



Rising Waters | Rooted Solutions



Flood and coastal resilience innovation programme

Part of the £200m  
Flood and coastal innovation programmes

# Natural Flood Risk Management

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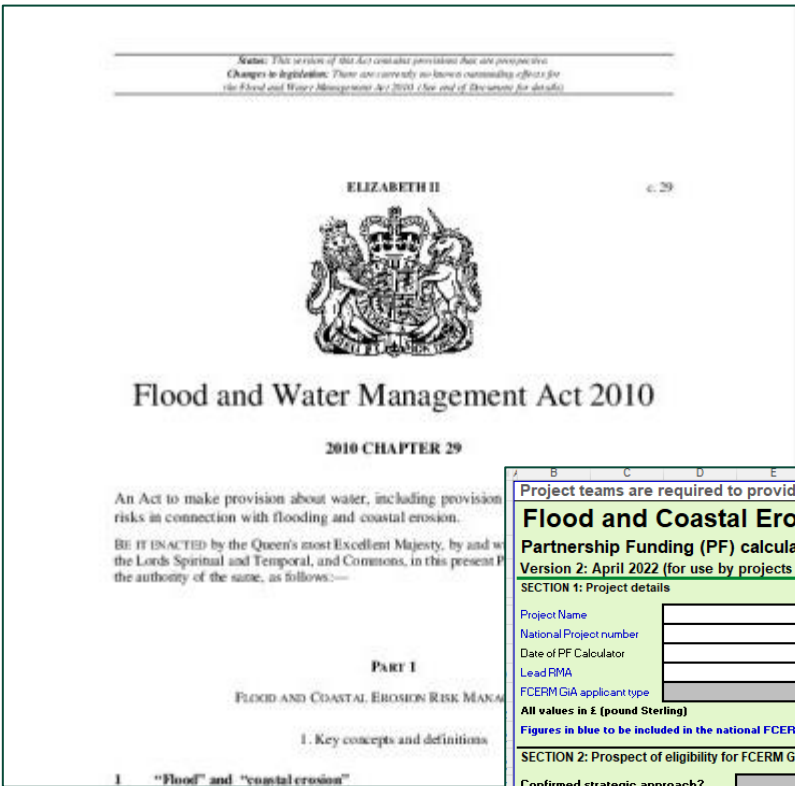
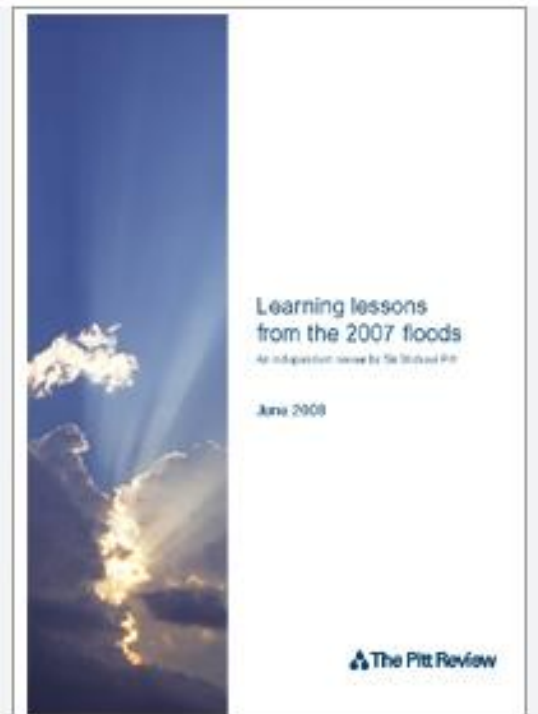












**Understanding the risks, empowering communities, building resilience**

The national flood and coastal erosion risk management strategy for England

Project teams are required to provide a copy of the PF Calculator within their business case for approval

### Flood and Coastal Erosion Risk Management (FCERM) Partnership Funding (PF) calculator 2020 for Flood and Coastal Erosion Risk Management

Version 2: April 2022 (for use by projects delivering FCERM outcomes after 1 April 2021)

**SECTION 1: Project details**

Project Name: \_\_\_\_\_ Project stage: \_\_\_\_\_  
 National Project number: \_\_\_\_\_ Option reference: \_\_\_\_\_  
 Date of PF Calculator: \_\_\_\_\_  
 Lead RMA: \_\_\_\_\_  
 FCERM GIA applicant type: \_\_\_\_\_

All values in £ (pound Sterling)  
 Figures in blue to be included in the national FCERM capital programme for the chosen option

**SECTION 2: Prospect of eligibility for FCERM GIA**

Confirmed strategic approach?  #DIV/0!

