

Tackling flood risk

Tidal

We are working with the Environment Agency and other partners to produce the [Thames Estuary 2100 \(TE2100\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/thames-estuary-2100)

The Plan sets a long-term adaptive pathway approach to managing tidal flood risk in London up to 2100. [An updated plan taking on board the most recent climate change forecasts will be published in 2023.](#) This approach to managing climate associated flood risk is now being used as a model for learning worldwide. The plan includes the options of a new barrier or improving the current one, as well as other defence raising up and down stream along the network.

The updated plan includes more recent climate change projections and scientific evidence used to inform the adaptive plan. The rates used are similar to the Intergovernmental Panel on Climate Change's (IPCC) 'likely' range for global mean sea level rise. The [Thames Estuary 2100: 10-Year Review monitoring key findings](#) indicates that sea levels are rising at rates anticipated in the original Plan and so therefore do not suggest a change to the 2070 replacement date for the Thames Barrier is needed. Though more frequent operation of the barrier due to sea level rise suggest that defences upstream of the Thames Barrier may need to be raised earlier than 2065.

Table 1: Deadlines for flood defence upgrades in the original Plan and proposed.

	Deadline in the original Plan	Deadline to be in revised Plan
Defence raising downstream of the Thames Barrier	2040	2040
Defence raising upstream of the Thames Barrier	2065	2050
Thames Barrier upgrade/replacement and additional defence raising downstream of the Thames Barrier	2070	2070
Additional defence raising upstream of the Thames Barrier	2100	2100

The tidal defences are critical for London. The monitoring reports highlights that even if the government's required target of net zero is reached by 2050, there is likely to be 59% more winter rainfall, and by 2100, once-a-century sea level events are expected to become annual events. The population in the plan area has grown by 14% between 2012 to 2022. The population continues to grow as the outer estuary is recognised by government as a prime growth opportunity area.

The Thames Estuary 2100 Plan sets out work within the plan in 3 phases. The next **Phase 1b is to be delivered from 2023 to 2035**. This phase includes working with communities to develop visions for their future riversides, plus plans for defence raising and securing land needed for future improvements to flood defences.

A great example of the actions that need to be taken is the [City of London Riverside Strategy - City of London](#)

The Environment Agency have also identified the need to prolong the life of the Thames Barrier by reducing the number of times the barrier is closed for fluvial flow events. The Environment Agency is going to work with partners to identify areas that currently benefit from closing the Thames Barrier during fluvial flow events, to agree and put alternative flood risk management measures in place for smaller fluvial events, by 2035.