

Future Trend: Changes In Customer Behaviour Due to Demographic Trends

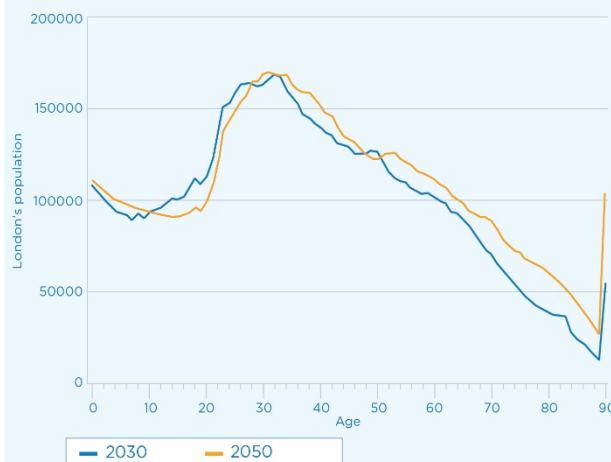
Trend definition and relevance to DWMP

The key demographic trends relevant to wastewater planning are an ageing population and increasing levels of home working^{1,2}. The November 2024 report¹, commissioned by Ofwat, examined how COVID-19 has influenced household water use and its implications for overall consumption targets. These shifts can affect the volume of wastewater generated, as ageing populations tend to use less water³, as well as where it is generated and the timing of when peak daily flows occur (as water use is spread over the day). Such trends may be important for DWMP development if they are sufficiently significant to affect the scale and pattern of dry weather flow in the system.

However, these trends are not currently considered sufficiently predictable or material in magnitude to warrant separate treatment within the DWMP28 planning process, beyond the catchment-level per capita flow forecasts already incorporated.

Trend description, uncertainty and potential impact on our region

London's population by age at 2030 and 2050



- London's population is forecast to age faster than other parts of the UK, with its median age rising due to lower birth rates and young people moving away. This trend is occurring from a relatively young baseline, with 16.5% of the population currently aged 60 and over, compared with a national average of 25%.
- This pattern is not uniform across the capital, with significant spatial differences. Some areas have notably older populations, such as Emerson Park in Havering, where 35% of residents are aged 60 and over, while other areas are considerably younger, such as Newham, where only 2% of residents fall within this age group².
- The figure compares the age of London's resident population in 2030 and 2050⁴. The ageing trend is clear in the rightward shift of the histogram, indicating a modest increase in the proportion of older residents.
- Changes in behaviour due to demographic trends may positively reduce wastewater flows. However, they may also alter the distribution of wastewater generation, affecting local supply-demand balances.
- The potential impact of this demographic trend on DWMP28 is considered to be low, with a high degree of uncertainty. However, we will monitor these trends carefully for future DWMP cycles.

Stage of DWMP used	
Risk assessment	×
Plan development	×
Impact/Importance	
Short term (2035)	Low
Medium term (2045)	Low
Long term (2055)	Low
Example PIs affected by this trend	
	Internal flooding
	Treatment works compliance (flow-to-full treatment)
	Treatment works compliance (dry weather flow)



References

- 1 Impacts of Covid -19 on PCC, commissioned by Ofwat and produced by Europe Economics in association with Arup, 2024. www.ofwat.gov.uk/wp-content/uploads/2024/12/Impacts-of-Covid-19-on-PCC.pdf.
- 2 Our Ageing Population – The State of Ageing 2025, Centre for Ageing Better, 2025. ageing-better.org.uk/our-ageing-population-state-ageing-2025.
- 3 'The global declining effect of population aging on water use', (2026), Yan, P., Lu, H., Wang, Y., Yan, Y., Zhang, Z., He, M., Li, H., Xia, J. and He, L. Water Resources Research, 62(1), e2024WR037685. Available at: <https://doi.org/10.1029/2024WR037685>.
- 4 The graph shows the Projected Population for All London, 10 Year (2022-based) Projection, All London in 2024, All Persons aged 0 to 90. Data from the GLA 2022-based housing-led population projections. All variants incorporate assumptions about future housing development derived from the [2017 London Strategic Housing Land Availability Assessment](#).

