

# Flood risk management through land use and land-use change

## Ripon Multi-Objective Pilot Project

### Introduction

The Ripon Multi-Objective Project (Ripon MOP) has been set up in order to help reduce the risk of flooding in Ripon, North Yorkshire. Funding from the Environment Agency has been secured to provide a grant scheme for capital works on the Rivers Skell, Laver and Kex Beck, and their tributaries. The aim of the project is to slow down water runoff from the land through land management projects. It will also help prevent soil and nutrient loss and create new habitats to improve biodiversity.

### Background

Following stakeholder concerns that the joint benefits of land use and flood management were not being adequately considered or realised, Defra agreed to promote a catchment scale pilot project focusing on these issues. A technical advisory group was established to develop an integrated, multiple objective, pilot project. Over 20 catchments were nominated for the pilot and in spring 2004, the Laver/Skell catchment at Ripon was selected.

### Objectives

The objectives of the Ripon project included:

- Improved understanding of the opportunities and barriers to integrating flood risk management and other objectives at a catchment scale.
- Consideration of the implications, deliverability and predictability of any land-use changes over a longer period of time.
- Encouraging and influencing stakeholders at all levels to consider potential changes to take forward effective multi-functional approaches to flood risk management at the catchment scale.

## Materials and Methods

### Study area

The project area falls mainly within the Nidderdale area of outstanding natural beauty (AONB) and covers 140 km<sup>2</sup> to the west of Ripon.

### Methods

The project aimed to persuade farmers, through targeted grant aid, within the catchments of the River Skell, River Laver, Kex Beck or their tributaries to carry out capital works to help control flooding and erosion.

A wide range of projects were supported in the Ripon MOP, for example:

- new tree planting
- woodland creation
- fencing existing woodland from livestock
- hedge planting
- wetland and pond creation
- moorland and upland grip blocking
- livestock fencing
- ditch management
- riverbank management, including fencing riverbanks and creating buffer strips

A project officer was employed to promote the scheme and its objectives and assist farmers with their applications.

## Results

The Ripon MOP is one of a range of projects aimed at influencing land management changes within catchments funded under the government initiative Making Space for Water. The lessons learned from this pilot project will inform future policy recommendations.

The Ripon MOP has made some progress in influencing changes within the catchment but it has not managed to implement the changes due to lack of available funding streams in the timeframe of the project. The Ripon project was set up as a pilot which has now come to an end. Local partners and stakeholders are now considering how to take the project forward. The broad scale modelling commissioned under this project has added to the knowledge base and understanding of the impacts of land use and management on flood risk management. Additionally, through the Defra Innovation funded project with Forest Research, the potential benefits of floodplain woodland will be explored further.

## Conclusion

To successfully involve a wide range of stakeholders and deliver tangible measured outputs, the following are recommended:

- Ensure that there is a project officer/liaison officer on the project team. Establish and empower local representatives who are able to make decisions that will be backed up with commitment from their organisation in terms of manpower, time and finance.
- Have a clear vision of what is possible but maintain flexibility. Set realistic objectives for the timescale of the project(s), i.e. allow more time but be aware that pilot projects can be expected to evolve. Flexible objectives are required to allow for change/evaluation.
- Review research: learn from what has been done previously, including local knowledge, and encourage knowledge exchange.
- Spend time with key stakeholders to build up a rapport. The expectations of stakeholders must be managed; it should be made clear how they can contribute and what happens next; they need to be thanked for their contributions and time. Stakeholder liaison is time consuming yet vital to success and should be costed into a project from the outset.

## Future plans

- A dedicated project officer has been appointed through the financial support of the project board, a formal partnership of the following organisations: England Catchment Sensitive Farming Delivery Initiative, Environment Agency, Farming and Wildlife group, Forestry Commission, National Trust, Natural England, Nidderdale Area of Outstanding Natural Beauty North Yorkshire Country Council and the Yorkshire Dales Rivers Trust.
- Within the project area (the river catchments for the Laver, Skell and Kex Beck) free advice and grant aid is available until March 2012 to encourage small land management changes to reduce the flood risk to Ripon.

## Reference

Murphy, D. (2007). Ripon Multi-Objective Project Final Report. Report to Defra, London.

<http://www.defra.gov.uk/environment/flooding/documents/manage/riponfr.pdf>