Raw PF Score  #DIV/0! Adjusted PF Score  #DIV/0!

Minimum pv contribution/saving required  #DIV/0! update project stage pv FCERM GIA up-front costs  #DIV/0! #DIV/0!

pv maximum eligible FCERM GIA  #DIV/0! pv FCERM GIA future costs  #DIV/0! #DIV/0!

**SECTION 3: Costs and contributions for the PREFERRED OPTION (over the duration of benefits period)**

Project costs	Towards qualifying outcomes		Contributions secured to date	Towards pv qualifying outcomes			Contributor(s) or Fund(s)
	pv appraisal costs	pv design and construction costs		towards pv appraisal costs	towards pv qualifying outcomes up-front	towards pv qualifying outcomes future	
pv appraisal costs			pv Local Levy				
pv design and construction costs			pv other public sector				
pv risk contingency			pv private and voluntary sector				
pv costs for approval	£ -		pv other Environment Agency				
pv future costs			<b>pv sub-total</b>	£ -	£ -	£ -	
pv WLC (over duration of benefits)	£ -		pv total contributions	£ -			

**SECTION 4: Outcome Measure 1 - economic benefits arising from FCERM**

pv WLB (appraisal period) \_\_\_\_\_ Economic summary sheet completed  Completing the Economic summary is required for full FCERM GIA eligibility. Otherwise FCERM GIA eligibility is removed.

Duration of benefits (DoB) period \_\_\_\_\_ Economic data included in business case?  A detailed breakdown of economic data for all short-listed options is required in business cases from OBC onwards

pv WLB (DoB = OM1A) \_\_\_\_\_

People related impacts - due to measures proposed (DoB = OM1B) \_\_\_\_\_

**SECTION 5A: Outcome Measure 2A (today) - households at risk today that are better protected against flood risk by this project (over the duration of benefits period)**



# Challenges around funding NFM under traditional FCERM methodologies

- The evidence base for NFM effectiveness is less mature than it is for concrete flood walls.
- FDGiA business cases require modelling that can cost more than the NFM solution.
- FDGiA business cases don't account for the additional benefits of NFM (eg wildlife habitat, carbon storage, enhanced water quality)
- Where NFM works best, and where there is space, is not always within the Local Local Flood Authority boundary.
- Where there is space to do NFM, it is usually rural, and there are fewer, more isolated properties and so business cases don't meet the cost/benefit threshold.





### Hurdles to overcome

- finding a suitable location
- persuading a community and a land owner to install NFM
- loss of income for farmers
- no maintenance provided afterwards
- challenges around working in a protected landscape









# Ousewem

A four year project to reduce flood risk to communities across York and North Yorkshire using Natural Flood Risk Management techniques.

Four workpackages make up the project:

- WP1 modelling and monitoring (JBA Consulting)
- WP2 NFM delivery (YDRT)
- WP3 Socioeconomic benefits of NFM (University of York)
- WP4 Legacy (City of York Council)

Funded by Defra as part of the FCRIP programme, managed by City of York Council.

Budget for whole project £5.9m, budget for NFM grant is approx. £1m.

Covers the Swale, Ure, Nidd and Ouse catchments and runs to 2027.





# Ousewem's objectives

- Create and test a new NFM grant calculator, similar to the existing FDGiA calculator, but specifically for natural flood risk management.
- Deliver £1.2m worth of NFM interventions by 2027.
- Develop innovative ways of modelling risk and impact.
- Enhance the evidence base for NFM.
- Build capacity in the region for future NFM delivery.
- Inform future policy and funding regimes.





## Progress so far

- Grant calculator developed
- Model set up and scope agreed
- Delivery team recruited
- Pilot projects in development





## Some of the challenges

- Farmers want to farm. They want to grow food, and earn a reasonable living doing so.
- NFM schemes do not offer any compensation to land owners for loss of income, or for maintenance.
- The agri-env subsidy and policy regime is undergoing a huge change and there is significant uncertainty about future payments.
- The NFM Grant Calculator is based on benefits, not costs.
- Rural properties are isolated and few in number making the benefits lower.
- Interventions have to be within 5km upstream of properties at risk.









## Some final thoughts

Historic management of our landscapes and rivers has reduced their ability to store and slow the flow of water.

