

Kent County Council Flood Risk Management Committee meeting

20 November 2024



Agenda

About us / key dates

Water resources in Kent

Water Resources Management Plan

- Creating the plan
- Regional planning
- Challenges
- Solutions
- Our final plan



About us

We supply fresh, clean drinking water to **2.3 million** customers

On average, we treat and pump **530 million litres*** to customers each day

Each customer uses an average of **144 litres** a day

The average daily household bill is **67p***

We operate **88 treatment works**

Deliver water 24/7 through **9,000 miles** of pipe

Manage **33 sites** of Special Scientific Interest

Undertake **one million** water quality tests each year

*2021/22 figures

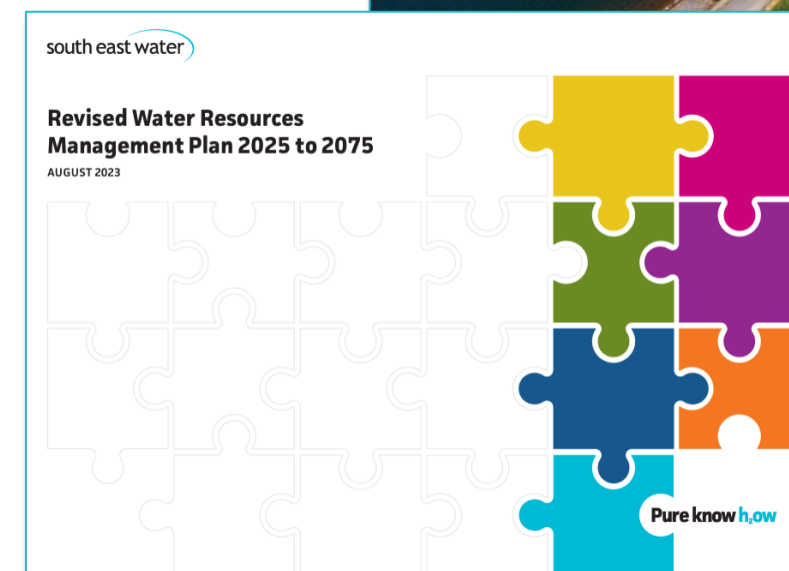
Our purpose

To provide today's public water service and create tomorrow's water supply solutions, fairly and responsibly, working with others to help society and the environment to thrive.

