

SEDIMENT PATHWAYS



Reducing the levels of fine sediment entering the river network.

The rivers Test & Itchen, both designated as Sites of Special Scientific interest (SSSI), have traditionally been regarded as two of the finest chalk rivers in the world. With crystal clear waters, they support a rich diversity of mammal, bird, fish, invertebrate and plant communities. The River Itchen is also classified as a Special Area of Conservation (SAC). However, many water bodies within the catchment are failing to achieve good status under the EU Water Framework Directive (WFD) after the most recent SSSI condition assessments.

In part, these failures arise due to sediment pressures. Historically, excessive fine sediment input to rivers has been perceived as a diffuse pollution problem that is too difficult to solve. However, in many cases land runoff is channelled via conduits such as roads, tracks and footpaths, and actually enters rivers at discrete points. This creates an opportunity to prevent excessive fine sediment entering the river, by targeting those discrete points at which it reaches the channel.

The aims for this project are to deliver on-the-ground action to reduce the existing high levels of fine sediment entering the river channels within the Test and Itchen Catchment. Excessive levels of fine sediment in the Test and Itchen are contributing to pressures on the health of aquatic ecosystems and the provision of clean drinking water.

In 2009, the Environment Agency (EA) initiated its 'Rural Sediment Tracing Project' (RSTP), with the aim of identifying and classifying catchment sources of fine sediment inputs to streams and rivers within 11 priority catchments, which were failing for salmon and where fine sediment was a known problem. The Test & Itchen Catchment was one of those priority catchments.

The RSTP recorded a total of 214 fine sediment sources in the Test and Itchen Catchment, with 22 (around 10 percent) being classed as Grade 1 (on a scale of 1-3, with 1 being the most severe). Reports of sediment-rich runoff from / via roads, tracks, droves and drains ('conduits') were frequent throughout the catchment, with over two thirds of Grade 1 sources being recorded as conduits across the catchment as a whole.

To date, there has been no systematic approach to tackle sediment pathways on a catchment wide scale in the Test and Itchen Catchment. The Sediment Pathways Project will deliver mitigation measures targeted at the most heavily impacted parts of the catchment. We are currently in the stage of the project where we are performing walkover surveys of various parts of the catchment to find out where interventions would be best applied. We will then grade the severity of the impacts to the river in these places and start to plan and put into place mitigation measures to reduce the risk.

For more information or if you are concerned about fine sediment in your neighbourhood, please get in touch by visiting the contact us page on our website.



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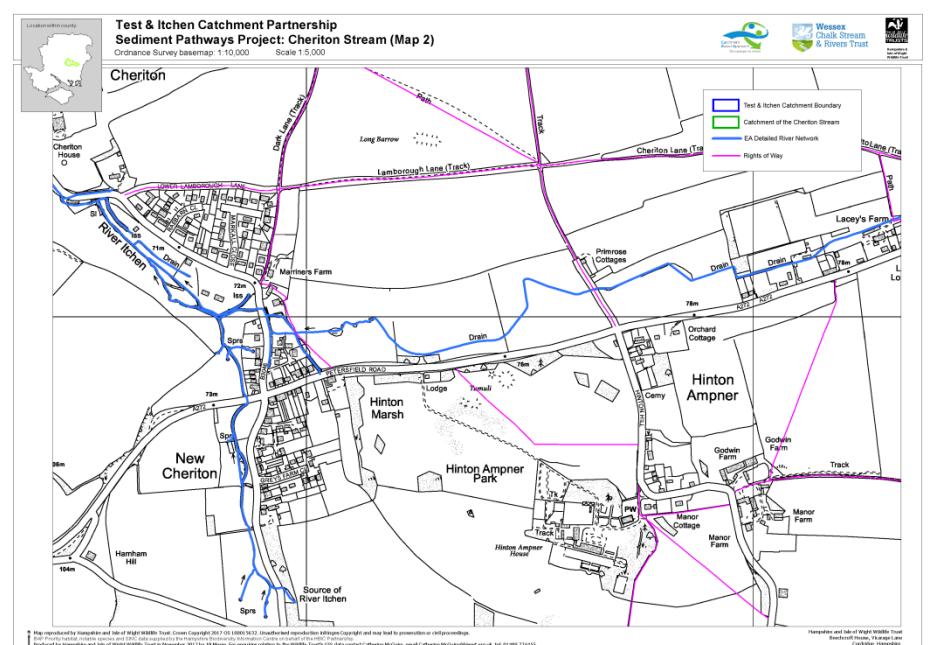


Fig 1 Example of map used for walkover surveys, points would be noted on the graph as to where interventions could be put in place.