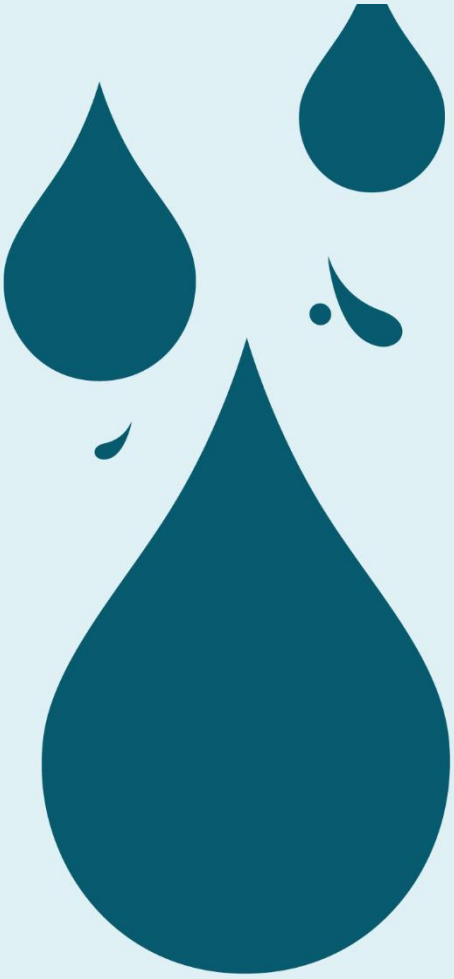
Planning Guidance for Developers

Flood Compensation Technical Note



Hampshire County Council

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Notice

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This document has **6** pages including the cover.

Document history

Revision	Purpose description	Originated	Reviewed	Authorised	Date
Rev 1.0	Flood Compensation	SDH	SR	SR	Dec 2025
Rev 2.0					
Rev 3.0					

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1. Aims and Objectives

This technical note is for major planning applications where there are areas of surface water flooding on the site and where the development is likely to displace flood water. This document set out when flood compensation is needed and how to clearly demonstrate that sufficient mitigation is being provided to prevent flood risk from increasing. Please note that this technical note relates to surface water flooding only and that any fluvial floodplain compensation should follow the Environment Agency's guidance.

1.1. How to use this document

This document is written to provide more detailed support where needed on how to demonstrate that level for level flood compensation has been provided. Please read this in conjunction with the Hampshire County Council's planning guidance document.

1.2. When to consider flood compensation

Anywhere that there is ground raising, buildings (without voids) or bunded attenuation within an area of flooding has the potential to displace flood waters and should be looked at more carefully. There are nationally available flood modelling extents for surface water flooding that can be used to identify when this might be occurring. Equally site-specific detail modelling may be used to identify where the displacement of surface water flooding is potentially possible. Where identified as a risk, mitigation may be needed.

Flood risk mapping:

- Long term flood risk mapping – https://www.gov.uk/check-long-term-flood-risk

2. Level-for-level Flood Compensation

Development in flood zones and areas at risk of surface water flooding can displace water, increasing flood risk. To mitigate this, **level-for-level compensation** ensures that any raised ground is offset by equivalent excavation, preserving flood storage volume.

2.1.1. Key Design Principles

- **Volume Matching**: Use 100–300 mm elevation slices. For each, cut volume must equal or exceed fill volume, up to the 1-in-100-year + climate change flood level.
- **Location**: Compensation areas must be close to the area of flood storage loss and hydraulically connect to the same watercourse or overland flow route.
- **Gravity Flow**: Areas must fill and drain naturally to remain effective during successive floods. Water must be able to reach the compensation area for all return periods affected.
- **No Culverts**: Avoid culverts or pipes, which may block or lack capacity.