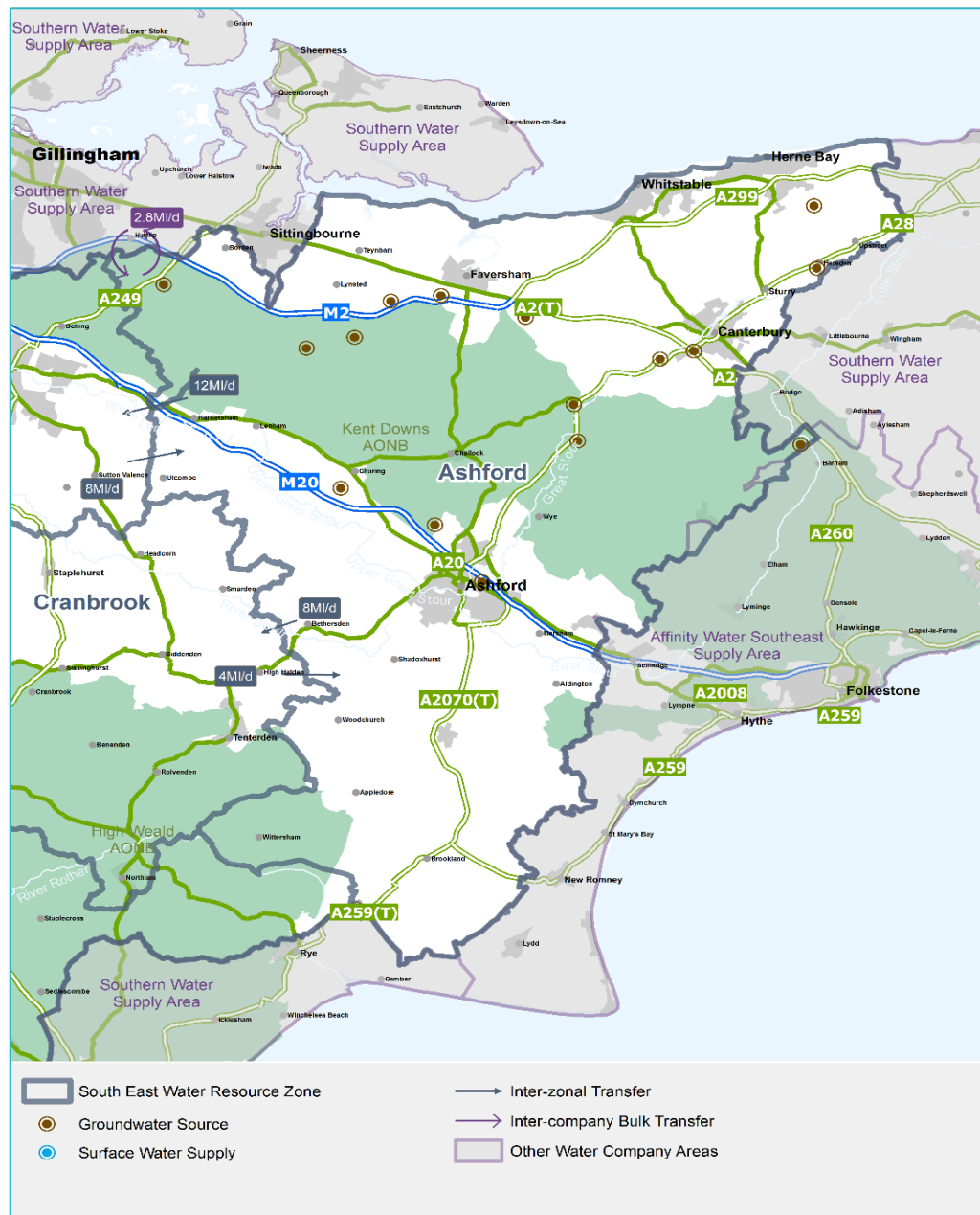


Key dates

- 14 November 2022** - dWRMP24 Consultation launched
 - Regional best value preferred plan consultation launched
- 20 February 2023** - dWRMP24 Consultation closed
 - Regional best value preferred plan consultation closed
- May 2023** - dWRMP24 statement of response
 - Regional best value preferred plan statement of response
- August 2023** - Revised WRMP24 published
 - Revised regional best value plan published
- March 2024** - Responded to and published response to Defra comments on our revised WRMP24
- October 2024** - Final WRMP24 published
- December 2024** - Price Review 2024 (business plan) final determination published with plan options included
- 2025 onwards** - Delivery of our plans



Water resources in Kent



- Population in our Kent region is **729,000** people.
- Average, normal year, daily demand in 2025 is forecast to be approximately **175 MI/d**. 19% is from non-household use.
- Available water during a normal year in 2025 is forecast to be approximately **207 MI/d**.
 - 87% of water is supplied by **groundwater sources**
 - 10% comes from our **shared surface water sources** which includes Bewl Reservoir and the River Medway.
 - We also have **1 bulk supply** of water from Southern Water which provides 3% of supplies

Creating the water resources management plan (WRMP)

- The draft, revised and final WRMPs have been developed according to the guidelines set out by our environmental and economic regulators.
- They have been created in collaboration with Water Resources South East (WRSE) an alliance of six water companies.
- The final plan looks at how we will keep our customers taps running between 2025 and 2075 while minimising the impact on the environment and customers' bills.
- They have been developed with input from customers, communities, other water providers and stakeholders.
- Take into account both the challenges and opportunities we face over the next 50 years, such as:

Challenges	Opportunities
Future population and housing growth	Delivering a plan that is affordable
Operating in an area of severe water stress	Sharing resources with neighbouring companies
Uncertainty of climate change impacts	Ensuring environmental resilience

