

RAIN

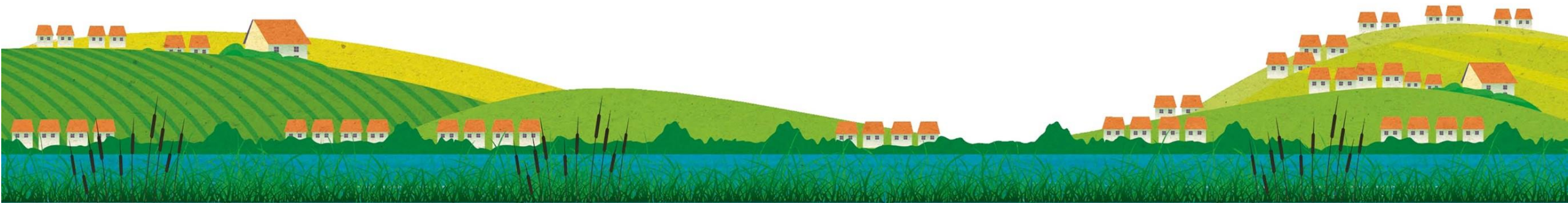
**Resilience and
Innovation Northants**



**North
Northamptonshire
Council**



**West
Northamptonshire
Council**

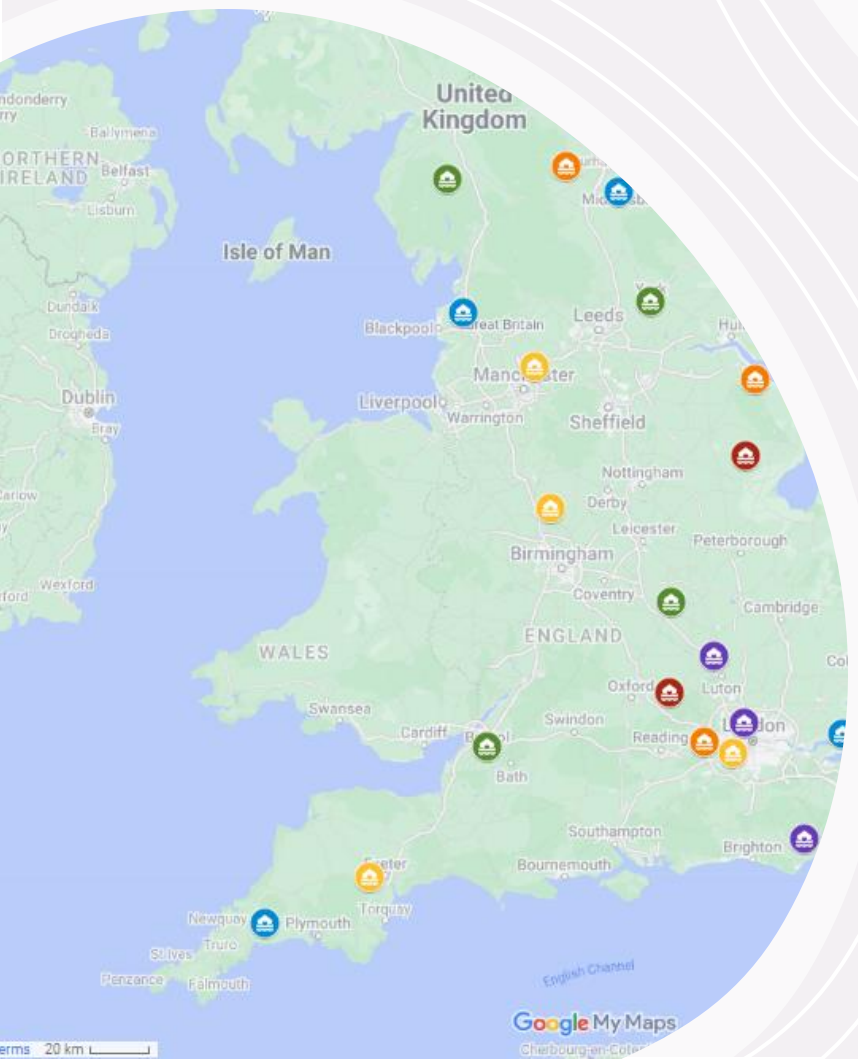


