

# Water Framework Directive Delivery - Project Record

## *River Habitat Improvement: Fifield, Upper Avon, Wiltshire, 2013*

Scheme completed	Yes
Lead partner	Wessex Chalk Streams Project / Wiltshire Wildlife Trust
Other partners	EA, NE, MoD/DIO, SDDFA, WTT

### Objectives of the project

The Fifield project focused on the following undoing detrimental physical alteration in the past, drought proofing rivers, mitigating climate change (hydrology, temperature), tackle sediment issues and provide high quality habitat for (game) fish and aquatic vegetation.

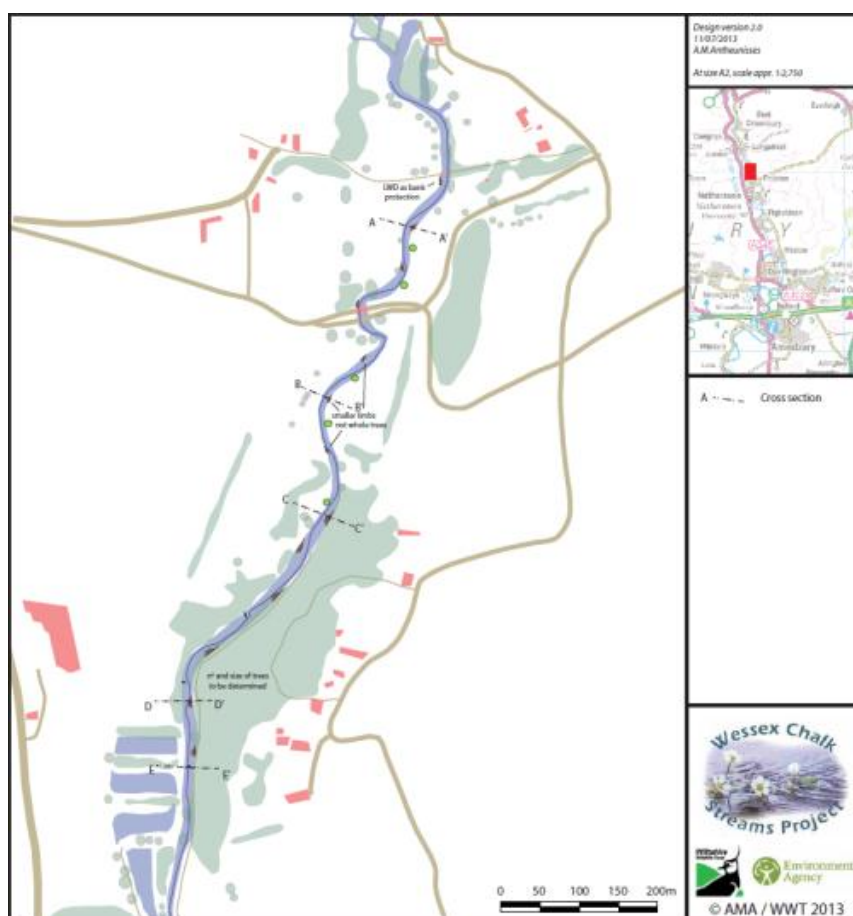
The reach comprises of two distinct different sections. The bottom part of the reach shows the effects of impoundment from Haxton Hatches, consisting of a very straight, overwide channel, with very little variation in flow. The upstream half of the reach consisted of a more meandering planform, as well as more variation in depth; however the channel was still over-widened and deep in places, with perched banks and very few in-stream features.

In the top half of the reach, undertaken by Wiltshire Wildlife Trust volunteers, measures and structures focussed on enhancing the sinuosity of the site, creating areas of faster flowing water to promote scour and creating areas of shading and overhanging vegetation to help cool the river and provide areas of habitat and refuge for invertebrates, fish and water vole. This was done through the installation of deflectors and brushwood to enhance the features already present.

In the bottom half, undertaken by independent river restoration contractors (Aquascience Ltd), the approach was slightly different. Due to the impounded, channelized nature of this section, larger pieces of woody debris, including a whole poplar and several large willows, were used to try and kick-start the meandering process, whilst also providing habitat for riparian and in-channel organisms.

### Location

The project encompasses a 1km reach of the Upper Avon, between the footbridge north of Tank Crossing B and Corfe End Lakes near the villages of Fifield and Netheravon, between the SU 14813 50330 and SU 14486 49530. The reach falls within RARP reach A92.





## Photos



*Fixed point photo before (left, June 2013) ) and 1 year after the work (right, January 2015) in the middle of the project reach facing downstream. A large LWD structure is visible on the left bank, creating significant sinuosity and scour.*



*Fixed point photo before (left, June 2013) and 6 months after the work (right, June 2014) – a willow was hinged and secured on the edge of a bur reed fringe to consolidate the natural bank for the future.*

## Project breakdown (estimates)

	Actual
EA cash contributions (£)	7,500
EA in kind contributions (£)	-
Partnership cash contributions (£)	2,500
Partnership in kind contributions (£)	2,500
Total costs (£)	12,500
Delivery Time Scale	10.2013 – 11.2013

Meters of river restored, by installing:	900
Solid berms	0
Soft berms (brushwood mattresses)	0
Gravel riffles	0
LWD / CWD structures (including hinging trees)	19
Bank regrading	0
Other	0
Number of trees planted	5
Ha of habitat created (wetlands, woodlands)	0
Metres of fencing installed	0
Number of diffuse agricultural infrastructure installed	0

### **Delivery outcomes and issues**

Benefits of the project are still being assessed; however, improvements in flow velocity and river bed variation have already been noted. Fishermen have perceived their fishing to be more rewarding.

### **Outstanding tasks**

In the winter of 2013-2014 several trees came down in the project reach – partly on top of the LWD structures installed. Following negotiations with SDCFA, we were able to go in and secure some of the natural LWD in place, thereby extending the remit of this project.

Until now, only a handful of trees have been planted (from whips), especially in the upstream section there is scope for more treeplanting.

### **Benefit Monitoring**

The project site is being monitored by SDCFA and WCSP. Monitoring involves invertebrate sampling as part of the Angling Riverfly Monitoring Initiative and fixed point photography (WCSP).

### **Contact details**

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