

1 Eastbourne SFRA – Functional Floodplain briefing note

1.1 Overview

The Environment Agency has expressed concerns regarding the definition of Flood Zone 3b in the latest Eastbourne and Southern Wealden Level 1 SFRA. This note outlines the approach taken in defining the functional floodplain in the SFRA.

Planning Practice Guidance defines the functional floodplain (Flood Zone 3b) as follows:

This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise:

- *land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or*
- *land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding).*

Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Not separately distinguished from Zone 3a on the Flood Map)

Notably, whilst the 3.3% AEP should be used as a starting point PPG clearly states that the functional floodplain should not be defined solely based on rigid probability parameters.

1.2 Guidance on defining Flood Zone 3b

In addition to PPG, the national guidance on preparing Strategic Flood Risk Assessments (<https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment>) states the following on how the functional floodplain should be defined:

Functional floodplain

Your maps should:

- *show functional floodplain - land where water has to flow, or which stores water, in times of flooding*
- *give the sources of information shown*

Show land that:

- *would flood from rivers **or the sea** with an annual probability of 1 in 30 (3.3%) or greater in any year, **with flood risk management features and structures operating effectively***
- *would normally form the river channel*

is designed to flood (such as flood attenuation schemes), even if it would only flood in more extreme events (such as 0.1% annual probability)

In your report, you should include a detailed explanation of your approach to defining and mapping functional floodplain.

You may decide to assess the potential impacts of climate change on the future extent of functional floodplain. This will help inform the sequential approach.

Effect of local defences on functional floodplain

Take into account local circumstances when you define the functional floodplain. You should use the parameters set out in the planning practice guidance as a starting point to identify the functional floodplain.

In any modelling used to identify the functional floodplain, include defences and other flood risk management features and structures.

You may not need to designate the functional floodplain in locations where evidence shows flooding would be prevented by existing:

- *flood defences*
- *flood risk management features or structures*
- *solid buildings*

Water storage areas are shown on the flood map for planning. Contact the Environment Agency to check if they are suitable to include in your designation of the functional floodplain.

1.3 Definition of Flood Zone 3b in the SFRA**1.3.1 Modelling approach for coastal Flood Zone 3b**

Following consultations with the EA in 2023, it was agreed that the 'do minimum' scenario for the Pevensy-Eastbourne scheme would be appropriate for inclusion in the SFRA to understand the risk of flooding from the sea. We understand this scenario does not consider any options being considered as part of Pev-Eb, but takes into account existing defences and routine maintenance activities. The following model output has been used as a basis for defining Flood Zone 3b:

EbPev_DEF_PD_T0030_2025_007_GPU_h_Max

This is a defended 1 in 30 (3.3% AEP), present day scenario. Based on the guidance highlighted above, using this as basis for a coastal Flood Zone 3b is appropriate, as it takes into account land that would flood with a probability of 3.3% or greater in any given year with defences operating effectively.

It is not appropriate to consider future FCERM schemes and activities in defining SFRA flood zones and potential Pev-Eb options have not been included in the SFRA flood zones.

It is likely that these areas of flooding are the result of overtopping of the existing defences, however these areas should be included in Flood Zone 3b as there are no indications that existing defences (included in the modelling) currently prevent this flooding.

We understand that the Shoreline Management Plan policy is to 'hold the line' and that the Pevensy-Eastbourne scheme will improve the existing situation in the future. We consider these to be 'locally specific circumstances' that would change the definition of Flood Zone 3b. **We have set out an approach to this in the definition of Coastal Resilience and Adaptation Areas (CRAA) and areas within the 3.3% AEP event that fall within a CRAA should not be defined as 'functional floodplain'.**

1.3.2 Modelling approach for fluvial Flood Zone 3b

The Eastbourne fluvial model has been used to define a fluvial functional floodplain in accordance with the guidance. A defended 1 in 30 (3.3% AEP), present day scenario has been used to define Flood Zone 3b over the majority of Eastbourne affected by fluvial flood risk.

As stated in the SFRA (para 187), the extent of Flood Zone 3b at locations affected by water levels in the "Lakes" system describe the flood extent for the 1 in 100 AEP event (and not the 1 in 30 AEP event) as this is the operational design standard for the "Lakes" system. **This reflects the PPG recommendation that Zone 3b includes "land that is designed to flood (such as a flood attenuation scheme)".**

1.4 Summary

We consider that the existing modelling methodology used to define the 3.3% AEP event in Eastbourne to be appropriate. However, in regard to coastal functional floodplain, the SMP policy and forthcoming Pev-Eb scheme provide 'local circumstances' that would not result in these areas being designated as 'functional floodplain'. Nevertheless, areas may still be at high risk of flooding and development in these areas need to be designed so that it can adapt to and is resilient to the impacts of climate change.

Areas within the coastal 3.3% defended flood extent should not be considered 'functional floodplain' if they also fall within a Coastal Resilience and Adaptation Area (CRAA). A CRAA has been defined for Eastbourne and this is set out in a separate note.

2 Coastal Resilience and Adaptation Areas

Prior to the publication of the 2020 National Strategy FCERM in England focused on 'risk management' and a risk-based approach. The future challenges facing Eastbourne and addressing the Environment Agency's National FCERM strategy necessitate a change in approach to placemaking in Coastal Areas where the SMP policy is 'hold the line'. It is proposed that establishing a defined Coastal Resilience and Adaptation Area in Eastbourne will allow improved decision making so existing and proposed development is to better adapted to these impacts over time and the resilience of the area generally improved.

This approach is outlined in a separate note.