

Pickering, Slowing the Flow

Profiling Partnership Funding

August 2013

Summary

A flood water storage facility is one element of a long-standing, locally driven programme of measures to protect this upland town. The scheme also includes a Defra-funded, flow-retaining, landscape and watercourse management scheme and a Ryedale District Council-led programme of property level protection measures.

The opportunity to reduce flood risk

The risk of flooding will be addressed using three inter-related approaches. Defra's 'Slowing the Flow' multi-benefit demonstration project will restore the catchment's flood attenuation capacity by managing upstream land and run-off. Forestry Research is leading the project in partnership with the North York Moors National Park Authority, Forestry Commission England, Natural England, Durham University, the Environment Agency and the local community. Holding back water in the upper catchment, coupled with flood water storage, was proposed in a 2008 joint academic and community initiative. The construction of a flood-water storage facility will reduce significant risk to a further 50 homes and 30 businesses. Lastly, Ryedale District Council's property-level protection (PLP) scheme will improve protection for up to 20 vulnerable homes within the town.

Vital statistics

FCRM economic benefits from Flood water storage facility - £4,224,000

FCRM GiA - £223,000 (+sunk costs)

Contributions for 'slowing the flow': £482,000 (Defra)

Contributions for storage facility: £950,000 (Ryedale District Council); £300,000 (Yorkshire County Council); and £125k* (North Pickering Town Council) *anticipated £5,000 p.a. towards maintenance

Contributions for PLP: £135,000 (Ryedale District Council, Defra and YRFCC Local Levy)



Key issues

Changes in upland land management and drainage practices in this steep upland catchment have increased the risk of flash floods in Pickering.

Pickering has suffered four flood events in eight years and previous attempts by the Environment Agency to develop a single scheme in isolation had proved unviable.

The success of this scheme is based on the commitment of the local community, individuals and organisations that have worked in partnership to bring together the complex and innovative combination of measures and contributors.

Defining technical, environmental and financially viability measures has and continues to be challenging. It has required exemplary project design, management and cost efficiencies.



TIMELINE

2001

Pickering has a long history of flooding with events in 1999 and 2000. In 2001 a feasibility study recommends flood defence walls to provide 1:50 year protection and it is given fast-track status. A £7 million flood defence scheme for Pickering is programmed for construction in 2002/03. Planning application raises numerous local objections.

2002

Information gathered during another flood (August 2002) needs to be taken into account and delays the review of options.

2003

Review of options report identifies that flood walls are still required to provide adequate protection. Scheme is deferred due to weak economic case and financial viability.

2007

Summer flash-flooding causes an estimated £7 million of direct damage in Pickering. The scheme is postponed due to changes in funding, economic case and negative local environmental and economic impacts of flood defence walls.

2008

The Ryedale Flood Research group publish a report 'Making Space for People'. It proposes changes to upstream land management and increasing flood-water storage.

2009

Hydraulic modelling is calibrated with 2002 and 2007 events. Defra approve funding for the 'Slowing the Flow' Project. Contributions Policy makes a partnership approach to funding schemes feasible.

2010

Modelling is used to explore bund and storage locations Ryedale District Council commit funding to a flood storage option.



2011

Set-back when flow modelling defines storage bunds as reservoirs. Cost implications force a redesign and discussions to secure contributions to the scheme.

2012

Partnership Funding contributions are committed and re-design of a single storage facility and cost engineering make the scheme potentially viable.

2013

Consultation with North Yorkshire Moors Railway enables integration of erosion protection and the line itself into the scheme. The programme is aligned with the Northallerton FAS. Scheme gains final approval and construction of the storage facility begins summer 2013.

People

Environment Agency Project Manager - Dean Hamblin

Environment Agency Project Sponsor - Innes Thomson