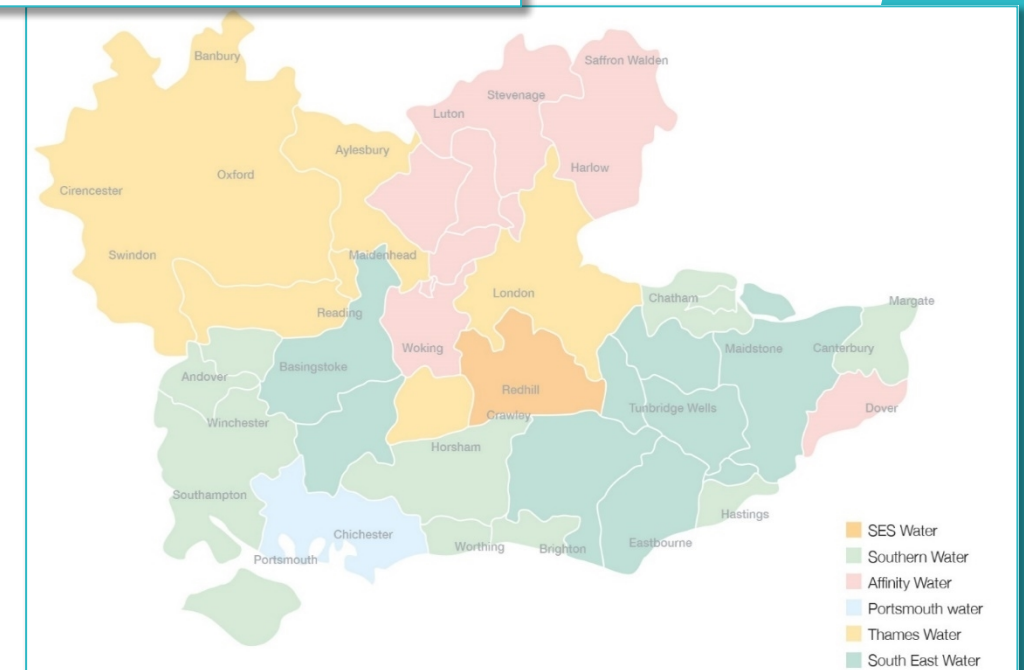
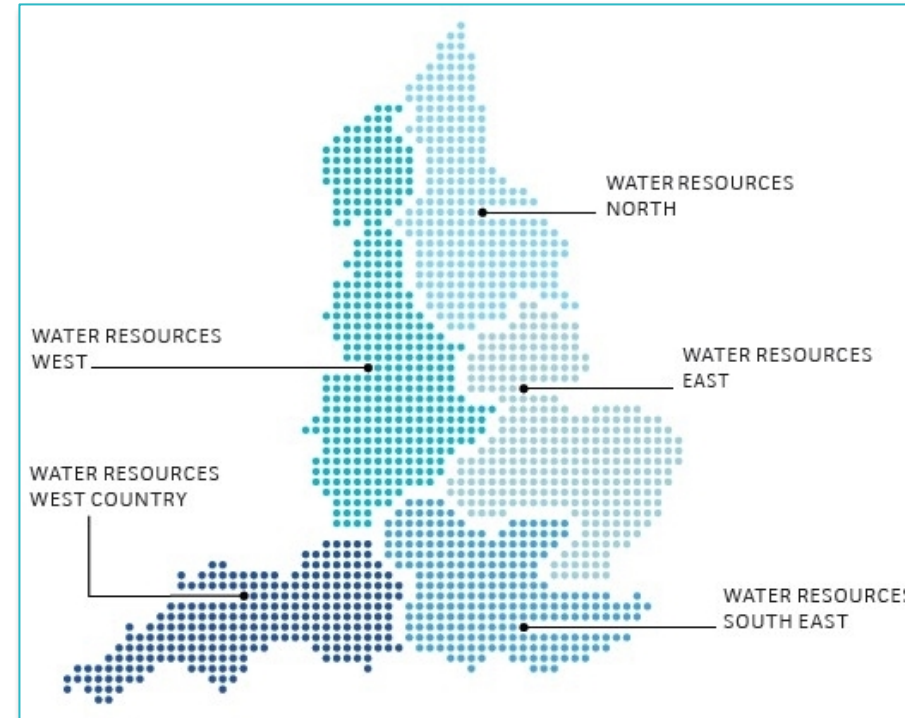
Regional water resources planning

The regional first approach

- Step-change in water resource planning.
- Ensures that, when combined, all plans can meet the national need for water in a dynamic and flexible way.

