



Department  
for Environment  
Food & Rural Affairs

# Flood Risk Management

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Forestry Commission  
England



Environment  
Agency

# Context

- In England, around **5.5 million (1 in 6) homes** are at risk of flooding.
- **Defra** has policy responsibility for flood and coastal erosion risk management.
- **The Environment Agency:** principal operating authority in England, exercising a general supervisory responsibility over all matters relating to flood risk management. It manages flood risk from main rivers & seas.
- **Local authorities:** manage local flood risk and are responsible for ordinary water courses, surface water, groundwater flooding and coastal erosion.

## Incident Response

- Most flooding incidents are handled by **local emergency responders** (e.g. Environment Agency, local authorities & Fire Service) with no direct involvement from central government.
  - **Defra** leads on **flood response** for complex or wide area floods.
  - The Department for Communities and Local Government (**DCLG**) leads on **flood recovery**.
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# Ministers



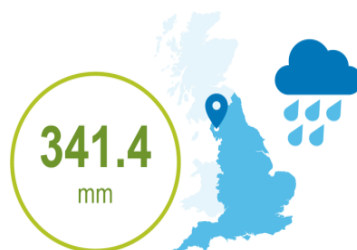


# Winter floods 2015/16

## North of England floods: 5 December 2015 to 6 January 2016



December was the wettest month ever recorded\*



Highest 24 hour rainfall - Honister Pass, Cumbria



Catchments experienced their highest ever river flow



Properties protected during storms Desmond and Eva



Properties flooded\*\*



Communities visited by flood support officers



