

# Worcestershire NFM Project: Isbourne catchment update

## November 2020



# Catchment Updates

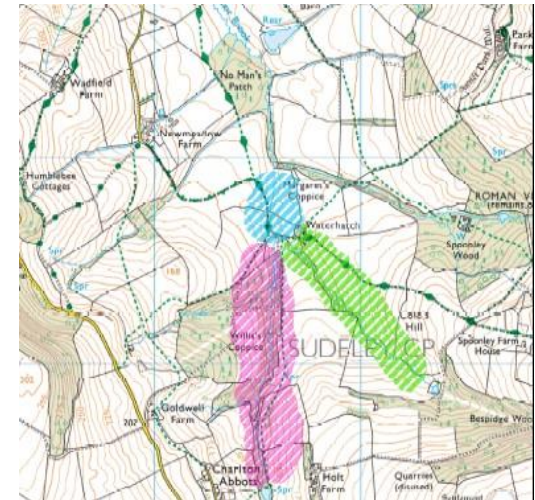
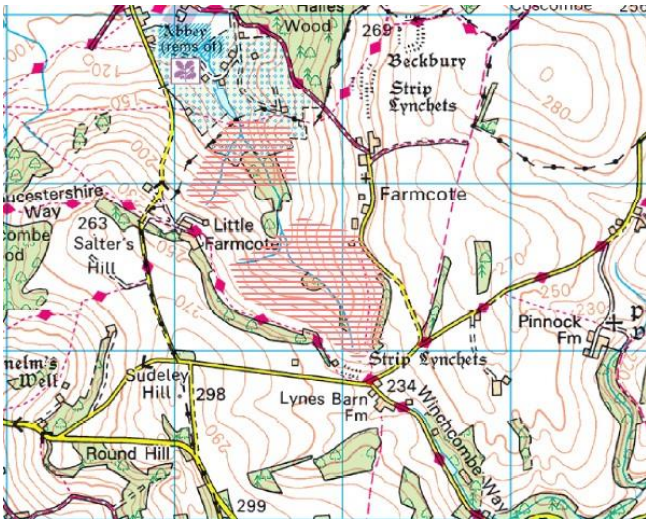
So far within the Isbourne catchment there have been the following NFM interventions installed:

- 55 leaky woody dams
- 12 storage areas (attenuation dug out associated with leaky woody dams)
- 10 ponds
- 1 ditch
- 2 scrapes
- 1 bund

Giving a total of 81 interventions to date, with lots more planned.

# Where in the catchment?

Works have been undertaken along the Beesmoor Brook, which joins the Isbourne at Winchcombe. These works have included 28 dams at the top of the catchment at Charlton Abbots and works have recently started further downstream at Sudeley Castle.



Also, on the Farmcote tributary, we have worked with two different landowners, both of which are in the upland areas of the catchment, so really helping to catch and slow the flow near the source.

Within the Farmcote tributary the following NFM measures have been utilised: a series of dams, attenuation areas and the re-instatement of an old mill pond for use as storage. It is hoped the mill pond and some of the attenuation areas will hold water for most of the year, as these are spring fed. They will provide new habitats and increase biodiversity in the area.



# Farmcote Implementations:



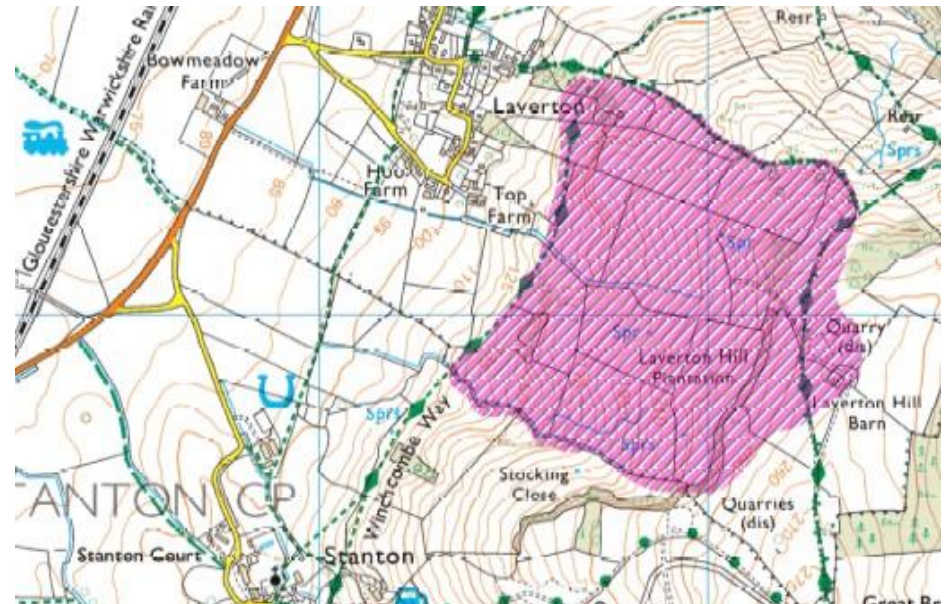
The photographs below show the mill pond during construction and then again nearing capacity after the rain event at the beginning of October....



