# **Affinity Water**

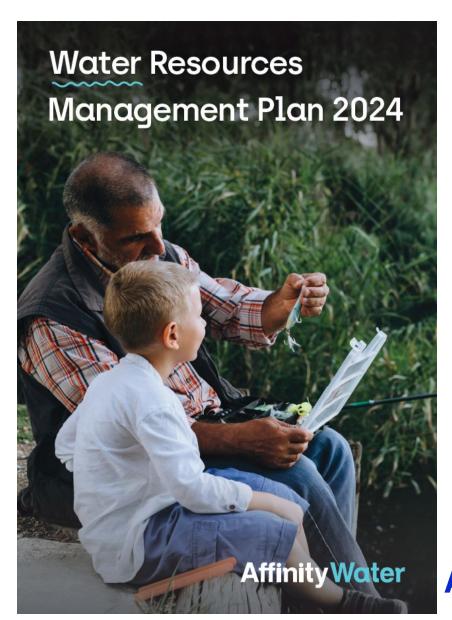
# Water Resources Management Plan (WRMP)

Dr Ilias Karapanos Head of WRMP



### Water Resource Management Plan (WRMP)

- Statutory requirement to produce a WRMP every 5 years
- It sets out how we intend to maintain the balance between water supply and demand for a minimum 25 years
- Our plan provides a reliable, resilient, efficient and affordable water supply to our customers to 2075
- Produced in conjunction with Water Resources South East (WRSE) and Water Resources East (WRE)
- Our WRMP24 was published on 18
   October 2024 following instruction from Defra
- It intersects with Water Industry National Environment Programme (WINEP), Price Review 24 (PR24) and Long-Term Delivery Strategy (LTDS)



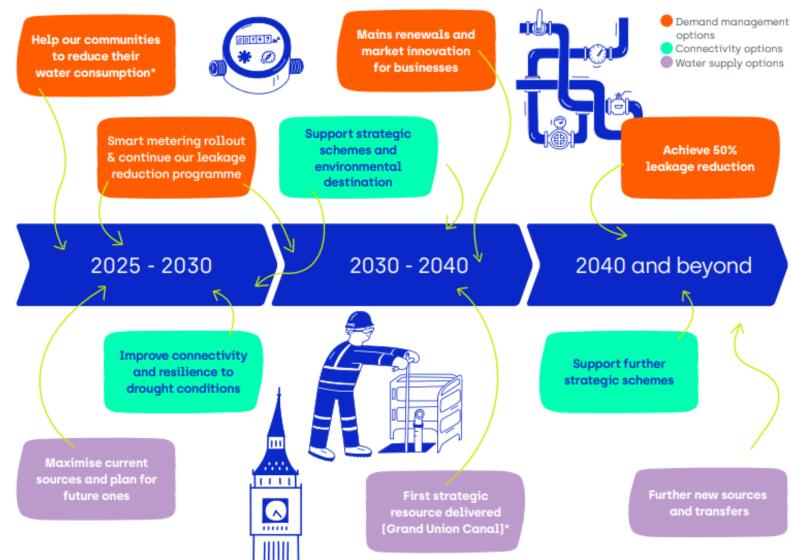
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# Our plan in summary

We have worked collectively as one of the six WRSE member companies, as well as with WRE, to develop a plan that both delivers for our Affinity Water customers and the southeast and eastern regions as a whole. Our plan provides an objective and evidence-based solution to meet our customers' future water needs.

We have looked beyond the boundaries of the company and identified the options that will deliver the most benefit to our customers, society, and the environment, now and in the future. Our plan fully reflects both the WRSE and WRE regional plans.

We will continue to engage and support our customers across the whole planning period, up to 2075.



<sup>\*</sup>These are areas that have changed in response to our consultation

### **Demand for water**



### **Challenges**

- Population growth
- High PCC
- Leakage reduction
- Climate Change
- Growth Al data centres

### Manage demand for water

2025 - 2030

2030 - 2040

2040 and beyond

### **Smart metering rollout**

- Install 400,000 smart meters for customer households and businesses
- Help our communities to reduce their water consumption (to achieve 110 l/h/d per capita consumption (PCC) by 2050)
- Active leakage control finding and fixing leaks within the network (this includes fixing leaks on the communication and supply pipes that connect our customers to the network)
- Reduce leakage on business premises (alterations and subsidised repairs)
- Enable businesses to reduce water use (self-audits and retailer audits)

### Mains renewals and market innovation for businesses

- Install a further 1,100,000 smart meters for customer households and businesses
- Continue active leakage control
- Begin mains renewals programme (to further reduce leakage) at slow pace to keep costs and disruption low
- Encourage water recycling for business customers
- Encourage businesses to consider water efficiency actions (incentive approaches to provide rebates, supported by information and accreditation)
- Government-led minimum standards on water-using goods and building regs initiatives

### Achieve 50% leakage reduction

- Continue with mains renewals to reach 50% leakage reduction while keeping costs and disruption as minimal as possible
- Continued government-led minimum standards and building regulations initiatives

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### **Enhance network connectivity**