RAIN

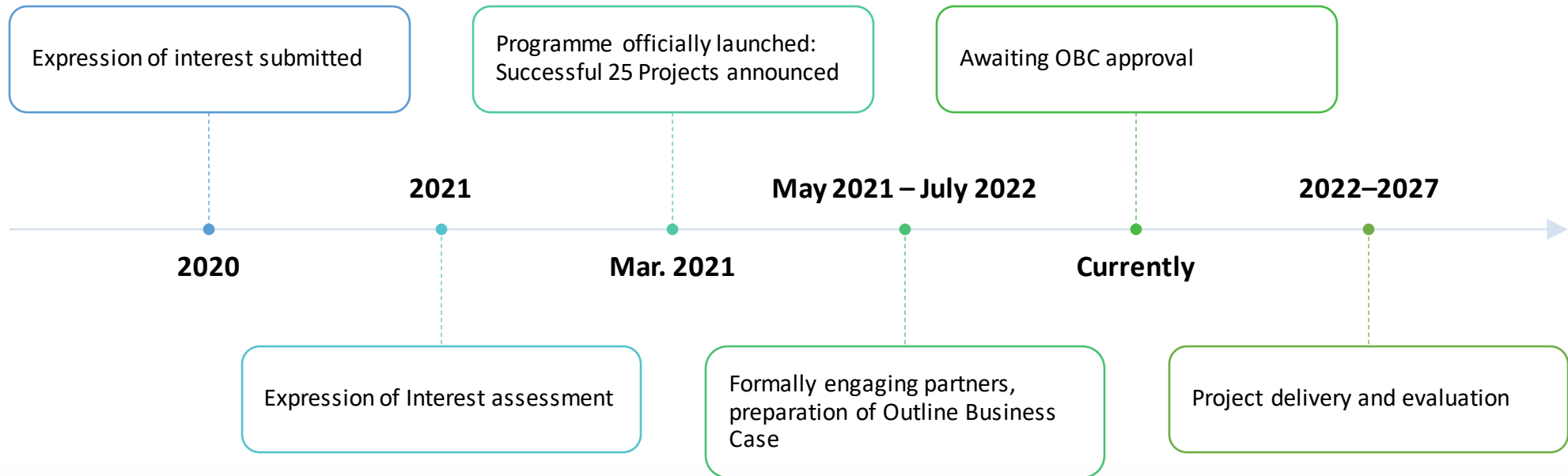
Resilience and
Innovation Network



Environment
Agency



Flood and Coast Resilience Innovation Programme (FCRIP)





The Project (Concept/ overview)