Water Resources South East

- Water Resources in the South East (WRSE) formed in 1996
- Working regionally ensures we look beyond boundaries at:
 - Population growth
 - Protection of the environment
 - Dry weather/drought resilience
 - Climate change
 - New infrastructure
 - Catchment management solutions

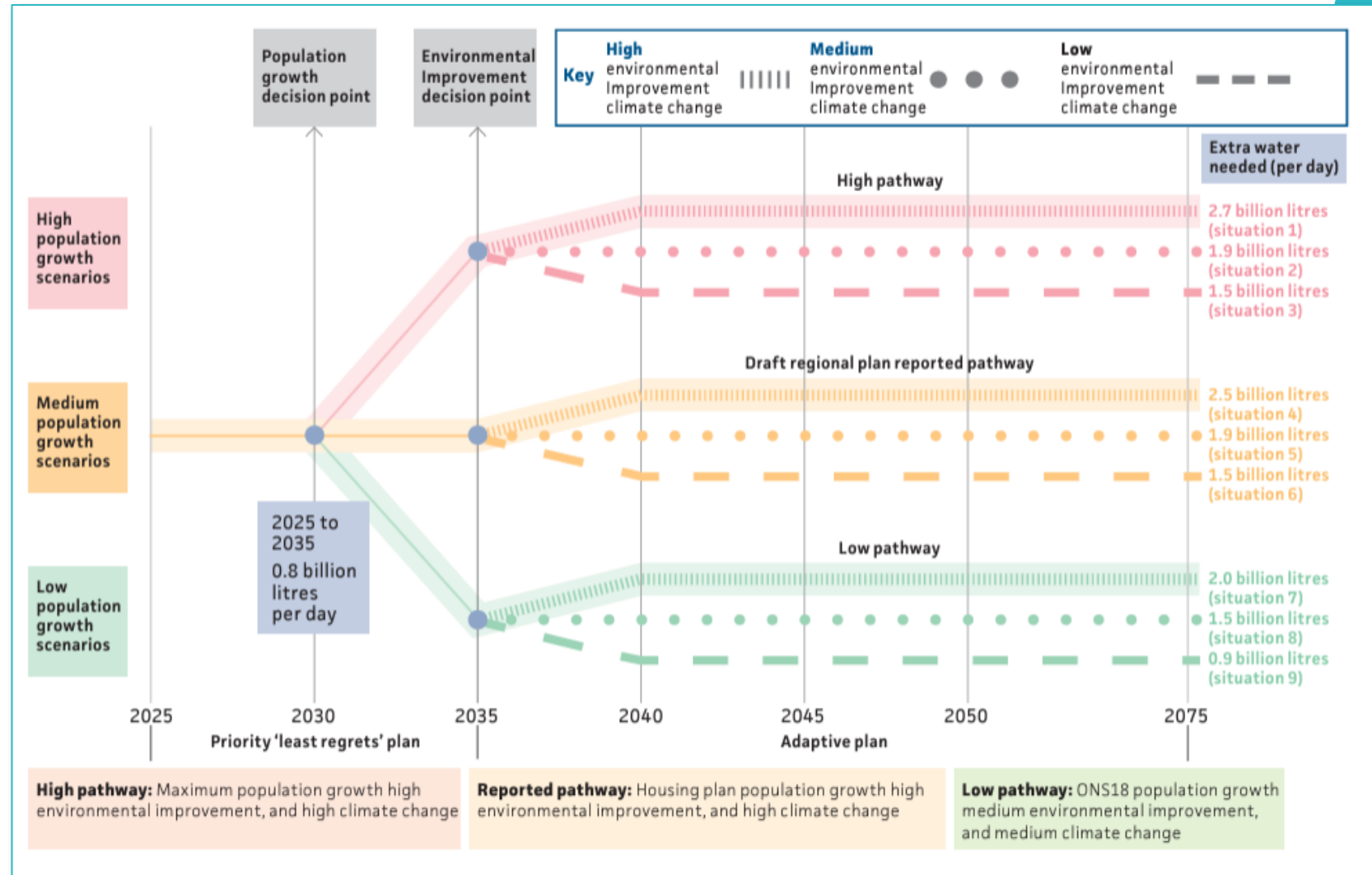


Adaptive planning

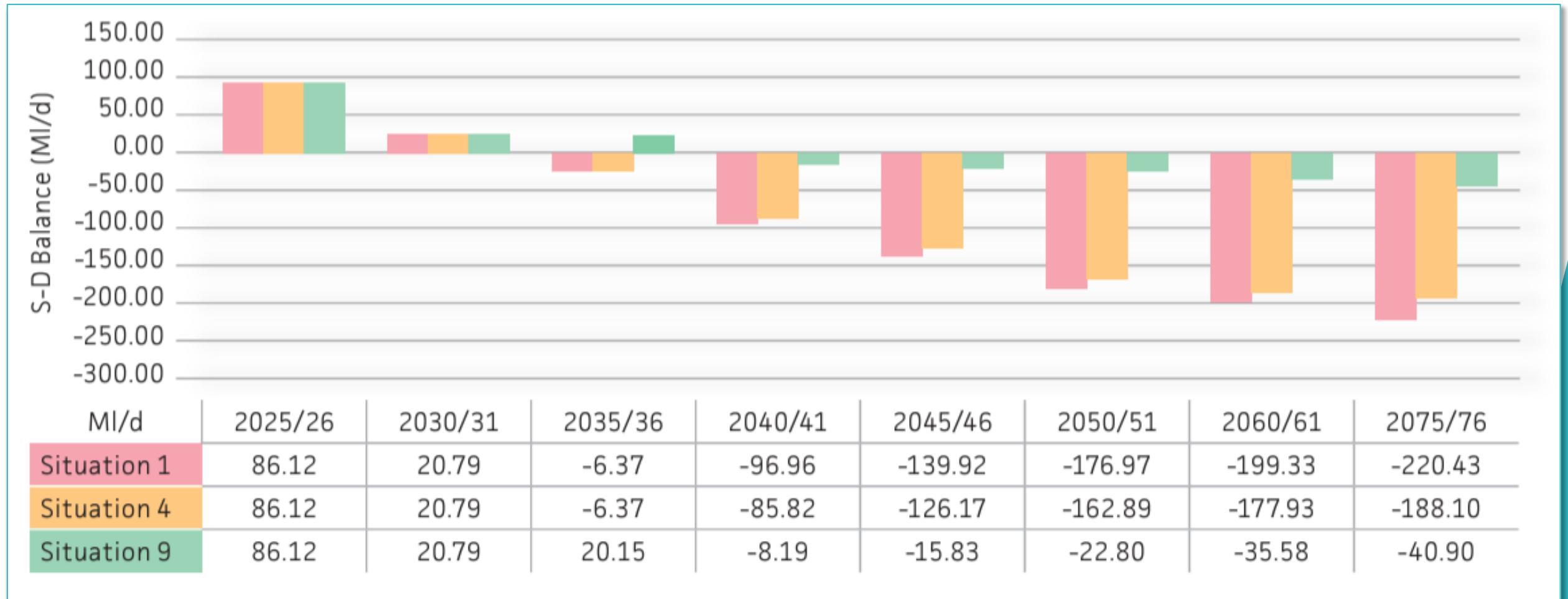
We use the most up-to-date and relevant tools, methods and data to produce our supply and demand forecasts. We