

Natural Flood Management (NFM) on the School Stream

Working with natural processes to slow the flow and store water to reduce flood risk across the south east.

The School Stream

The School Stream is a tributary of the River Beult in Kent. The catchment's clay geology leave it highly susceptible to flashy floods, impacting the downstream village of Headcorn.

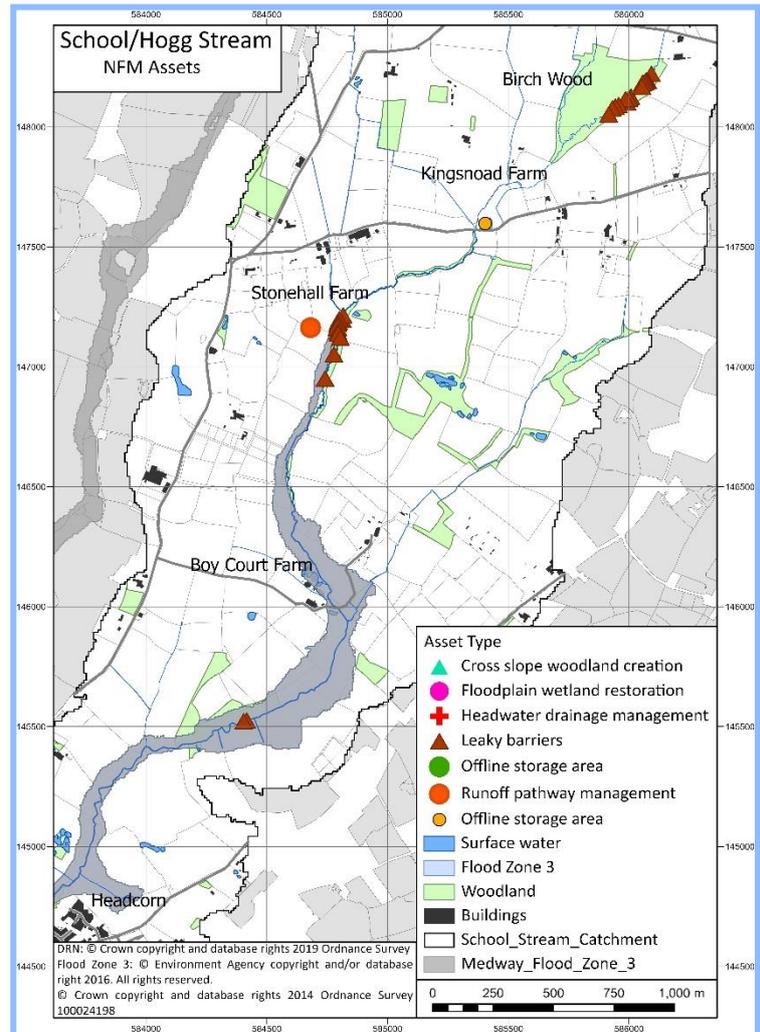
Aim

To work with local landowners and apply Natural Flood Management (NFM) on a sub-catchment scale to alleviate flood risk at Headcorn.

Natural Flood Management

NFM uses natural materials to slow the flow of water, reducing the chance of flash flooding, as well as increasing water storage throughout the landscape.

Using a combination of topography modelling, site visits and local consultation, SERT identified parts of the catchment where NFM could work best and designed a range of practical and effective measures.



Funders & Supporters

Natural Flood Management Measures

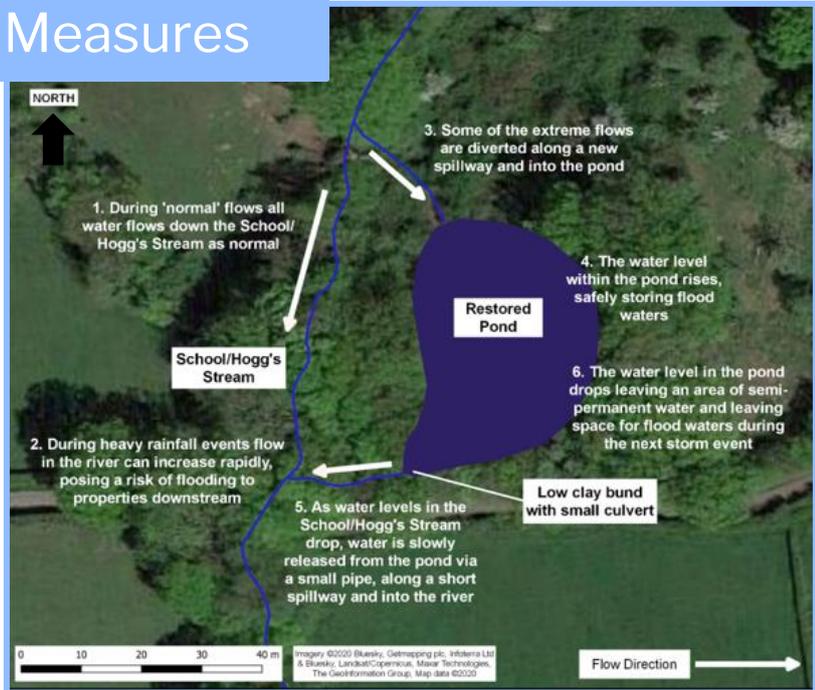
Flood Storage: Kingsnoad Pond

SERT designed and constructed an offline pond in the headwaters of the catchment, providing 600m³ of flood storage.

The pond provides multiple benefits.

Diverting water through the pond allows sediment to settle out of the water, improving the quality of water entering the School Stream downstream.

Pond habitats significantly increase biodiversity, supporting a variety of aquatic plants and animals, contributing to the wider freshwater ecosystem.



Kingsnoad Pond in action – storing flood waters from the School Stream.



Leaky Woody Structures (LWS)

SERT installed over 25 LWS in the School Stream catchment. Due to the powerful flows during flood events, the LWS were designed and constructed to withstand all flow conditions. Large (10m+), locally-sourced tree trunks were used. The structures were adapted to fit the contours of the river banks.

These LWS hold back water in the upper catchment, slowing the flow of the river and reducing the flood risk at Headcorn.

The structures have **multiple benefits**. Holding and retaining water in the wet woodland increases this threatened habitat's **resilience to climate change**. The structures also collect large volumes of silt and debris from the stream, **improving water quality**.