# **Information regarding future change in use of the Thames Barrier**

We are sending this letter to multiple communities on or near the River Thames that will be affected by future changes to the operation of the Thames Barrier. Some of you may already be aware of these changes from previous correspondence with us. We hope this letter clarifies when this change will occur, how it will affect you and what steps we are taking to find options to mitigate subsequent changes in flood risk.

### **Context**

The Thames Barrier and associated defences were originally designed to manage the tidal risk upstream of the Barrier to Teddington Weir for the duration of its lifespan to 2070. Over the last few decades, the original remit has expanded to manage fluvial flooding to areas further upstream of Teddington Weir. This means the Barrier now closes more frequently than it would under the original operating procedures. If this elevated operation continues, then the Barrier will not be able to fulfil its original intended purpose with the required level of reliability. As part of the Thames Estuary 2100 Plan, which sets out how we can manage rising sea levels and increasing tidal flood risk on the Thames, we need to manage the number of Thames Barrier closures to preserve its lifespan. We have provided further information on Barrier reliability and maximum closures below.

### **Future operation**

The change in operating procedures for the Thames Barrier needs to happen by 2035 at the latest. From this point onwards, the Barrier will continue to close when water levels in the Thames between Charlton and Teddington are forecast to cross high trigger levels. These high-water levels could be a result of high tides in the North Sea, or high fluvial flows coming from upstream, or a combination of the two. From 2035, we will no longer operate the Barrier to manage smaller fluvial floods. This will lead to a change in flood risk for many communities which is why we’re establishing a project to evaluate options to mitigate this change in risk.

**Managing Barrier closures**

In the Thames Estuary 2100 Plan, we determined the maximum number of closures of the Barrier to be 50 per year on average before maintenance (and thus reliability) of the Barrier would be significantly affected. We determined this number using input from the Thames Barrier Operations and Maintenance teams in conjunction with a series of statistical and reliability studies, which external expert engineering consultants carried out between 2003 and 2009.

If the average number of closures per year exceeds 50 then there won’t be the required amount of time between closures to carry out essential maintenance and ensure the Barrier can continue to provide the required standard of service to protect communities from extreme water levels.

The Thames Estuary 2100 Plan sets out how those with a role in managing flood risk in the estuary can work together to adapt to a changing climate and plan for the future of our riverside. As an adaptive plan, regular reviews and updates are crucial to ensure the Plan remains based on the latest science and best possible data and evidence.

We are currently reviewing the average annual closure limit to reflect the latest evidence, with support from external engineering consultants. This evidence includes climate change projections and updated maintenance and reliability studies.

### **What we are doing**

There are multiple projects and strategies that cover the Lower Thames and Estuary, some of which you may already be aware of such as the River Thames Scheme (RTS) and Thames Estuary 2100. We have established a new project called ‘West London Communities’ which is part of the Thames Estuary 2100 Plan. It will investigate and deliver alternative flood risk resilience and adaptation measures to mitigate the change in risk arising from the updated Barrier operation. These measures will be in place prior to the change in Barrier operating procedures. The project team is an integral part of the Thames Estuary 2100 Plan which ensures a consistent approach throughout the Estuary. Thames Estuary 2100 and RTS are regularly collaborating regarding this project due to the overlapping boundaries.

The modelling from RTS will provide the most up-to-date evidence base on fluvial flood risk for the Lower Thames area. This first phase of this modelling has just been completed and is integral to the West London Communities project. Our team is now analysing the outputs from the RTS modelling study to better understand which communities will be affected by the change in Barrier operation. We know that we will have to carry out further modelling to adapt the RTS outputs to suit the needs of the West London Communities project. Following further modelling, the first stage of appraisal to develop a long list of options and engage with affected communities is expected to run from 2023-2026. For further information on project delivery timescales, please see the website linked below.

## **What you can do**

As you live in a community that will be affected by the changes to Barrier operation and will be the ultimate beneficiaries of the new mitigation measures that will be delivered, we’d like you to play an active role in shaping the project to suit your needs.

You can use the email address Thamesestuary2100@environment-agency.gov.uk to contact us and ask any questions on the information we’ve presented in this newsletter. There is also a website with further information on this project available at: [tinyurl.com\\2wtyuzrj](tinyurl.com/2wtyuzrj) where further information will be posted. We will keep this page up to date with the latest information.

If you are not already part of one, we would encourage you to join or organise a community flood group so you can share information with one another; this will make it faster and simpler for us to contact you with future updates.

In addition to this letter, we have prepared an FAQ document which will hopefully answer some of your initial questions. This FAQ will be on the website noted above in to allow us to regularly update it and provide you a single place to come back to when you have questions. Any queries which are not answered in the FAQ can be directed to the inbox above.

For any queries related to the TE2100 plan, please contact Thamesestuary2100@environment-agency.gov.uk