

Guildford Resilience

Tess Fayers – Waste & Bioresources Director

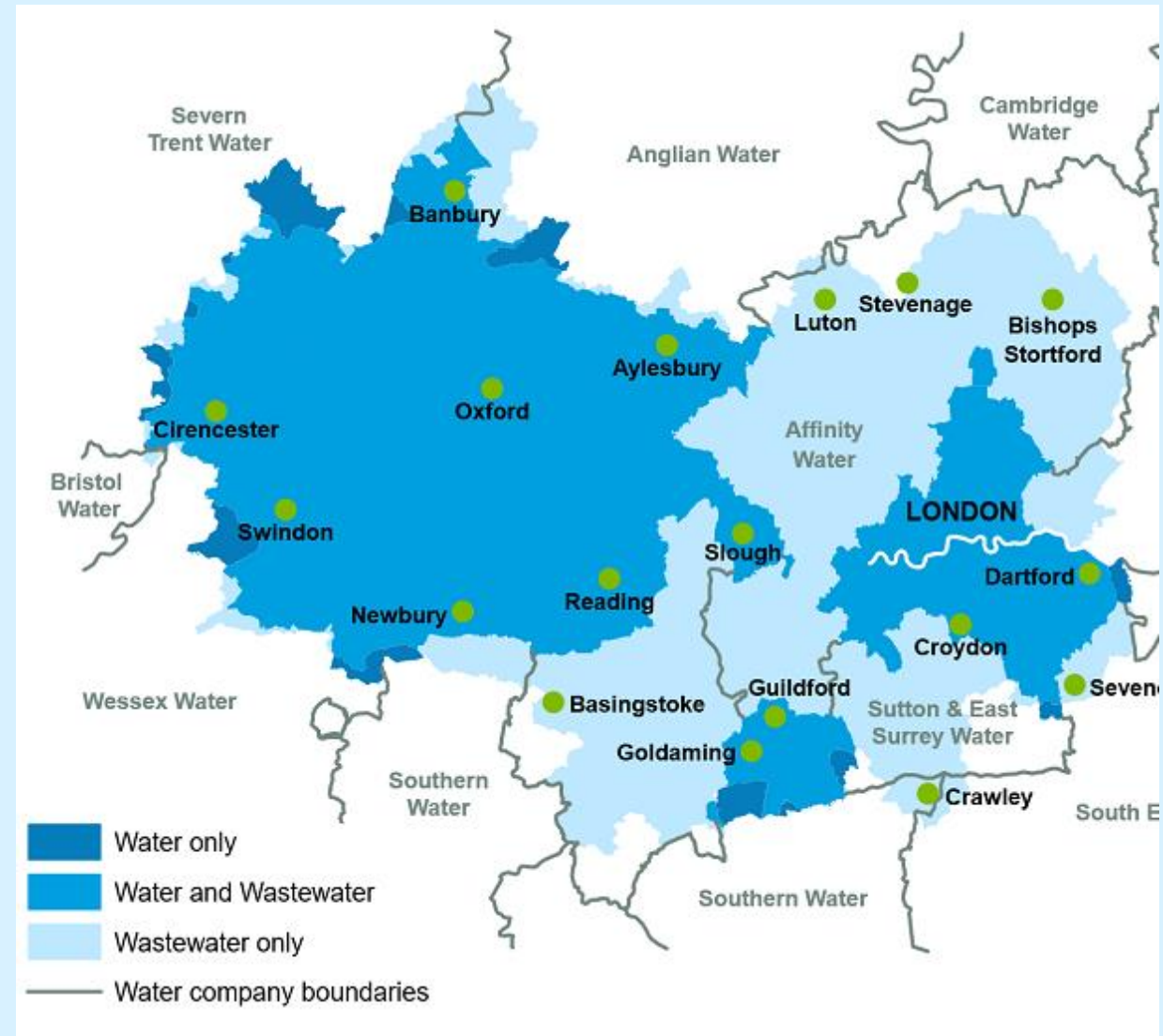
Simon Moore – Head of Planning

July 2024

Guildford Water Resource Zone

A Growing Area with Aging Assets

1. Guildford is an island zone (meaning it's not connected to the wider Thames Water network) with 756 critical assets and a typical demand up to 67Mld
2. Thames Water operates of trunk main, 1,000 km of distribution main. 6 water treatment works and 14 service reservoirs in the Guildford WRZ
3. In November 2023 Storm Ciaran led to power issues and turbidity spikes, combined with some operational failures leading to a widespread loss of supply. This highlighted several additional improvements we have committed to delivering in the wider Guildford area.



