

River Till SSSI enhanced through farm track works

Berwick St James

Hampshire Avon Catchment (24)

CSFO: Jodene Williams

Pollution Issues

The River Till is a tributary of the River Wylye within the Hampshire Avon catchment, which is designated as a SSSI, SAC and an EC Freshwater Fish Directive, Salmonid Fishery.

Run-off from a farm track laden with sediment was regularly discharging into the River Till at Berwick St James through a road drain. As a result of the sedimentation the SSSI is classified as being in an unfavourable condition due to agricultural run-off. (On ENSIS Natural England database to monitor progress towards PSA target 2010 – improving SSSI condition). Chalky run-off from the track during storm events colours the River Till as far down stream as the River Wylye. Fine sediment is detrimental to the spawning of salmon and trout and the species composition of invertebrates within this river. It also delivers pollutants such as phosphate attached to the silt which contribute to nutrient enrichment and can affect species diversity.

The eroded track is owned by Druids Lodge Estate, is 2Km long, and gives access to a farm. The track is classified as a Right of Way which is managed by Wiltshire County Council. Over a number of years the track has sunk well below the level of surrounding fields and has become increasingly gullied. The material is scoured from the surface of the track over 2Km then discharging directly into the River Till.



Solution

Work carried out in July 2009 is outlined below:

- From the A303 to 500m from the start of the track Druids Lodge Estate have diverted run-off from the track into surroundings fields using existing ditches that have been dug out. This sheds water from the majority of the track and prevents water from flowing straight down the track which would cause erosion as it races downhill.
- From the start of the track at Berwick St James to 500 metres up the track the surface has been cambered and covered with road planings and compacted with a vibrating roller. There is only one opportunity to shed the run-off and divert it into the edge of an adjacent arable field. 150 metres up the track a drain has been installed which takes the run-off through a drain into a sediment pond excavated in the adjacent field. The sediment pond is large enough to cope with a high intensity rainfall event and soaks into the chalk. These actions have prevented water travelling the whole 2Km of the track as it has been shed from the track at each opportunity in a number of locations. This has eliminated runoff getting into the river and the potential for contamination with sediment.



Prior to improvement works, sediment ran down the farm track, discharging into River Till through a road drain causing a plume of sediment turning the River Till white

Now that the works have been carried out 35ha of riverine SSSI condition will improve, and therefore move to "underway" on the ENSIS database, contributing to "unfavourable, recovering" SSSI condition.

Partnership working

This project has given CSF and the Environment Agency the opportunity to work with Wiltshire County Council to tackle diffuse pollution and highlight the issues of sediment run-off into on sensitive river systems. The work was funded by the Environment Agency, Wiltshire County Council and Druids Lodge Estate, and project managed by Wiltshire Council using their specialised contractors to plan and carryout the work.

Peter Hayes who is President of the Till Fly Fishers Association, President of the Wilton Fly Fishing Club and a committee member of the Wiltshire Fishery Association said the following about the work on the track.

"All of us who care about the River Till and Lower Wylye are very grateful for the works that have been completed to improve the farm track at Berwick St James. The Environment Agency, Wiltshire County Council, Druids Lodge Estate and the England Catchment Sensitive Farming Delivery Initiative have all worked well together to diagnose and resolve the problems. The



work has significantly reduced the amount of sediment entering the River Till improving the overall water quality and habitats.

The Wessex Salmon and Rivers Trust have demonstrated that in order for successful trout and salmon spawning, the gravels they use should be as free from silt as possible. In the past 10 years there have four salmon redds (egg nest made from gravels) identified within the River Till and as a result of this there have been numbers of young salmon noted in fish surveys. This is particularly important as salmon are a key indicator species of the River Avon Special Area of Conversation.

Now that work has been carried out to reduce the main single input of silt on the River Till the future looks much more positive for salmon and trout stocks in the river."

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Catchment Sensitive Farming (CSF) is delivered in partnership by Natural England, the Environment Agency and Defra.

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