RAIN Resilience and
Innovation Northants

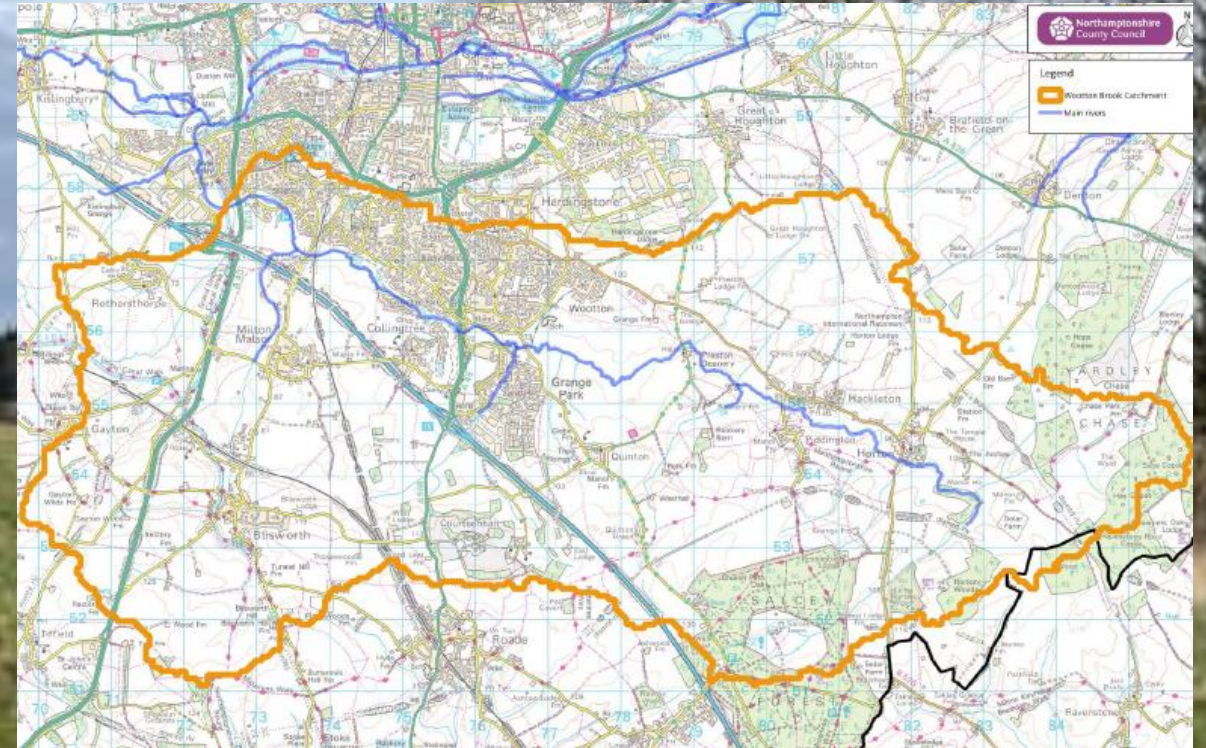


The Catchments

Harpers Brook



Wootton Brook



**Our holistic approach to building resilience involves
action at three scales...**



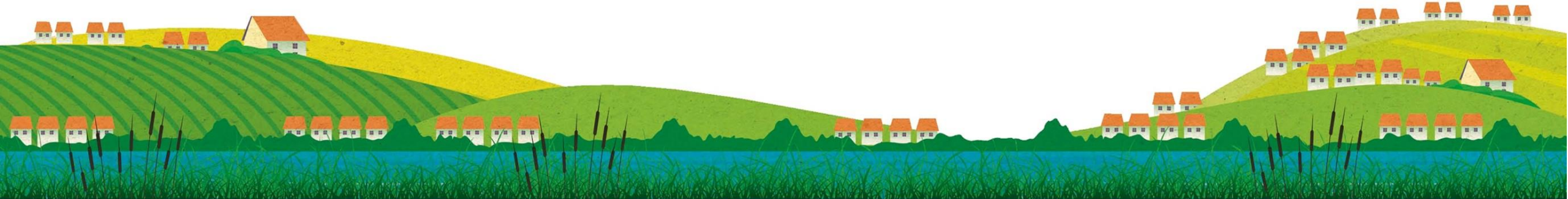
CATCHMENT



COMMUNITY



PROPERTY



aims to..

