4.7 FLOOD PROTECTION

FLOOD DEFENCES



flooding

Kent & Medway Kent & Medway

Homes at risk from 1 in from tidal/fluvial 200 years surface water flooding

CURRENT SITUATION

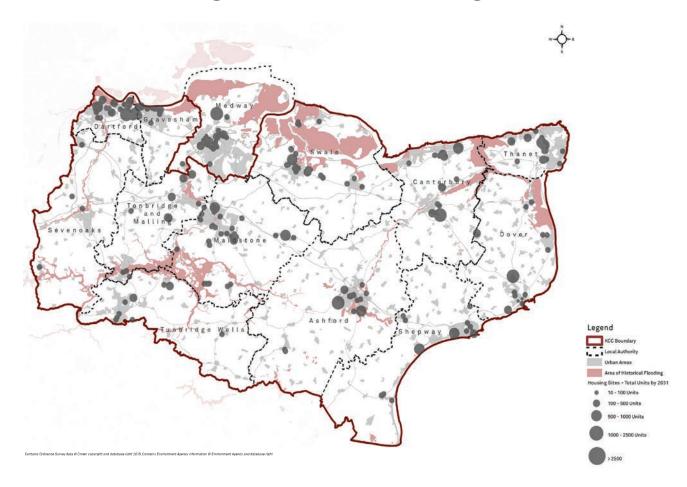
Flooding across Kent is a well-recognised problem with large parts of the County at risk of flood as illustrated in Figures 4.17 and 4.18. Fluvial and tidal sources are behind the majority of flooding incidents and there have been 2.500 historical flood events in Kent since 1986. There are three types of flood risk:

- Groundwater flooding Risk in some areas due to major aquifers in Kent, the chalk of the North Downs and the sandstone of the High Weald
- Fluvial and tidal Flooding- 46,000 homes (108,000 people) at risk of flooding
- Surface Water Flooding 60,000 homes (140,000 people) at risk to a depth of 0.3m in a 1 in 200 year event

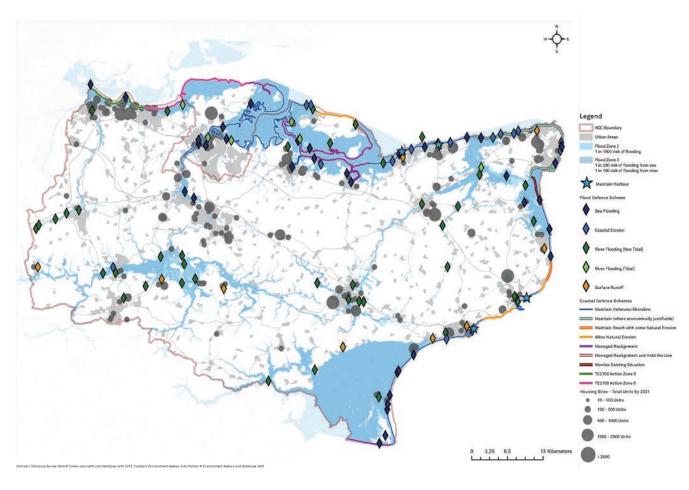
Kent has the 'highest surface water flood risk of any Lead Local Flood Authority (LLFA) in England'. The highest risk of surface water flooding is in Maidstone with 11,700 people estimated to be at risk. Limited capacity within existing drainage infrastructure (be it surface water or combined systems) enhances this risk with notable drainage constraints in Margate/Broadstairs, Ramsgate, Deal, Folkestone, Marden, Staplehurst, Headcorn and Paddock Wood.

Figure 4.17 Kent & Medway

Historical flooding and proposed housing sites



Proposed Flood Defence Projects



HOUSING SITE ANALYSIS

Our analysis of potential risk from flooding to existing and proposed development sites in Kent highlights that:

- 15% of forecast new homes located in Flood Zones 2 and 3.
- Notably high level of proposed sites within Flood Zone 3 in Dover, Sevenoaks, Swale, Tonbridge & Malling.

SHORELINE MANAGEMENT PLANS

Shoreline Management Plans (SMP) are also in place to manage the protection of the Kent Coastline through maintaining existing defences, allowing natural erosion or through monitoring::

- South Foreland to Beachy Head SMP
- Medway Estuary and Swale SMP
- Isle of Grain to South Foreland SMP

FUTURE REQUIREMENTS TO MEET GROWTH

■ 121 flood defence projects currently in the pipeline.

One of the most important strategic projects affecting growth in Kent is the Thames Estuary 2100, being led by the EA, addressing the implications of climate change, sea level rise and aging flood defences which are deemed to present a significant challenge not just to the future growth in North Kent but to the fabric of the economic and societal base for Kent Thameside and beyond.

Kent's Severe Weather Impact Monitoring System is also analysing the likely impact and consequential costs associated with future weather events on Kent's infrastructure.

COSTS AND FUNDING

Based upon information received from KCC and the Environment Agency, the following costs and funding have been identified:

$$\label{eq:cost} \begin{split} &\textbf{Cost} = \pounds 406,\!590,\!000 \\ &\textbf{Secured Funding} = \pounds 217,\!450,\!000 \\ &\textbf{Expected Funding} = \pounds 0 \\ &\textbf{Funding Gap} = \pounds 189,\!140,\!000 \end{split}$$