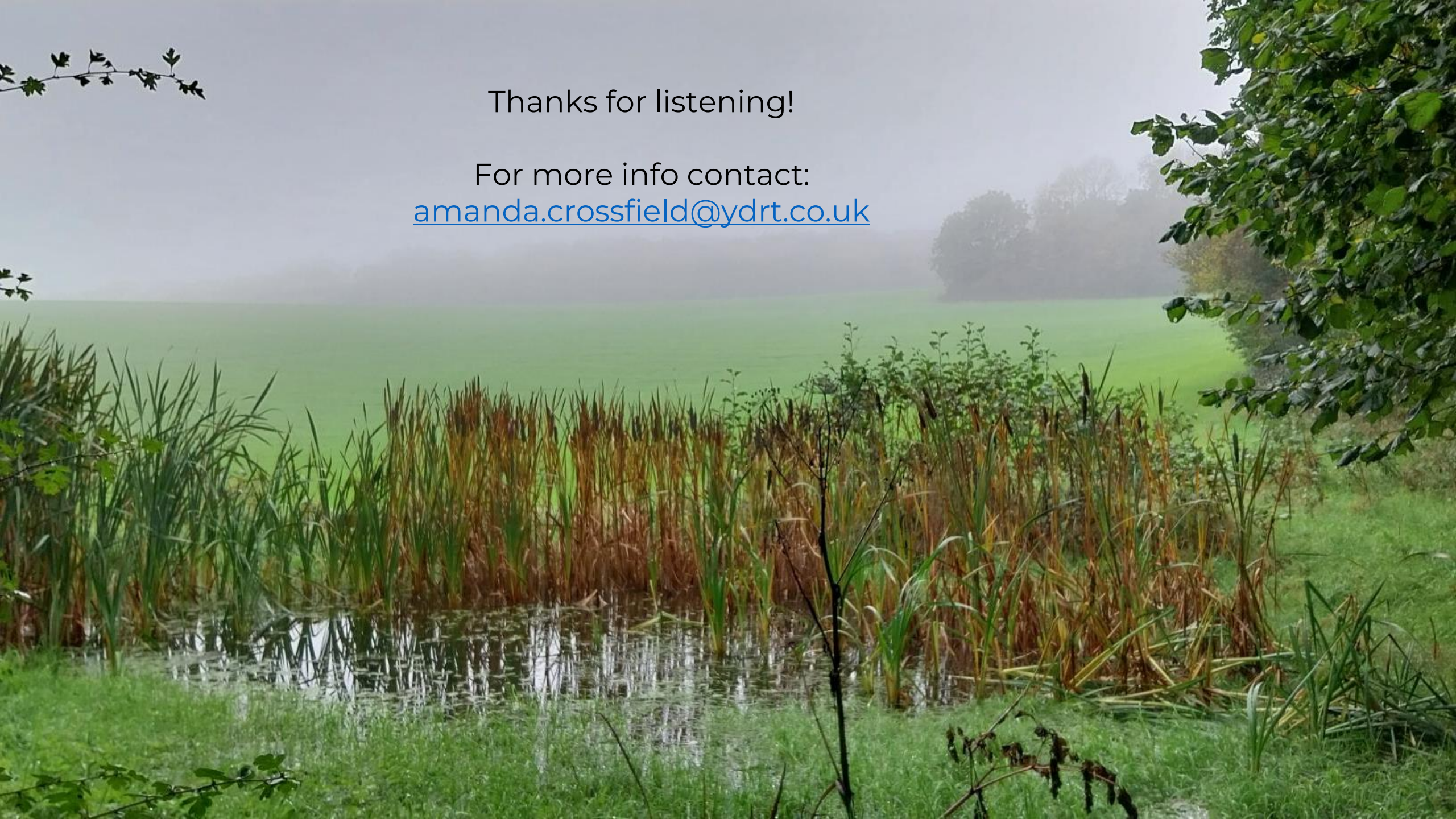
NFM can help restore these natural processes, reducing flood risk and providing greater, wider benefits than traditional concrete flood walls.

There has been a lot of progress in the last five years in making NFM more mainstream in national FCERM strategy, policy and delivery.

There are still many challenges to overcome to align agri/env/FCERM policies and funding regimes.

Nonetheless, there is lots of NFM being delivered across the country.



A misty landscape featuring a pond in the foreground. The pond is surrounded by tall reeds and grasses, some of which are brown and some are green. The background is a soft, hazy green field with trees in the distance. The sky is overcast and grey. The overall scene is peaceful and serene.

Thanks for listening!

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