Improve

- Improve local flood risk knowledge

Reduce

- Reduce residents fear

Empower

- Empower residents to take responsibility

Increase

- Increase resilience in neighbourhoods

Challenge

- Challenge the norm

Innovate

- Be innovative

Learn

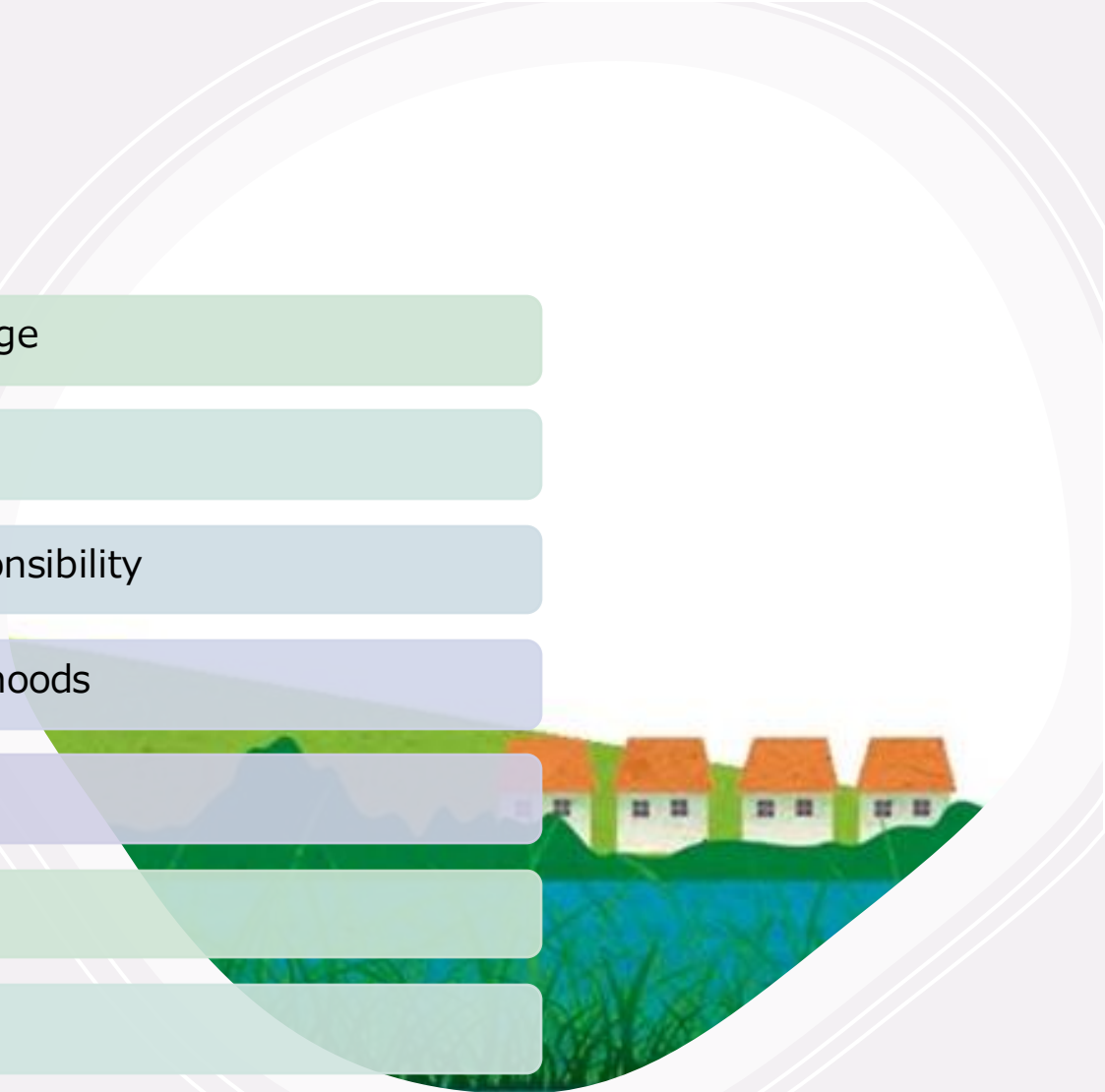
- Be scientific

Holistic

- Be holistic

Explore

- Explore how different interventions work together



Our Partners

The logo for 3keel, featuring the number '3' in a dark blue font and the word 'keel' in a lighter blue font.The logo for NENE RIVERS TRUST, with 'NENE' in a gold serif font and 'RIVERS TRUST' in a blue sans-serif font below it.The logo for MDA Flood Resilience Consultants, featuring a stylized 'M' and 'DA' in blue and grey, with the text 'Flood Resilience Consultants' below.The logo for GJB Consultancy Ltd, with the text 'GJB Consultancy Ltd' in white on a teal background.The logo for North Northamptonshire Council, featuring a stylized landscape with a castle, trees, and a river, with the text 'North Northamptonshire Council' to the right.The logo for HR Wallingford, featuring a blue stylized wave icon, the text 'HR Wallingford' in black, and 'Working with water' in blue below.The logo for the Environment Agency, featuring a green circular icon with a stylized figure holding a tree, and the text 'Environment Agency' in green.The logo for Northamptonshire Local Nature Partnership, with the text 'Northamptonshire Local Nature Partnership' in white on a teal background.The logo for love every drop anglianwater, with 'love every drop' in purple script and 'anglianwater' in blue sans-serif, accompanied by a blue water drop icon.

This project is funded by Defra as part of the £150 million Flood and Coastal Resilience Innovation Programme which is managed by the Environment Agency to develop and test new approaches to help communities become more resilient to the effects of flooding and climate change.



WP1 – The West Northants Project Team

Ruth Burnham – project exec

Alan Ryan – programme manager

Sarah Parr – project manager

Kate McLaren – project officer



WP2 – Catchment Scale NFM

Working with landowners and farmers in the upstream areas of our project catchments to implement nature-based solutions to slow/reduce the flow.

“I am looking forward to working on the RAIN Project because I believe that the innovative approach has the most potential to deliver superior collective outcomes, both for biodiversity and flood prevention.

I believe the RAIN project will be successful because it takes a multi angle, innovative approach to flood protection.

Involving communities and landowners to drive change from the ground up” – Tristan Baxter-Smith, Agriculture Advisor, Nene River Trust



