Policy Statement
Network Capacity Modelling

The purpose of this document is to set out our approach to potable and wastewater modelling.

Our Approach to Capacity Modelling

Potable Water Modelling

A formal document detailing our approach to modelling the impact of a new development on the potable water supply network is still in development and is due to be published later this year. This policy document will be updated with a link to the potable water modelling criteria once it is published.

Wastewater Modelling

Our approach to modelling the impact of a new development on the public sewer network is set out in Foul Sewerage Modelling Criteria, V1.1, a copy of which can be found and downloaded https://www.southernwater.co.uk/Media/Default/PDFs/DS-Modelling-Criteria.pdf

The criteria employed in both these documents is based on national guidance, industry best practice and direct evidence (e.g. metered flows) and constitute reasonable assumptions of demand over the long-term.

Modelled flow rates are based on the information we receive and we are always willing to revise our modelling based on more detailed information subsequently provided. This is particularly pertinent to developments containing commercial or industrial properties, where anticipated flow rates can be highly variable. Where this is the case, we urge developers to provide us with a schedule of fixtures and fittings at the earliest opportunity so that we can model demand as accurately as possible.

Temporary Wastewater Flow Capacity

Our wastewater modelling criteria accounts for the long-term impact of unauthorised connections and climate change on network capacity. However, we acknowledge that the influence of these factors over short timeframes are likely to be negligible. Consequently, we are willing, initially, to accommodate limited flows, where the build profile of the development is such that the projected demand exceeds the capacity of the network. We hope this provides developers with more flexibility in the short-term, helping to minimise any network capacity constraints on development. Please note, modelling of the permanent flow capacity will still include these factors.

Network Reinforcement

Where reinforcement of the local network is necessary to provide sufficient capacity for your development, we will commit to delivering this within 24 months of outline planning permission being granted and a confirmed commitment to build.

Where we cannot provide sufficient capacity to service the development within the agreed timeframe, alternative supply and discharge arrangements will be required. Please refer to our Alternative Discharge Arrangements Policy for further details.

Where a strategic upgrade to the existing network is required to provide sufficient capacity for a new development, we will mutually agree delivery timescales on a case-by-case basis with you. We do not anticipate this will be necessary in the vast majority of cases and should only apply in exceptional circumstances.

Where possible, we will endeavour to notify you of the capacity threshold, expressed in terms of the total number of residential properties that can be connected to the network, before a network reinforcement scheme is triggered. These enhancement works are our responsibility.

Our Commitment to Water Efficiency and Sustainability

We operate within a water stressed area in the South East of England and are committed to the sustainable management of water resources and our supply system. In response to this, we have embarked on the most ambitious water efficiency programme in the UK Water Industry, Target 100, which aims to reduce demand to 100 litres per day by the year 2040. Collaborating with our developer and NAV customers will be essential to achieving this challenging goal and we want to work with you to ensure that new developments are designed and built to the highest water efficiency standards.

To incentivise this, we offer a 100% infrastructure charge discount for any residential properties that adhere to the 110 litres per person per day water efficiency standard under section G of the Building Regulations, 2010. We acknowledge that in many instances, the occupants of the new properties will remove any water efficient fittings, which will increase demand above the 110 litres standard. However, our current modelling assumes that all properties will use 129 litres per person per day, which is based on the average daily use throughout our area of supply, and already accounts for any increase in demand due to the replacement of water efficient fixtures and fittings.

References

- Water Demand Information. 30th April 2019
- Foul Sewerage Modelling Criteria, V1.1,
- The Building Regulations 2010, Section G: Sanitation, hot water safety and water efficiency
- Alternative Discharge Arrangements Policy

Version	Date	Author	Amendments
0.1	03/09/2019	Mat Brown	-
0.2	05/09/2019	Mat Brown	Removed reference to timeframe for network reinforcement starting when an application is received.
1.0	09/09/2019	Mat Brown	Minor formatting amendments following review by Stuart Ward, Dan Whitcher and Chris Nelson. Reviewed by Dylan Freeman. Document issued.