# Scheme Summary

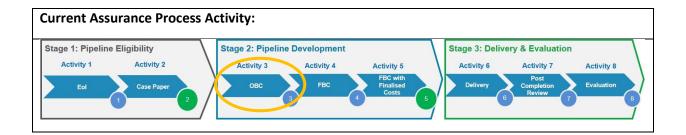
Name of Scheme:	The Leeds City Region Pilot Natural Flood Management Programme
PMO Scheme Code:	GD-PA4-020a
Lead Organisation:	Kirklees Council
Senior Responsible Officer:	Simon Taylor – Head of Development Management
Lead Promoter Contact:	Guy Thompson
Case Officer:	Paul Coy

Applicable Funding Stream(s) – Grant or Loan:	Local Growth Deal 3
Growth Fund Priority Area (if applicable):	Priority Area 3 – Clean Energy and Environmental Resilience Priority Area 4 – Infrastructure for Growth

Approvals to Date:	
Forecasted Full Approval Date (Decision Point 5):	July 2018
Forecasted Completion Date (Decision Point 6):	December 2020 – complete works and payments

Total Scheme Cost (£):	£4,552,889
WYCA Funding (£):	£1,700,000
Total other public sector investment (£):	£2.08 million
Total other private sector investment (£):	£0.021 million

Is this a standalone Project?	No
Is this a Programme?	No
Is this Project part of an agreed Programme?	Yes



# **Scheme Description:**

The risks to 63,000 homes, 31,000 businesses and critical infrastructure sites from flooding have been clearly illustrated by repeated flooding episodes in the last decade, including the devastating floods of December 2015 that hit the City Region. The SEP identifies a headline initiative to develop an "integrated flood risk reduction programme" to address the urgent need for greater resilience against flooding to protect and retain businesses and employment, and to maintain the transport network. Local Growth Fund Investment will accelerate, enhance and unlock joint schemes planned for delivery by the Environment Agency, local authorities and other partners, contributing to and matching other funding sources already identified and secured.

An indicative programme of flood risk management projects has been developed that will improve the resilience of businesses in Leeds City Region Spatial Priority Areas. Areas targeted are those which are both currently affected by high flood risk, where jobs and businesses could be lost as a result of recent flood events and the likelihood of recurrence, and those where planned future development could be slowed or constrained. In addition, the programme will mitigate the risk of disruption or loss of access and critical infrastructure in these areas which would affect current and potential business viability.

Investing in resilience against flooding and ensuring the resilience of the transport network will safeguard existing jobs and businesses, especially in the strategically important manufacturing sector – as well as enabling further growth in jobs and housing in the Spatial Priority Areas by reducing the constraints posed by flood risk and transport network resilience.

Amongst the projects identified in the indicative programme is:

Scheme 8: Growing Resilience - the LCR Natural Flood Management Programme. A pipeline of projects is being developed by Local Authorities, Catchment Partnerships, Yorkshire Dales National Park Authority, Yorkshire Wildlife Trust, White Rose Forest and Yorkshire Water initiative to implement natural flood management measures within prioritised sub-catchment areas of the rivers Aire, Calder, Colne and Holme. LGF contribution will deliver a range of outcomes including increased woodland cover and run off attenuation measures within upper catchment areas to reduce flow rates. This will provide long term benefits for our urban centres and LCR Spatial Priority Areas downstream, as well as providing additional benefits like increased biodiversity, recreation and tourism activity and contributions to our target of a zero carbon economy.

Business Case Summary:		
Strategic Case	The role of strategic natural flood management at a catchment scale is clearly emerging at a national level of understanding as a long term and multi-benefit way to reducing flood risk and providing wider economic benefits to those catchments. There is recognition that land management practice in our uplands	

has directly contributed to increasing the likelihood of flood risk. The ground has generally been overgrazed, subject to acid rain and under gone compaction. NFM investment aims to undo this damage. Therefore priority sub catchments' vegetation needs to be restored and their soil treated to improve infiltration rates and increase the hydraulic roughness across the landscape to slow the flow of water.

This is not a quick win solution, it will take decades to develop. There's a recognition that NFM investment will need to be undertaken systematically across our catchments, as opportunities arise, all the way to the end of the **SEP timeline of 2036.** 

This is in line with SEP Priority 3 – Clean Energy and environmental resilience

Initiative 7 – make climate change adaptions and high quality green infrastructure integral to improving the City Region economy and its spatial priority areas

Success measures: Increase the quality and extent of GI including climate and carbon sequestration benefits related to tree cover

Initiative 10 - Develop an integrated flood risk reduction programme, incorporating flood defences, green infrastructure and resilient development.