NENE
RIVERS TRUST



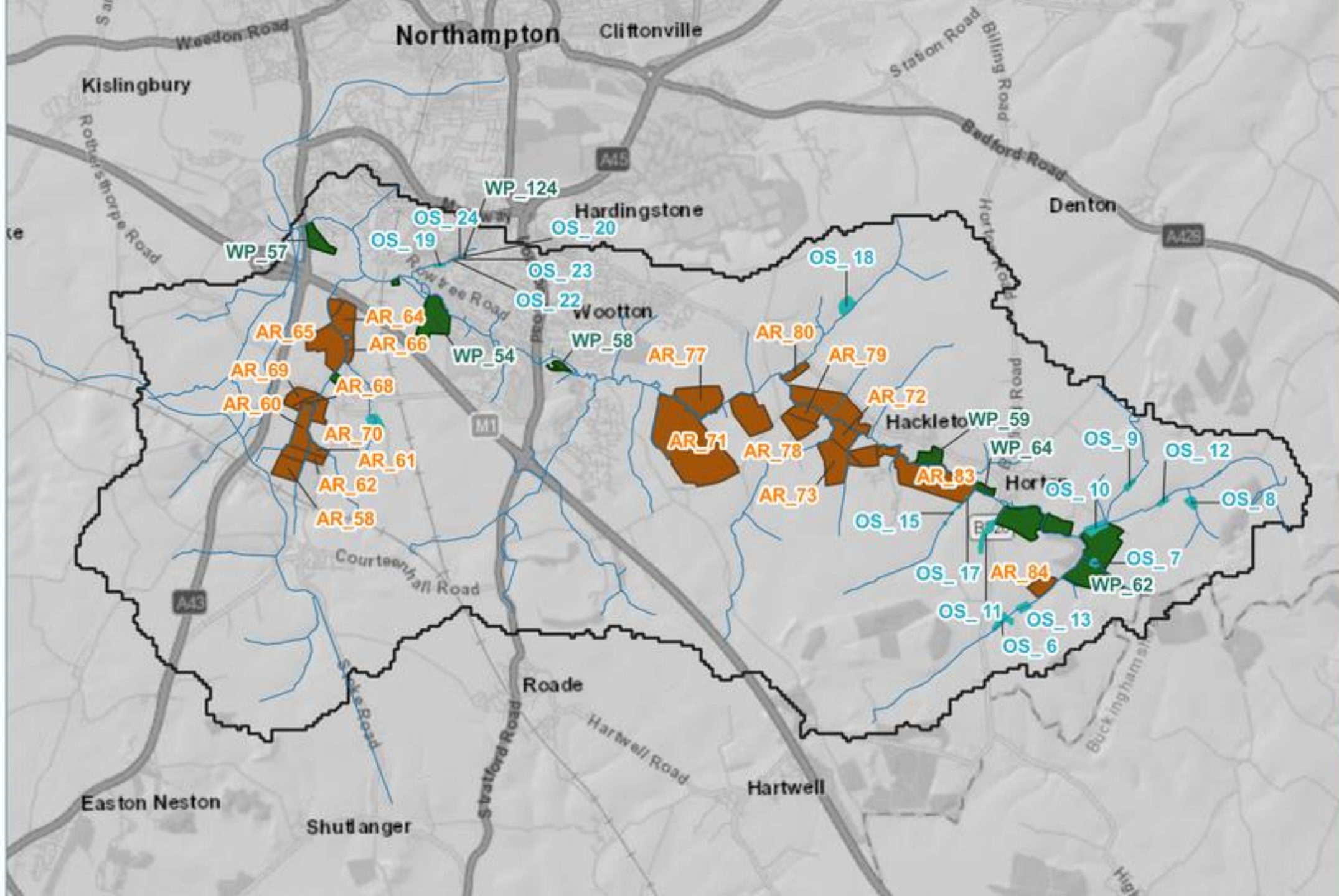
WP2 – Catchment Scale NFM

- We will trial a new funding mechanism known as the Landscape Enterprise Networks (LENs) approach



"The RAIN project provides important opportunity to demonstrate how public and private-sector funding can be aligned to deliver multiple environmental and community resilience benefits through Nature-Based Solutions." Alan Sargent, 3keel





Offline storage (wetlands, woody dams and field bunds)

