Brighton Energy Fund

EV charging network

One Public Estate Energy efficiency

Water neutrality

Lowest PCC in the country

Real-time water information

Growing natural capital

Improved groundwater quality

Key partnerships



Brighton & Lewes Downs
UNESCO World Biosphere Region



Benefits of water efficiency



**Positive
engagement in
water usage**



**Better
advice for
customers**



**Reduced
water
consumption**



**Reduced water
bills and
energy costs**



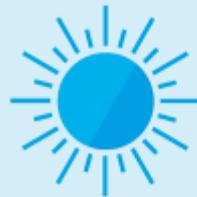
**Lowers
our cost
to serve**



**Improved
affordability**



**Less
wastewater**



**Positive
impact on the
environment**



**Less
leakage**



**Southern
Water**

Thank you

Ben Earl
Head of Water Efficiency

ben.earl@southernwater.co.uk