Our Strategy for Guildford's Water supply

Improving the areas resilience and preparing for future growth

Improve Water Availability

- Continued focus on leakage and consumption reduction
- Targeted investment in existing works to deliver process improvements to maximise output
- Increase network resilience through improved connectivity of critical assets and sites

Upgrade our Assets

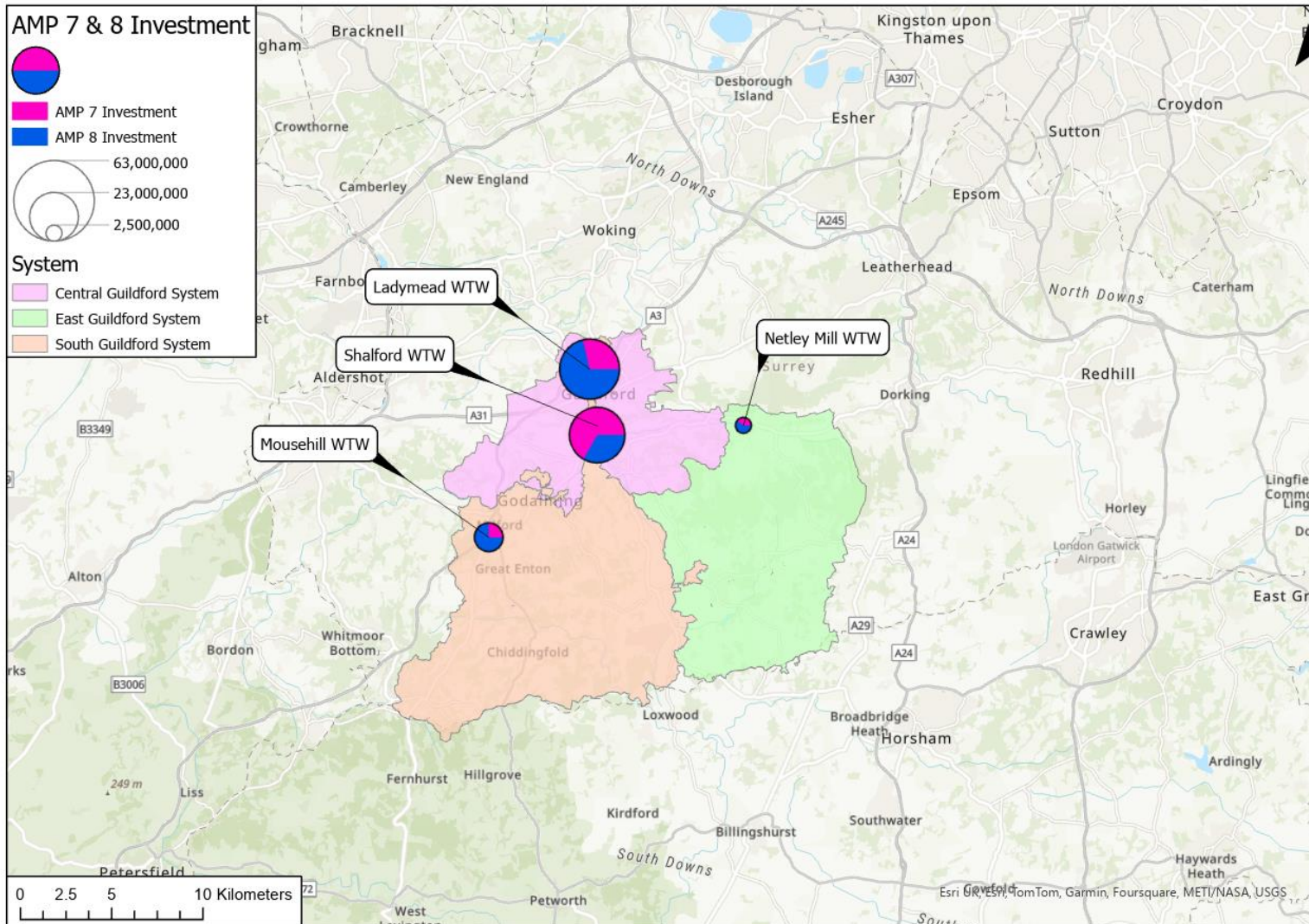
- Continuation of targeted mains replacement across our network
- Complete programme of upgrades to all of Guildford's water treatment works to improve performance and enable faster return to service following outages
- Increase resilience to power fluctuations or outages at all of Guildford's water treatment works