Woodland planting

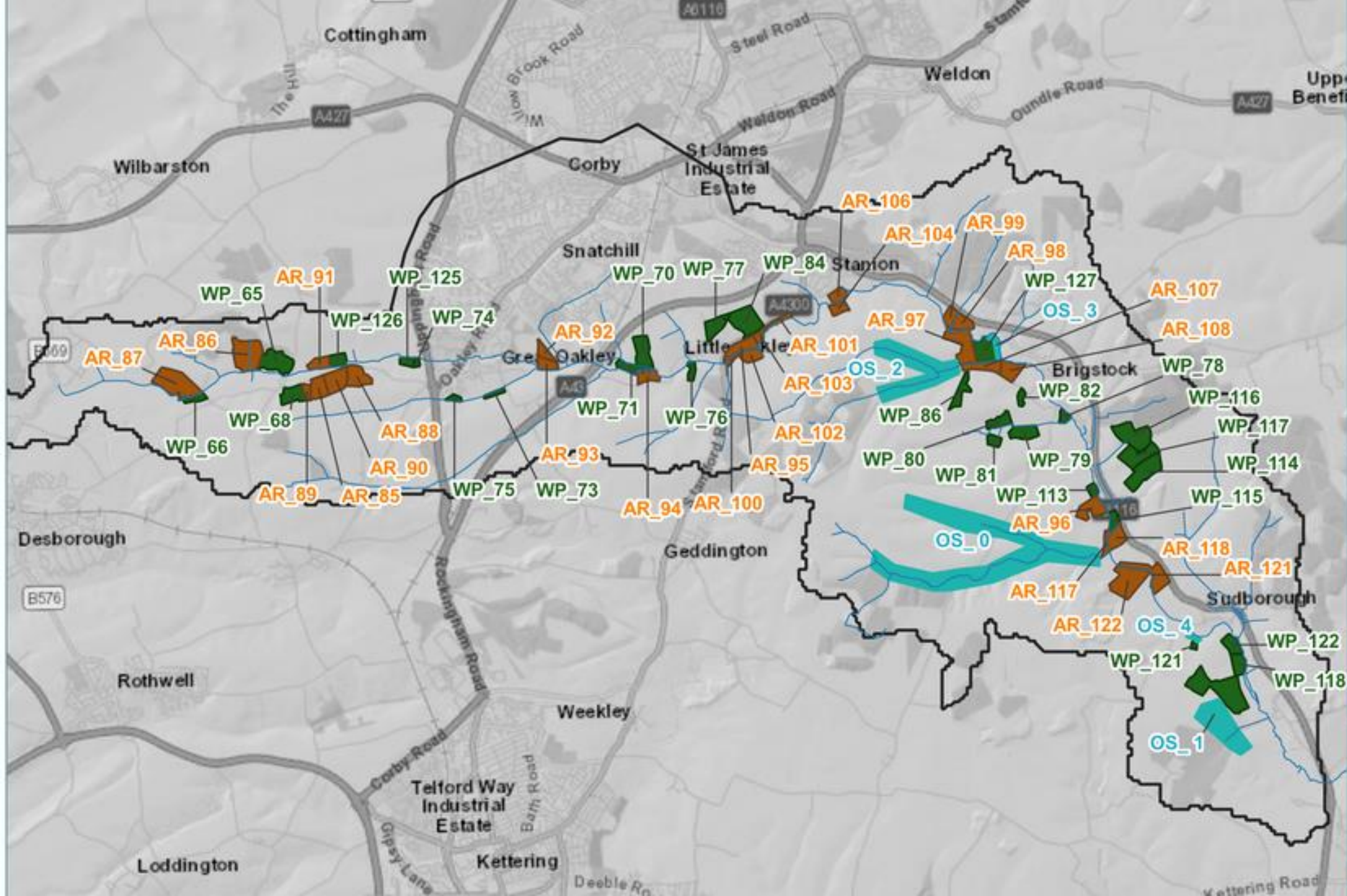
Arable reversion (includes Autumn-sown cover crops)

0 500 1,000 m

Coordinate System
EPSG: 27700

Basemap: © OpenStreetMap contributors

Project ref: FWR6532



- Offline storage (wetlands, woody dams and field bunds)
- Woodland planting
- Arable reversion (includes Autumn-sown cover crops)



0 500 1,000 m

Coordinate System
EPSG 27700

N

Basemap: © OpenStreetMap contributors

Project ref: FWR6532

WP3 – Community Resilience

- Building resilient communities - Improving preparedness, knowledge, flood risk
- Empowering and providing the tools for communities to be prepared for emergencies
 - Community volunteer opportunities, flood stores, emergency plans, school visits, citizen science



