

Executive Summary

A Surface Water Management Plan (SWMP) is a study to understand the flood risk that arises from local flooding, which is defined by the Flood and Water Management Act 2010 as flooding from surface runoff, groundwater, and ordinary watercourses.

SWMPs are led by a partnership of flood risk management authorities who have responsibilities for aspects of local flooding, including the County Council, Local Authority, Sewerage Undertaker, Internal Drainage Boards and other relevant authorities.

East Sussex County Council as Lead Local Flood Authority (LLFA) has led the production of Heathfield Stage 1 SWMP in partnership with Wealden District Council, the Environment Agency and Southern Water. This steering group was established as part of the SWMP process. However, it is proposed that the monitoring and reporting on the implementation of the action plan will be undertaken locally and it is expected that partners will take forward actions independently, and convene as and when appropriate.

Heathfield is a small market town in Wealden district of East Sussex. It sits on one of the principal ridges crossing the High Weald. Expansion of the town is limited by the surrounding High Weald Area of Outstanding Natural Beauty (AONB). As a result, development is focused within the existing boundaries of the town.

The underlying geology is Ashdown Formation which is primarily composed of sandstone, siltstone and Weald Clay. This relatively impermeable geology encourages surface water runoff.

As Heathfield is situated at the top of the High Weald, all the topographic catchments fall within the town. As the catchments are small, urbanised and underlain by impermeable geology they respond quickly to rainfall. This flashy response leads to erosion and permits wash off of surface sediment. As a result bank erosion and sediment deposition are common problems in Heathfield.

In attempting to understand the flood risk, a Source-Pathway-Receptor model was applied. The application of such a model facilitates flood risk mitigation by potentially addressing the **source** (often very difficult), blocking or altering the **pathway** and even removing the **receptor** e.g. navigate development away.

Flood prone areas, referred to as hotspots, have been identified when there are repeated flood incidents and/or multiple flood mechanisms along with areas of predicted flood risk. Two hotspots were identified - the Waldron Thorns and Meadow Way areas.

The flood history and risk data has been used to draw up an action plan. To assist with affective delivery, the actions have been prioritised. The prioritisation process considered:

- the frequency of recorded flooding;
- the date of the last recorded incident; and
- the vulnerability of the receptors.

In addition, the action plan attributes specific project partners as owners of the action.

Prioritised actions include:

- commissioning a study to improve understanding of erosion mechanisms in Heathfield to identify land use management practices to manage surface water flooding as a consequence of mobilised sediment entering the highway gully network;
- promoting Southern Water's "Your Water Meter" campaign to encourage source control; and
- target asset inspection of highway gulleys, in the 2 hotspots and implement a program of preventative maintenance.

Again, the importance of partner engagement is crucial here so that agreed actions are followed through to completion.