Support Growth and Environment

- Maximise use of existing water resources whilst protecting vulnerable catchments
- Long term – possible transfer pipeline between water companies

Investment Highlights

Improving our Assets



Resilience improvements at all sites including new pumps, contact tanks, disinfection facilities, run to wastes, power resilience.

Totalling over £98 million additional spend between 2020-2030.

Two New Transfer mains:

- Construct a contingency feed into the East Guildford (Netley Mill) area of around 10 MI/d, it is currently an island zone.
- Provide an additional 2MI/d from Shalford to South Guildford to support the areas resilience and support for future supply and demand.

Continued focus on reducing leakage and consumption

Operational Improvements

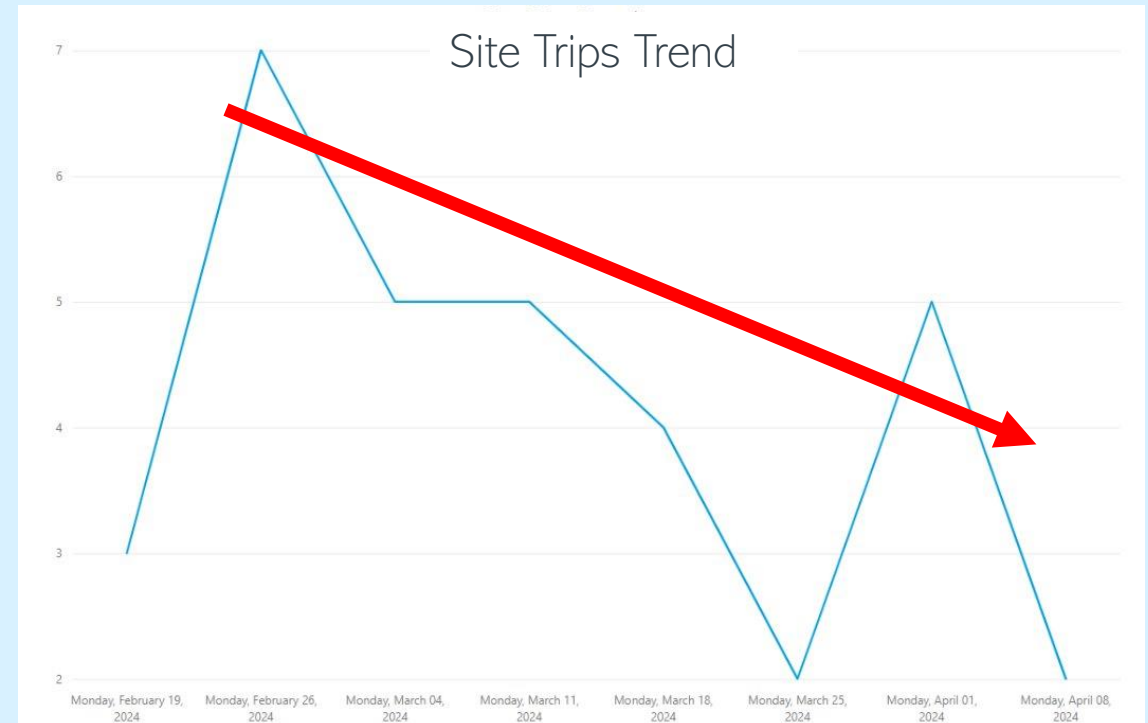
We have completed targeted site improvements to tackle the issues identified through recent events