2030 - 2040 2040 and beyond 2025 - 2030 Improve connectivity Support further Support strategic and resilience to drought schemes and strategic schemes conditions environmental destination • Downstream improvements Releasing trapped water Onward movement of water to the network to support the Thames to Affinity from our Wey community within the Pinn community to our Pinn community Downstream improvements Transfer SRO\* to the network to support Further connectivity the Grand Union Canal SRO\* improvements within our Pinn community · Improved connectivity in the • Improved connectivity between Stort community to support environmental benefit the Lee and Stort communities

### Manage the supply of water

2025 - 2030

2030 - 2040

2040 and beyond

## Maximise current sources and plan for future ones

- Transfer additional water from River Thames released by upstream abstraction reductions
- Brett: revert to agreement to share Ardleigh reservoir water 50/50 with Anglian (30/70 originally)
- Wey: agreement with South East Water to reduce existing export by 10Ml/d and transfer this extra capacity north, support groundwater abstraction reduction
- Started planning permission, construction of Grand Union Canal SRO (100 Ml/d) to supply central area
- Planning permission for South East Strategic Reservoir SRO to supply central area

### First strategic resource delivered

- Grand Union Canal SRO
   [100 Ml/d] delivered in 2032
   to supply our central area
- Construction for South East Strategic Reservoir (150Mm³) to supply our central area
- Planning permission and construction for the Thames to Affinity Transfer SRO to supply our central area
- Begin the reverse trade of water from Grafham reservoir to support Water Resources East environmental ambition

### **Further new sources**

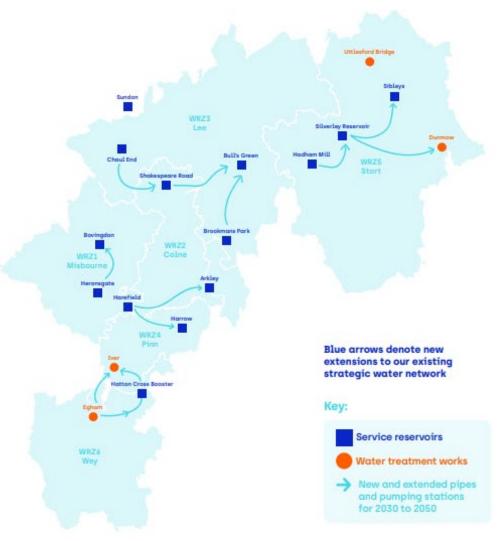
- South East Strategic Reservoir used to support Thames to Affinity Transfer SRO (2040s) to supply our central area
- If required, further phases of transfer from Thames Water

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### Unlock surplus & identify new supply options



# Extending movement of water around our communities





### **Grand Union Canal SRO**

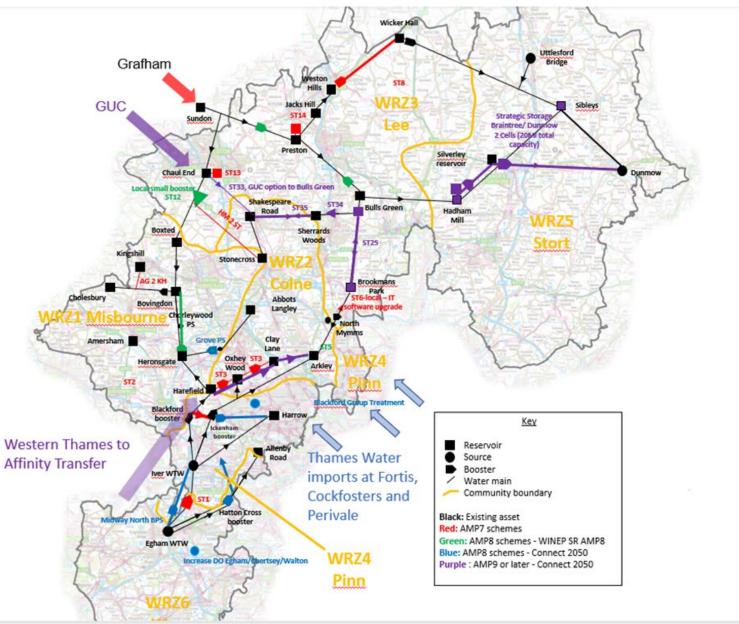




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### Connect 2050

- Series of internal interconnectors built to support the SROs and move water within our Central region
- Continues throughout the planning period all the way to 2050



### **Baldock development**

- Any new demand will be accommodated through a combination of internal and external transfers
- This will require additional network reinforcement (e.g. new booster stations)
- No additional local groundwater abstraction will take place as the local abstraction licences have been capped to recent actual
- The source of the water for any new development will be a combination of Grafham-derived water and other groundwater transferred from neighbouring zones as a displacement
- New demand already forecasted in our WRMP24
- Water pressure we have to meet certain statutory targets for every supply zone. Pressure in the Baldock area is well within the targets.



### **WRMP24** documents

https://affinitywater.uk.engagementhq.com/wrmp





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# Thank you

Any Questions?