The projects in the programme will reduce the risk of flooding to existing businesses and residential properties from the risk of flooding, and support and act as a catalyst for the wider development of the areas.

# GI Strategy Priority 1 – effective water management and flood risk reduction

The work will also be closely aligned to priorities 5 and 6 namely 'plant and manage more trees and woodland and restore uplands and manage them more sustainably.

#### **Commercial Case**

Clear drive from central government towards integrated planning and scheme development. This can be seen by the formation of the National Infrastructure Commission, its links with the Flood Resilience Review, and the continued promotion of a Catchment Approach to engineer solutions for flood defence within communities of all sizes.

The Northern Powerhouse concept has an increasing amount of governance formality around it, with a focus on transport and connectivity as a key enabler to achieving a step change in economic growth across the north. There is a growing recognition and awareness that this needs to be complemented by targeted green blue infrastructure investments in key places, and that the resilience of existing economic activity needs to be improved in order to enable Good Growth. This has been developed strategically by the development of the Northern Forrest.

## **Economic Case**

The projects selected in this programme are all either within identified Rapid Response Catchments as provided by the Environment Agency or are located within priority sub-catchments modelled on behalf of the Environment Agency.

**Wessenden Valley** was selected because it is within one of two Rapid Response Catchments in the Colne and Holme catchment. To date no further modelling has been undertaken within this catchment so these are primary guides. The

other Rapid Response Catchment is above the Holme Valley and the advice from the landowner was that the current agreement with tenants and a Shooting Group would suggest that it would be difficult to process. The Wessenden Valley however has had the long term involvement of a local community group and the local authority in developing long-term landscape management change.

**Gorpley Reservoir** is located above the Walsden Sub-Catchment identified by Calder Valley modelling to be one of four top priority sub-catchments in which NFM measures would have the greatest impact.

**Hardcastle Crags** is located in the Hebden Water sub-catchment also identified by Calder Valley modelling to one of four priority sub-catchments in which NFM measures would have the greatest impact. It is also the largest woodland complex in West Yorkshire.

**Upper Aire** Land Management project are all located within the rapid response catchment and have been supported by the modelling carried out by the Leeds Flood Alleviation Scheme 2. All the projects on the list have full landowner engagement with many of the projects being carried out on farming land with previous water framework directive investment.

#### **Financial Case**

The programme is looking to drawdown £1.7 million from WYCA over a four year period. Funding will also be provided from the Countryside Stewardship Scheme, Calderdale Local and Flooding Funds, Moorlife 2020 and the Leeds Flood Alleviation Scheme 2.

The project management costs will be funded by including approximately 10% 'execution costs' for the local growth fund 3 element of the project.

## **Management Case**

**Colne and Calder projects** will combine the three larger projects under one management process with the National Trust a White Rose Forest signatory, acting as accountable body.

The execution costs will be used to employ an experienced contracts manager who would be line managed by the National Trust West Yorkshire manager for administration purposes.

The contract manager would then work directly with the 3 respective project management groups. These groups membership is based on roles and responsibilities identified in the development of the OBC. For the FBC these roles will be reflected in the management plans.

The National Trust Chair the **Hardcastle Crags** project group. This group is made up of Environment Agency, Slow the flow Calderdale, Pennine Prospects and Moors for the future.

**Gorpley** has a project management group made up of Yorkshire Water (landowner), Calderdale Council (likely lease), Woodland Trust, Treesponsibility and Kirklees Council (White Rose Forest Partnership Manager), Environment Agency. National Trust contracts manager would join this group and begin work setting up the tendering and procurement process as per the FBC.

The **Upper Aire** Land Management project will be governed by the Upper Aire partnership which is made up of a membership from Yorkshire Wildlife Trust,

Yorkshire Farming and Wildlife Partnership, Environment Agency and the Yorkshire Dales National Park. Yorkshire Wildlife Trust, a White Rose Forest signatory will be employed by Yorkshire Wildlife Trust and will be managed using Yorkshire Wildlife Trust's Human Resources policies and procedures. Yorkshire Farming and Wildlife Partnership will be a key delivery partner and close liaison will also take place with Craven and Pendle District Councils and North Yorkshire County Council where project delivery takes place in their districts to ensure that the Good growth guide will be integrated into the project delivery.