- We have suffered several voltage dips since November and thanks to the power monitor installs, we now have on all the sites we can go and speak to the power companies and escalate proactively.
- We have installed a temporary generator at Ladymead to protect the site in case of a power event.
- We have also managed to take Shalford out of supply for planned works for more than 8 hours on two occasions without seeing Supply Interruptions thanks to the operational changes implemented.

Backlog Trend



Site Trips Trend



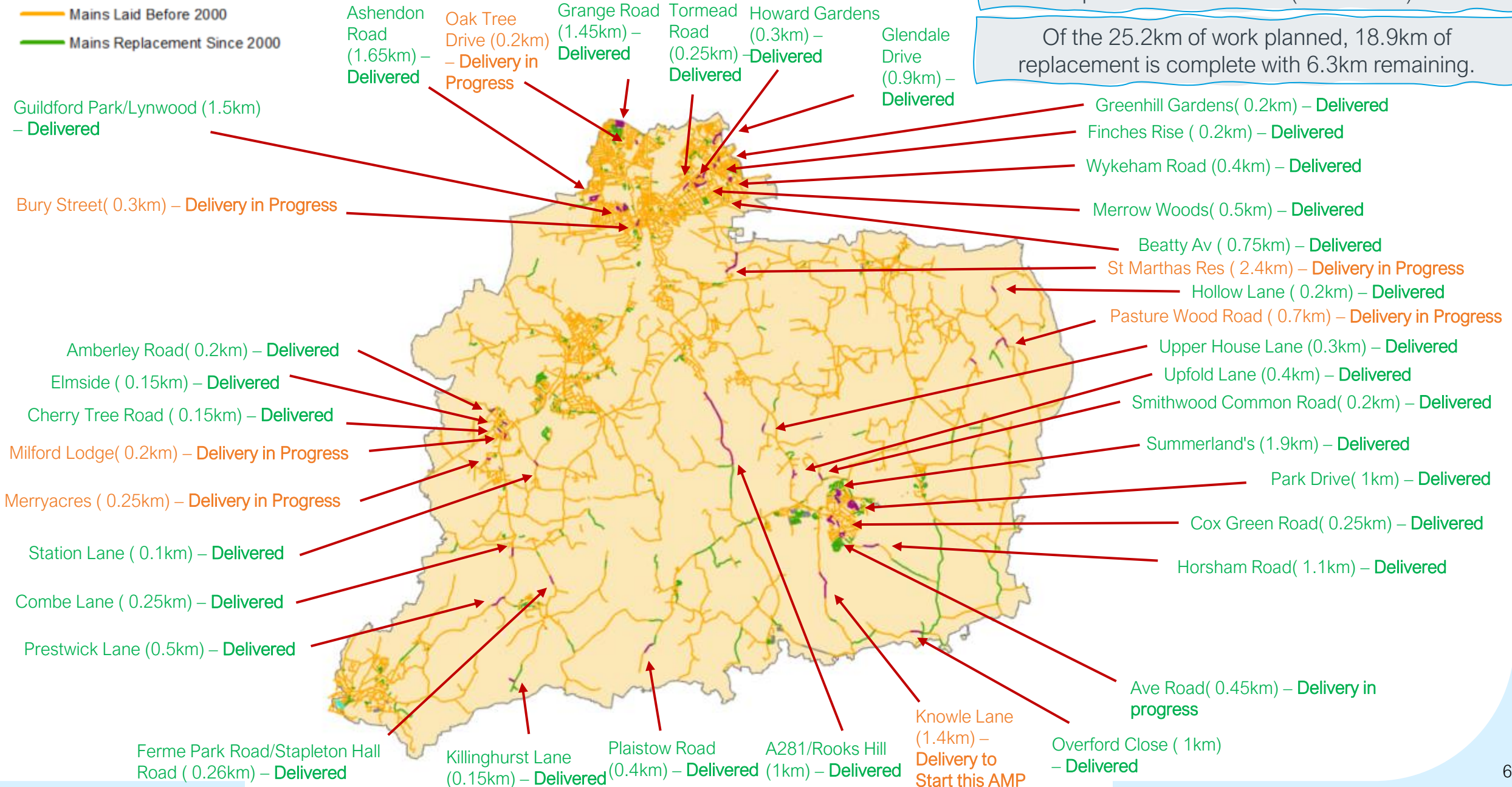
Distribution Main Investment – Current Status