have looked at a range of nine future scenarios (situations) we might face over the next 50 years, with different combinations of:

- Population changes
- Non-household (business) use
- Changes to abstraction licences
- Environment ambition
- Climate change
- Tolerance to drought restrictions
- Levels of drought resilience

The regional deficit by 2075 could range from **0.8 billion litres** to **2.7 billion litres**.



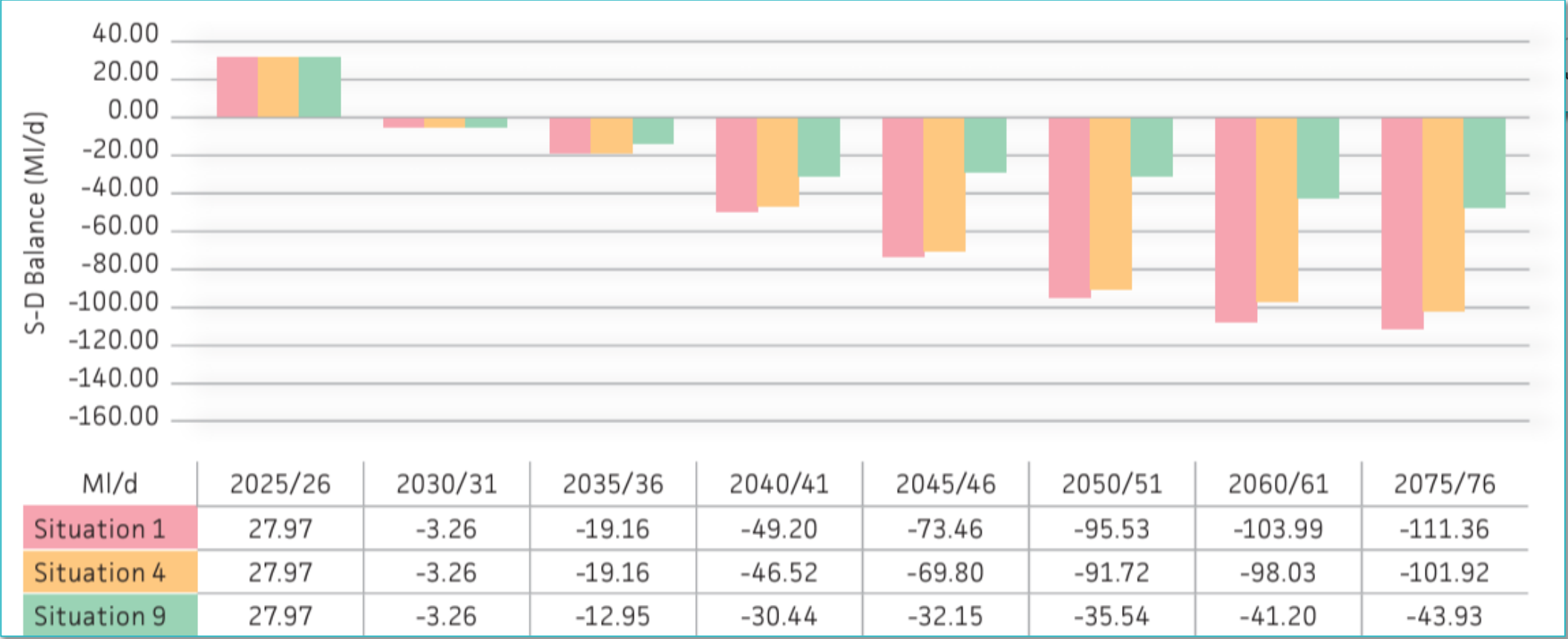
Company-wide supply demand balance 2025 to 2075