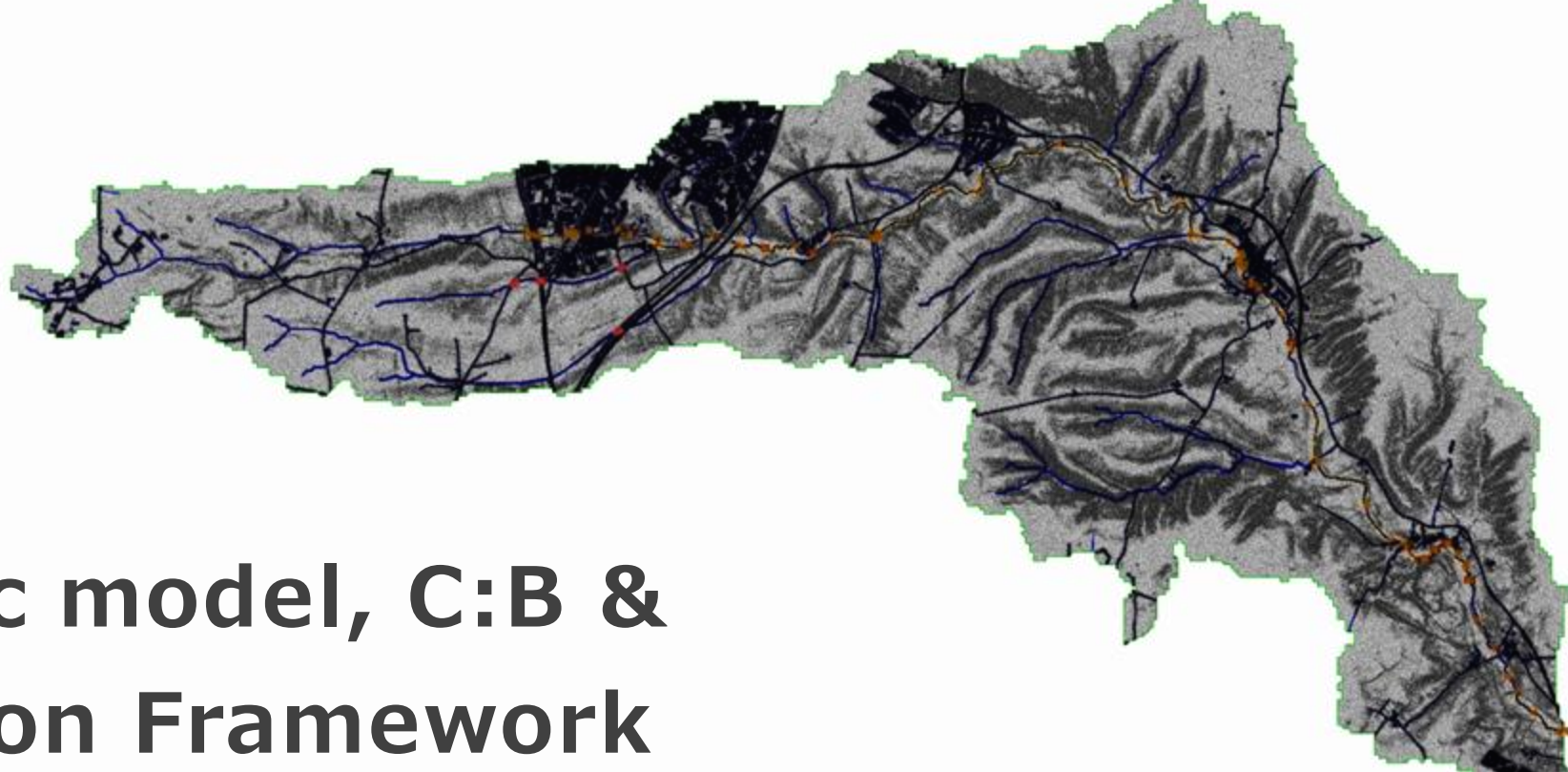
WP4 - Property Flood Resilience

- Deliver property flood resilience measures to up to 100 properties
- Utilise the Floodmobile and Flood Demonstration Property at HR Wallingford
- Train specialist officers to embed opportunistic PFR

“I’m excited to be part of this project and to have the opportunity to provide some peace of mind to people at risk by providing real support in the way of PFR.