— Mains Laid Before 2000

— Mains Replacement Since 2000

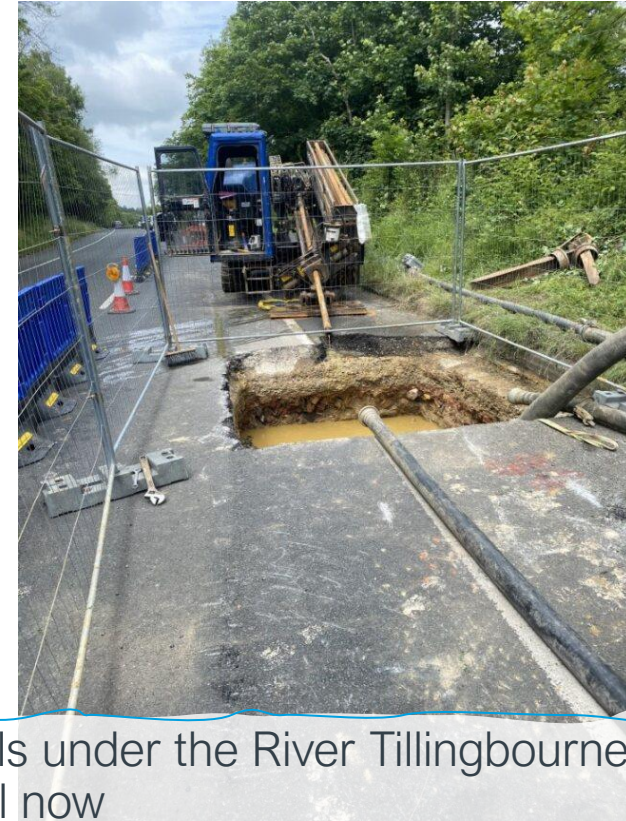
Across the borough, there are 25.2km schemes planned for this AMP (2020-2025).

Of the 25.2km of work planned, 18.9km of replacement is complete with 6.3km remaining.



Pewley Reservoir to Netley Mill Pipeline

This project to install a 8.2km pipeline is well underway with an estimated completion date of Spring 2026



We have laid 1.3km of 450mm pipe to date, including two directional drills under the River Tillingbourne and BOAT byway and we're starting the 3rd drill now

Up to 10MI/d of Shalford and Ladymead water will be taken from Pewley Reservoir and piped to Netley Mill

The pipeline is a critical element of our plans to provide capacity to support forecast demands to 2040 and beyond, enabling reduced abstraction at Netley Mill to protect the River Tillingbourne

Summary

We are actively working to address unacceptable performance in Guildford with sustainable, resilient solutions

We are sorry for the disruption that residents have experienced recently and are working hard to make these disruptions a thing of the past, but there is no quick fix

We have identified immediate operational improvements for some of our key sites and have set about implementing them, which is already benefitting customers

We continue to replace the worst performing pipes in the area with the greatest community impact

We are investing substantially in our key sites to address long term issues and make them and the water supply system more resilient and interconnected, increasing output to meet future growth needs and reducing our impact on the local environment

Thank you and any questions?



It's everyone's water