One in 500 dry year annual average

Supply demand balance in Kent

- Growth in population is predicted to increase by 16% by 2050 and 23% by 2075 (14% increase in need for water).
- Abstraction reduction of up to 94 MI/d (45% reduction in available water)
- Climate change impacts of 7 MI/d by 2075 (3% reduction in available water)
- Drought resilience impacts of 3MI/d to move from 1:200 to 1:500 level



How we're addressing the challenge

- Plan includes a balance of water reduction measures and new infrastructure projects
- Investing **£1.1 billion** in demand management interventions to:

- drive down leakage levels to meet our target of **50 per cent*** reduction by 2050
- reduce household water usage to **110 litres per person** a day by 2050
- reduce non-household water usage to meet our business demand target of **15 per cent**** reduction by 2040

- Investing **£1.2 billion** to build large-scale infrastructure projects such as reservoirs, new transfers and desalination schemes
- Increase resilience across our supply area and maintain the integrity of our water resources zones

south east water

2025 to 2040



2040 to 2075



Our long-term preferred plan for the Kent region

Dry Year Annual Average Demand	2024-25 (MI/d)	2029-30 (MI/d)	2034-35 (MI/d)	2039-40 (MI/d)	2044-45 (MI/d)	2049-50 (MI/d)
Supply / Demand Balance	+ 27.9	- 3.3	- 19.2	- 46.5	- 69.8	- 91.7
Options	2024-25 (MI/d)	2029-30 (MI/d)	2034-35 (MI/d)	2039-40 (MI/d)	2044-45 (MI/d)	2049-50 (MI/d)
Leakage Reduction	0.0	2.8	5.1	6.7	8.7	10.0
Consumption Reduction	0.0	7.1	14.2	17.9	22.7	24.1
Aylesford Newsprint	18.2	18.2	18.2	18.2	18.2	18.2
Broad Oak Reservoir	0.0	0.0	19.6	19.6	19.6	19.6
Desalination at Reculver	0.0	0.0	0.0	0.0	30.0	30.0

- Twin track approach – we are adopting an ambitious plan to reduce demand alongside our new resource schemes.
- Work is already underway to develop a major new groundwater scheme on the former Aylesford Newsprint site, near Maidstone, this will provide SEW with more operational flexibility and resilience in our Kent area.
- In our previous business plan, we were funded for the five year period, 2020-25, to further develop Broad Oak Reservoir. Our latest draft business plan seeks additional funding to allow us to move into full delivery of the scheme.

Our final plan

- Our final WRMP24 was approved by the Secretary of State and published on 18 October 2024.
- The plan can be viewed at southeastwater.co.uk/futurewater
- Work is now beginning on our next plan, which is due for publication in 2029.
- We would be keen for Kent County Council involvement in formulating that plan.



Thank you