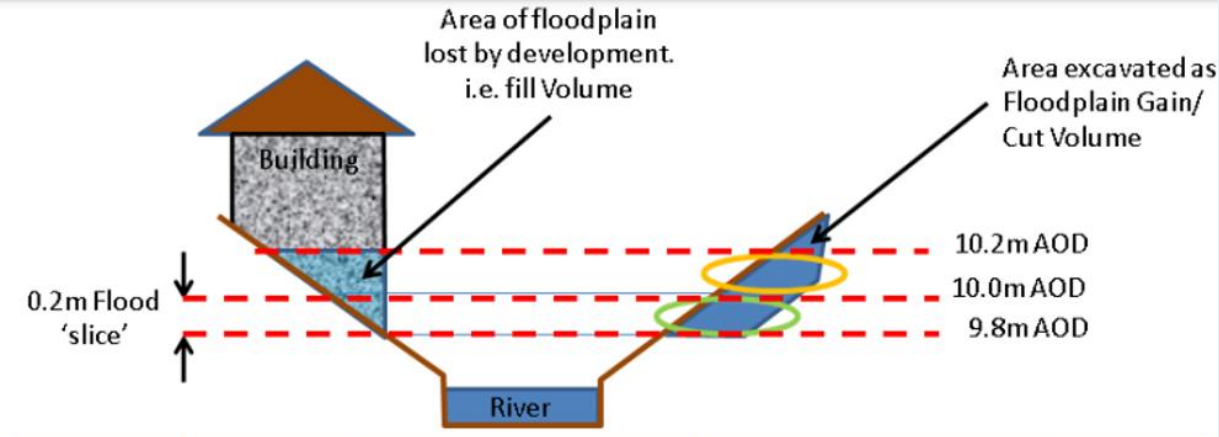
2.1.2. Demonstrating Compliance

It is essential to provide:

- A plan showing displaced and compensated areas.
- A cut-and-fill table showing volume balance per elevation slice.
- A topographical survey.
- The 1-in-100-year + climate change flood level (or max raised ground level if unavailable).

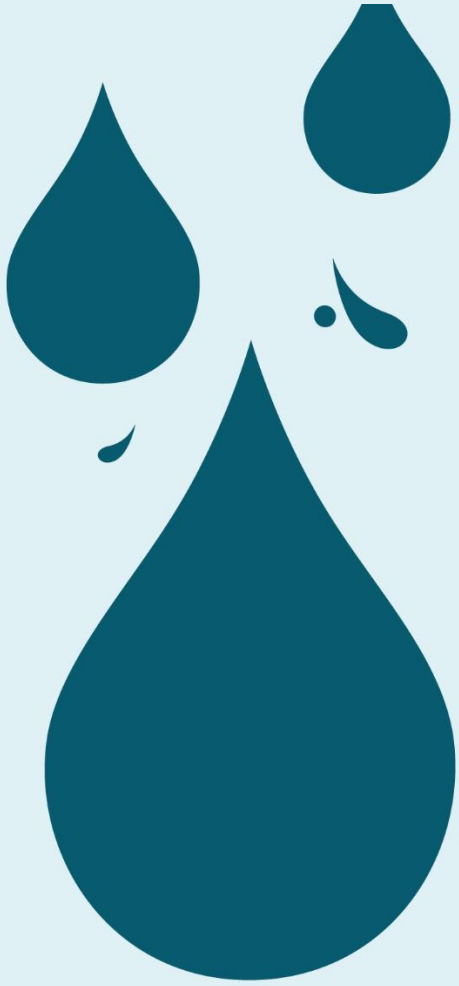
Using elevation slices ensures compensation mimics the original floodplain, preventing displacement during smaller flood events

Figure 1 – Level for level compensation methodology



Flood Slice (m AOD)	Depth (m)	Loss of Floodplain		Floodplain Gain		Total Volume (B-A)
		Area of Slice (Sq m)	Volume A	Area of slice (sq m)	Volume B	
10.2m-10.0m	0.2	20.0	4.0	45.0	9.0	5.0
10.0m- 9.8m	0.2	7.0	1.4	18.0	3.6	2.2
9.8m-9.6m	0.2	0.0	0.0	0.0	0.0	0.0

Figure 1 illustrates how to calculate flood water displacement by a new building and the volume provided by the compensation area, along with the related cut and fill table.



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