# Where in the catchment?

We have worked with Laverton Hill Farm consistently over the past two years and now have a great project in place consisting of ponds, scrapes, ditch creation and hopefully soon hillside woodland planting.

The farm lies in the upland area of the Isbourne catchment, where there are a number of springs and the amount of run-off makes the land very difficult to manage/farm.



The works started at Laverton Hill Farm last September, and we have since added to this. There are now a total of 9 ponds on the farm, again all of which are spring fed, so will provide wetland habitats. The ponds all have additional capacity to hold extra water during times of high flow.

In addition to the ponds we have also included two scrapes to re-direct flows into small natural depressions and a bund, again to try and hold back run off from a steep wooded slope.

As a final phase to this project we are hoping to plant approximately 1500 trees on the hillside during this winter. This will again provide massive environmental benefits as well as increasing infiltration.





# Planned future works

- NFM measures are currently being undertaken on the Sudeley estate. It is hoped that we will have a number of dams and possibly some storage areas in place once this is complete
- Laverton Village: a project is ready to go immediately above the village and will include some pollarding to increase the light to the watercourse, as well as installing some leaky woody dams within the woodland area. The footpath which runs into the village is also a major flow route for surface water and has eroded as a result. There are pans in place to re-surface this and install some grips to divert water from the footpath back into the watercourse. It is hoped that works will commence here in the next couple of weeks.
- Another landowner downstream of Laverton Hill Farm is keen to undertake discussions with regards to what could be done on his land. It is hoped this will take place in early November.
- Tree planting at Toddington Manor has taken a back seat due to the absence of our contact at the Woodland Trust. He is now back at work and currently drawing up a plan for what species to plant, which will hopefully be undertaken in Jan / Feb 2021

# Monitoring

- We currently have a rain gauge towards the top of the catchment at Winchcombe primary school and river level gauges at Beesmoor Brook, Winchcombe and Toddington.
- We are currently awaiting quotes for these gauges to remain in place for the next five years, so we can gain evidence of how the watercourses are responding to rain events going forward. This cost will be taken from the current budget.
- Site walkovers have been undertaken at a number of the sites with Laura Wood, WCC Senior Ecologist, who will undertake flora and fauna surveys in the summer of 2021, 2023 and 2025. Again, this is a longer term monitoring plan, which is needed to provide the evidence of how NFM implementations are improving and enhancing the landscape, as well as reducing flood risk.

# Spend so far

<b>Isbourne Spend to Date</b>		
<b>Cost</b>	<b>Amount</b>	<b>Date</b>
Charlton Abbots, Phase 1	£4,303	May-19
Waterhatch, Phase 1. Design & Print	£48.00	May-19
Waterhatch Plynth	£220	May-19
Laverton Hill Farm	£8,350	Sep-19
Charlton Abbots Phase 2	£9,930	Oct-19
Installation of 3 stiles & site clearance at Waterhatch	£521	Jun-19
Days at Farmcote	£5,184	May-20
Laverton Hill Farm - Phase 2	£10,500	Oct-20
Farmcote (Hughes)	£15,062	Oct-20
	£54,118	

# Current spend

- It is hoped that with the works at the two sites at Laverton Village, Sudeley Castle and the tree planting at Laverton Hill Farm, we will be on track to spend the £90k budget allocated for interventions for the project.
- Given the fact that we have effectively lost a year on site due to an extremely wet winter and then COVID we have worked really hard over the past couple of months to 'catch up' and get as much in on the ground as we can.
- Really noticing that the project is gaining momentum, with several local contractors now involved and constantly meeting and being introduced to new keen landowners

# Post March 2021..

- WCC and the EA are currently exploring two possible funding sources: via RFCC or the IRP (Innovative Resilience Program) in order for the NFM project to be continued post March 2021.
- It is anticipated that the new project will be a county wide project, working in the wider Worcestershire area, therefore introducing NFM to many new areas but also continuing the work in the current catchments