

Report to the SFF: Funding for natural flood management June 2016

PhD student Josh Wells (josh.wells@ntu.ac.uk) is currently undertaking a research project from 2015-2019, funded by NTU in collaboration with the Environment Agency. The plan is to implement and monitor natural flood management (NFM) measures within two sub-catchments of the Potwell Dyke, including installation of large woody debris (LWD) dams, a small river restoration and bunding in fields to store and delay runoff (see Figure 1). Land drainage consent has been obtained for LWD to be installed in June 2016. Pre-intervention stage monitoring has taken place since November 2015 on the tributaries, and for two and a half years on the Potwell Dyke watercourse. At present we have five water level loggers, with four more telemetric loggers due to be installed shortly (funded by EA). Questionnaires are currently being sent to all households in Southwell, to obtain data on public knowledge of and attitudes to NFM. Interviews with landowners are simultaneously taking place, to gain parallel data. There is also an EA gauging station on the main river Greet at Southwell.

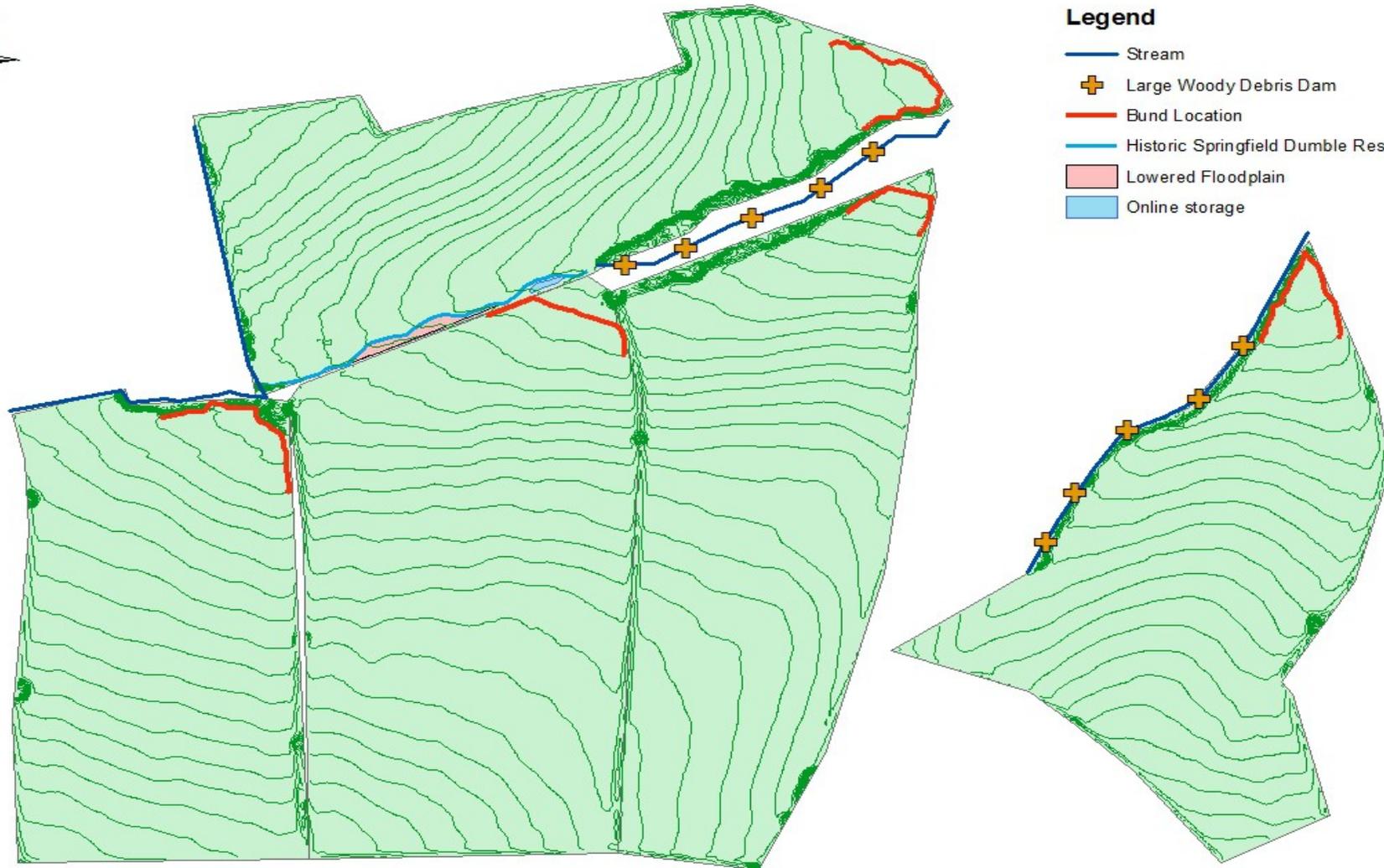
The Partnership agreement between Nottingham Trent University and the Environment Agency has stated that £89,000 will be invested into the project, as shown in table 1. This does not include monitoring equipment already purchased and installed by Nottingham Trent University. The figures shown include staff time set at £500 per year from the Environment Agency and £5000 per year from Nottingham Trent University (supervisor Dr Jillian Labadz). Table 2 shows the additional costs and deliverables for data collection and project implementation.

Table 1. Partnership Budget (Staff and Student time)

Partner	2016/17	2017/18	2018/19	total
Environment Agency	£22,000	£500	£500	£23,000
Nottingham Trent University	£55,000	£5,000	£5,000	£65,000
NTSU	£1000			£1000
Total	£78,000	£5,500	£5,500	£89,000

Table 2. Costings and Deliverables

Deliverable	Date of Completion	Cost	Storage Capacity
Rainfall and stream monitoring (NTU)	October 2015	Approx. £15,000	
Telemetric Monitoring (NTU/EA)	June/July 2016	£17,500	
Large woody debris dams	June/July 2016	£1000	Unknown as yet. Literature suggests flow will be slowed and storage increased.
Corner of field bunds River restoration and online storage	December 2016	£6000	Approx. 2500m ³ Approx. 300m ³
Questionnaire	May/June 2016	Approx £1200	
Total		£40,700	



Legend

-  Stream
-  Large Woody Debris Dam
-  Bund Location
-  Historic Springfield Dumble Restoration
-  Lowered Floodplain
-  Online storage

OS MasterMap® Topography Layer [TIFF geospatial data],
Scale 1:2000, Tiles: sk6852,sk6853,sk6952,sk6953,sk7052,sk7053,
Updated: 11 June 2015, Ordnance Survey (GB), Using: EDINA Digimap Ordnance Survey Service,
<<http://digimap.edina.ac.uk>>, Downloaded: 2015-10-08 11:49:51.085



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Figure 1. Plan for Brackenhurst Natural Flood Management Scheme