
1. Introduction

1.1 Scope

Bracknell Forest Borough Council has appointed Entec to undertake a Strategic Flood Risk Assessment (SFRA) of the Borough to inform the Local Development Framework (LDF). One of the primary goals of the SFRA is to assess the flood risk of potential development areas through the application of the sequential test outlined in the emerging Planning Policy Statement 25 (PPS 25) *Development and Flood Risk*. The SFRA will also provide those involved in the planning and control of development in the Borough with a better understanding of flood risk issues throughout the Borough.

As Bracknell Forest Borough falls primarily outside of any fluvial floodplains there is only a limited amount of data on flood risk. Consequently, it was identified at an early stage of this project that a high level assessment of flood risk within the borough was the most appropriate solution for this Strategic Flood Risk Assessment. The SFRA would rely on existing information by collating what is already available and interpreting it in a single document.

1.2 Objectives

Historically, the management of flood risk in the UK has been undertaken in a reactive manner, addressing problems in response to flood events. It was recognised by Government that, in general, this was not a particularly cost effective approach and often failed to deal with flood risk for the wider hydrological system.

The Environment Agency has therefore committed to a rolling programme of flood risk assessment (mapping) and strategic flood risk management investigations, including Catchment Flood Management Plans (CFMPs) and PAG2 Flood Risk Management Strategies¹ within fluvial (river) systems. These studies take a catchment-wide approach, identifying where flooding is known and / or perceived to be an existing problem, how this flooding regime may alter in future years as a result of climate and land use change, and how flooding can be managed cost effectively and sustainably over the next 50 to 100 years.

On a local planning level, SFRAs consider the flood risk within the local area and, through the Sequential Test detailed in PPG 25 and the emerging PPS 25, allow LPAs such as Bracknell Forest Borough Council to direct development whilst controlling flood risk. More detailed Flood Risk Assessments (FRAs) are then undertaken for selected sites when and if they are developed. Advice within the SFRA should be consistent with broader catchment scale recommendations of the relevant CFMP. However, since SFRAs are specific to administrative areas they can pay more attention to secondary sources of flooding (such as groundwater, overland flow and sewer flooding).

¹ PAG2 is DEFRA's *Strategic Planning and Appraisal* guidance, the second in the series of *Flood and Coastal Defence Project Appraisal Guidance*.

1.3 Structure of Report

This report comprises the following sections:

- Section 1 provides the background, scope and objectives of the Bracknell Forest SFRA, together with a brief summary of the hydrology and planned development;
- Section 2 outlines the data collected as part of this study;
- Section 3 summarises the planning context for development and management of flood risk at a national, regional and local level;
- Section 4 outlines the general approach of SFRA's and how this has been applied in Bracknell Forest Borough and provides an overview of flood risk in the Borough including potential sources of flood risk, historical flood events and the potential impacts of climate change;
- Section 5 assesses the flood risk for the proposed development areas based on the PPS 25 Sequential Test to guide prioritisation for development;
- Section 6 outlines flood risk mitigation measures to control flood risk whilst allowing development in the Borough;
- Section 7 concludes the SFRA and provides recommendations for the application of the SFRA findings in the LDF as well as the Development Control process.

1.4 Hydrology

This section summarises the main sources of flood risk within the Borough of Bracknell Forest.

The River Cut rises in the north of Bracknell Forest and flows north along the eastern borough boundary through North Ascot. In Winkfield it turns west and flows to the north of Bracknell Town through some small villages until it reaches Binfield where it turns north again and then flows out of the borough. It then carries on through Bray where it has its confluence with the River Thames.

The Cut is joined by two tributaries as it flows to the north of Bracknell Town. The Bullbrook rises in Bracknell Forest and flows north through Bracknell Town, where it is culverted in some sections, and then joins The Cut to the north of Newell Green. The Downmill Stream also rises in Bracknell Forest and flows north through the eastern part of Bracknell Town. It flows through Mill Pond, near Wildridings, an online flow attenuation pond designated as a reservoir, amongst other on line ponds. It is also culverted as it flows under the industrial estates. It then joins The Cut to the north of Priestwood.

The town of Sandhurst in the south of the borough lies on the right bank of the River Blackwater. The Blackwater rises near Aldershot then passes through several other towns including Farnborough and Frimley, then rural/agricultural land and recreational lakes before reaching Sandhurst.

Generally, the flood risk posed by these rivers to the settlements in the borough is limited in comparison to flood risk in other boroughs.

There are incidents of flooding from overland flow due to poor land drainage and poor maintenance of drainage networks and some reports of sewer flooding. There are no incidents of groundwater flooding.

1.5 Planned Development

The Draft South East Plan 2006-2026 allocates 2,695 dwellings to Bracknell Forest Borough for each plan period, additionally the shortfall in housing from the last local plan period, 359 dwellings has been added to the first plan period. Hence the total number of houses allocated to Bracknell Forest from 2006-2026 is 11,139 to be phased according to Table 1.1

Table 1.1 Phasing of Housing Allocation

2006-2011	2011-2016	2016-2021	2021-2026	Total
3,054	2,695	2,695	2,695	11,139

The Borough Council is aware that there is no ideal location for major housing development in the Borough. Therefore, the local plan has attempted to identify those areas which will have the least environmental, traffic, and amenity impacts, thereby seeking to secure development which is “sustainable”. The Borough Council has looked to central government advice, particularly that contained in Planning Policy Guidance Note (PPG) 13 Transport, as a way of promoting development which will meet the needs of the present without compromising the ability of future generations to meet their own needs. Notwithstanding the aim to secure sustainable development, the scale of development proposed and the constraints on development within the built-up areas of the Borough have required that an area of countryside be identified for housing.

The Borough Council considers it important to provide housing for people in housing need and has commissioned a study of those needs in the Borough. Its conclusions form the basis of the amount of affordable housing sought. The Borough Council attaches particular importance to ensuring that there are housing opportunities to meet local needs, defined as those on the Borough Council’s housing waiting list; particularly people in ‘priority need’ under the Housing Act 1996 (as may be amended, substituted or re-enacted).

One of the Council’s objectives is to provide for residential development, including affordable housing, in accordance with strategic guidelines, and the best principles and practices of sustainable development, in such a way as to maintain the environmental quality of existing settlements, the countryside, and the Green Belt.