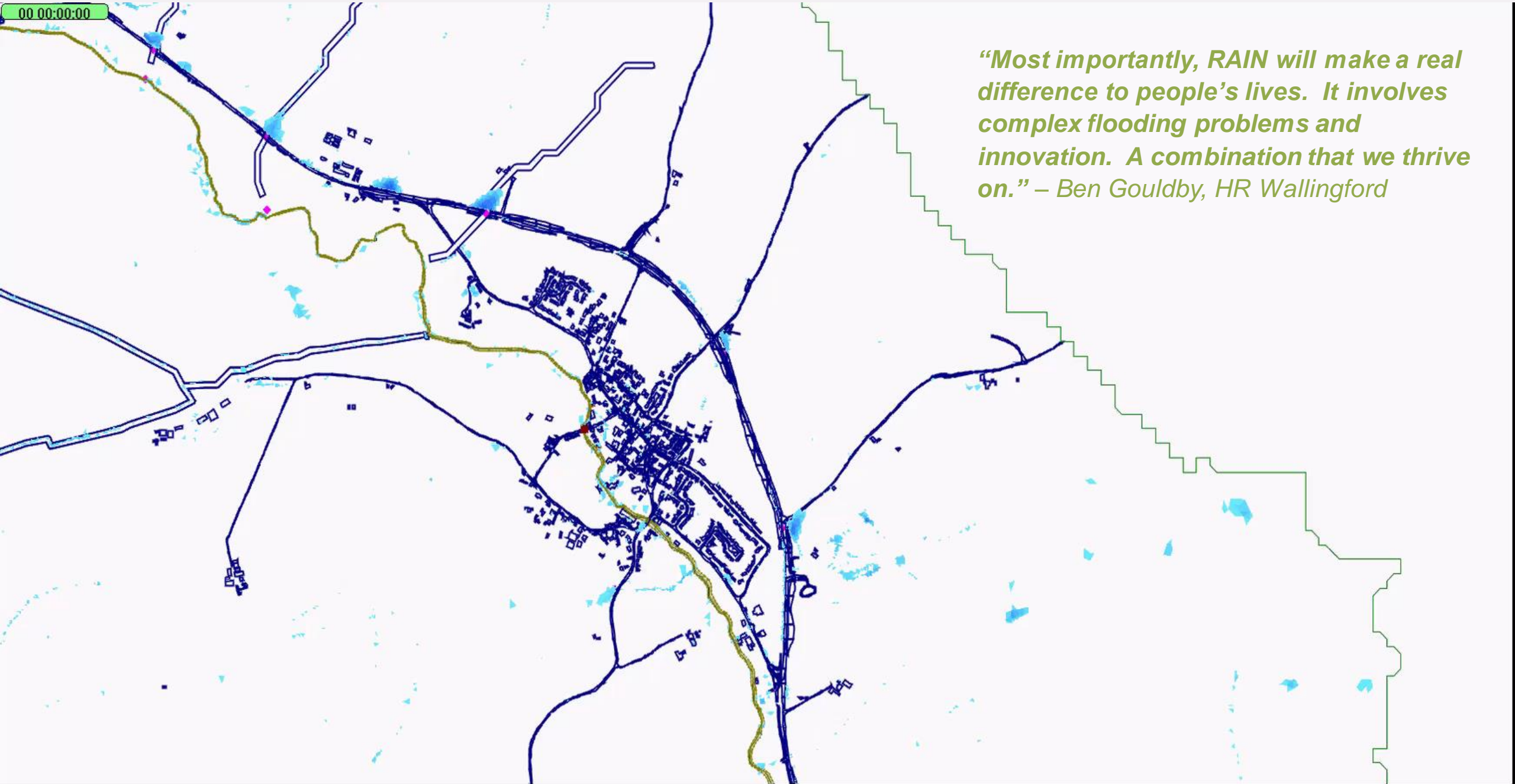
This project is a perfect follow on from the work we did as part of the Ox Cam project, and a great opportunity to utilise the demo property at HR Wallingford to educate on the benefits of PFR” - Graham Brogden, GJB Consultancy





WP5 – Hydraulic model, C:B & Spatial Evaluation Framework

- 70 years' experience
- Integrated surface water and fluvial model to test and inform the interaction of catchment, community and property level interventions.



“Most importantly, RAIN will make a real difference to people’s lives. It involves complex flooding problems and innovation. A combination that we thrive on.” – Ben Gouldby, HR Wallingford

So far, we have achieved...

- Refined processes for modelling and the lens process.
- Baseline hydraulic modelling
- Engaging with farmers and landowners across both catchments
- Created a provisional list of measures and sites influenced by hydraulic modelling and local knowledge.
- The NFM measures for LENS Year 1 trade have now been agreed and the contracts are with legal for finalising
- Community engagement planning
- The internal procurement process for the PFR delivery scheme has now started.
- OBC Submitted, and third comments answered and awaiting approval


Benefits...

A holistic method to flood risk and resilience brings benefits to all areas of society. For our residents, we hope we can ease anxiety around flooding and ensure those at risk feel in control and supported.

Additionally, we hope to create a local environment where the landscape and people can thrive.

- The delivery of NFM on the ground will be evaluated for its effectiveness both in delivering its primary purpose of reducing flood risk and in terms of the co-benefits it delivers e.g., biodiversity and carbon sequestration
- NFM can supporting ecosystem services, such as soil formation, reducing soil erosion and reduced nutrient leaching
- In general, we hope some of our NFM will create and improve open spaces within our communities





By the end of the project, we will have...

“I am looking forward to working on the RAIN Project because of the possibility of delivering meaningful, locally relevant and appropriate measures to support local communities to build their resilience to and recovery from floods!” – Kathryn Hardcastle, Nene River Trust

Understood the cost / benefits of our measures to help evidence schemes where traditional capital schemes are not viable.

Used an innovative partnership funding model to deliver NFM and demonstrated its viability elsewhere in the country.

Embedded behavioural change

Evaluated and produce a framework to assess how resilience measures interact and work collectively together at different spatial scales



Any Questions?