Severe Flood Warnings issued



Metres of temporary barriers used to protect communities



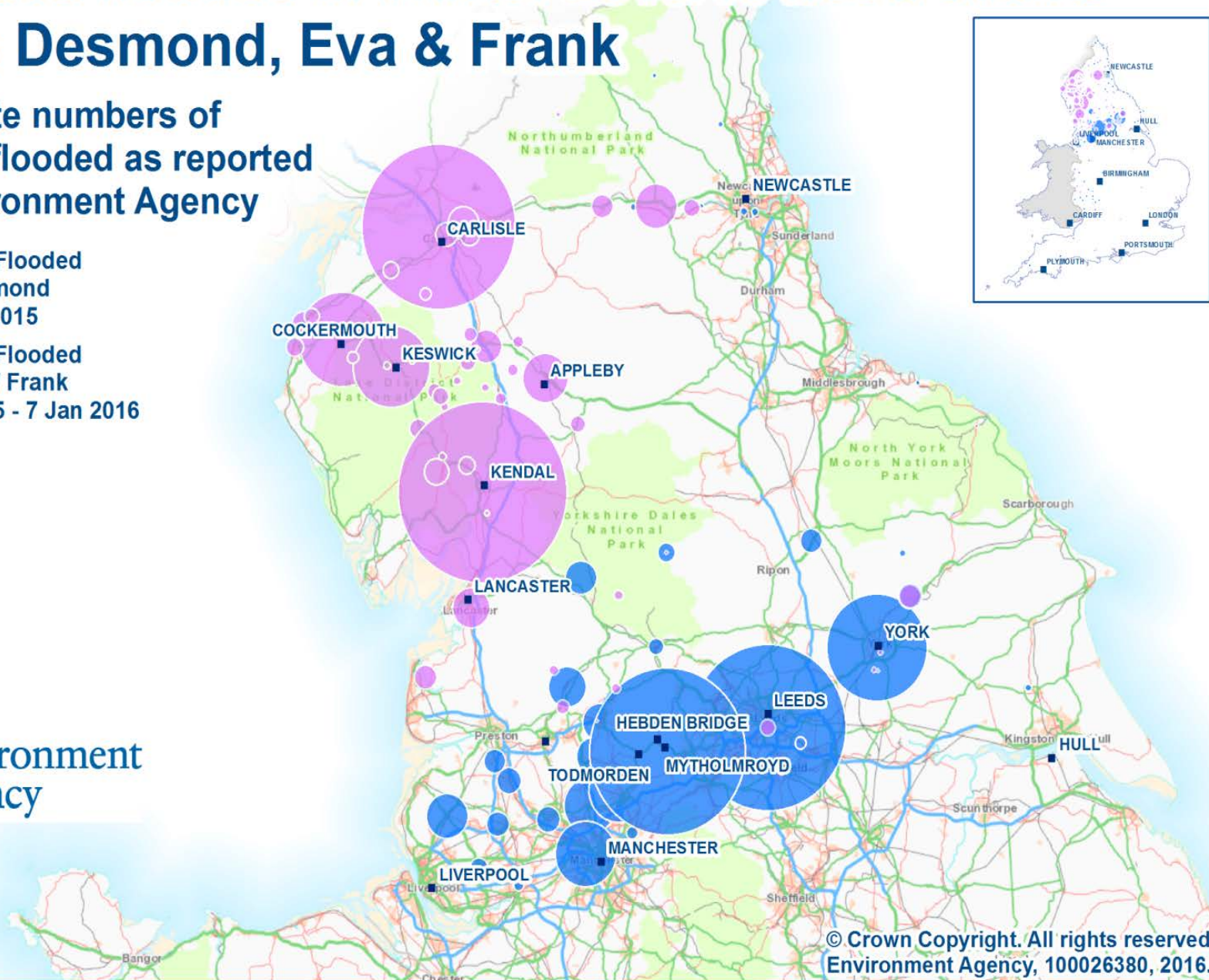
Flood defence assets needing repair

# Properties flooded in Winter 2015/16 flood events

## Storms Desmond, Eva & Frank

Approximate numbers of properties flooded as reported to the Environment Agency

-  Properties Flooded Storm Desmond  
4 - 22 Dec 2015
-  Properties Flooded Storm Eva / Frank  
25 Dec 2015 - 7 Jan 2016







# Government Response

## Direct to 15/16 floods:

- Flood Recovery – incl. community support schemes
- National Flood Resilience Review
- Cumbria Action Plan
- Flood Defences

## Ongoing action:

- Flood Forecasting Centre – flood forecasts and warning
  - Flood Response & Community resilience – EA
  - Flood Re
  - Property Level Resilience – incl. Bonfield Action Plan
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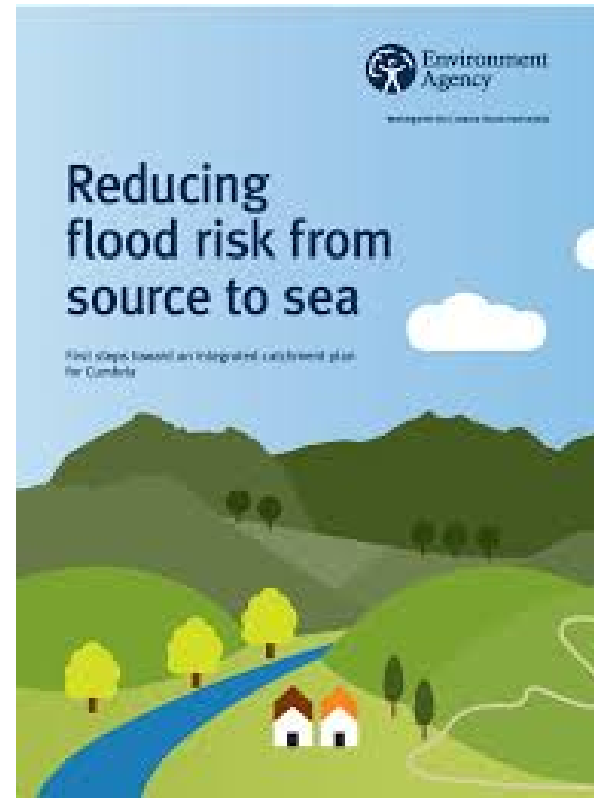
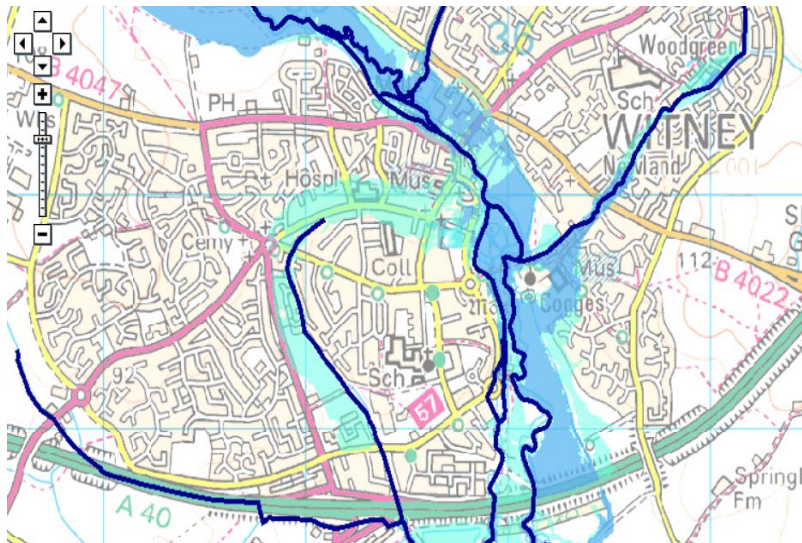
# Flood recovery





# National Flood Resilience Review

# Cumbria Action Plan





# Flood Defences Investment



**£2.3<sub>bn</sub>**

Government investment in new flood defence schemes between 2015-2021. Supplemented by around £600m of funding from partners



**300,000  
homes**

Homes to be better protected by 2021, through now over 1,500 flood defence schemes



**£1<sub>bn</sub>**

Spending on flood defence maintenance in this Parliament



**£1.3<sub>bn</sub>**

Expected cost of insurance claims from December 2015 floods



**350,000**

Households at high risk of flooding able to access affordable insurance through Flood Re

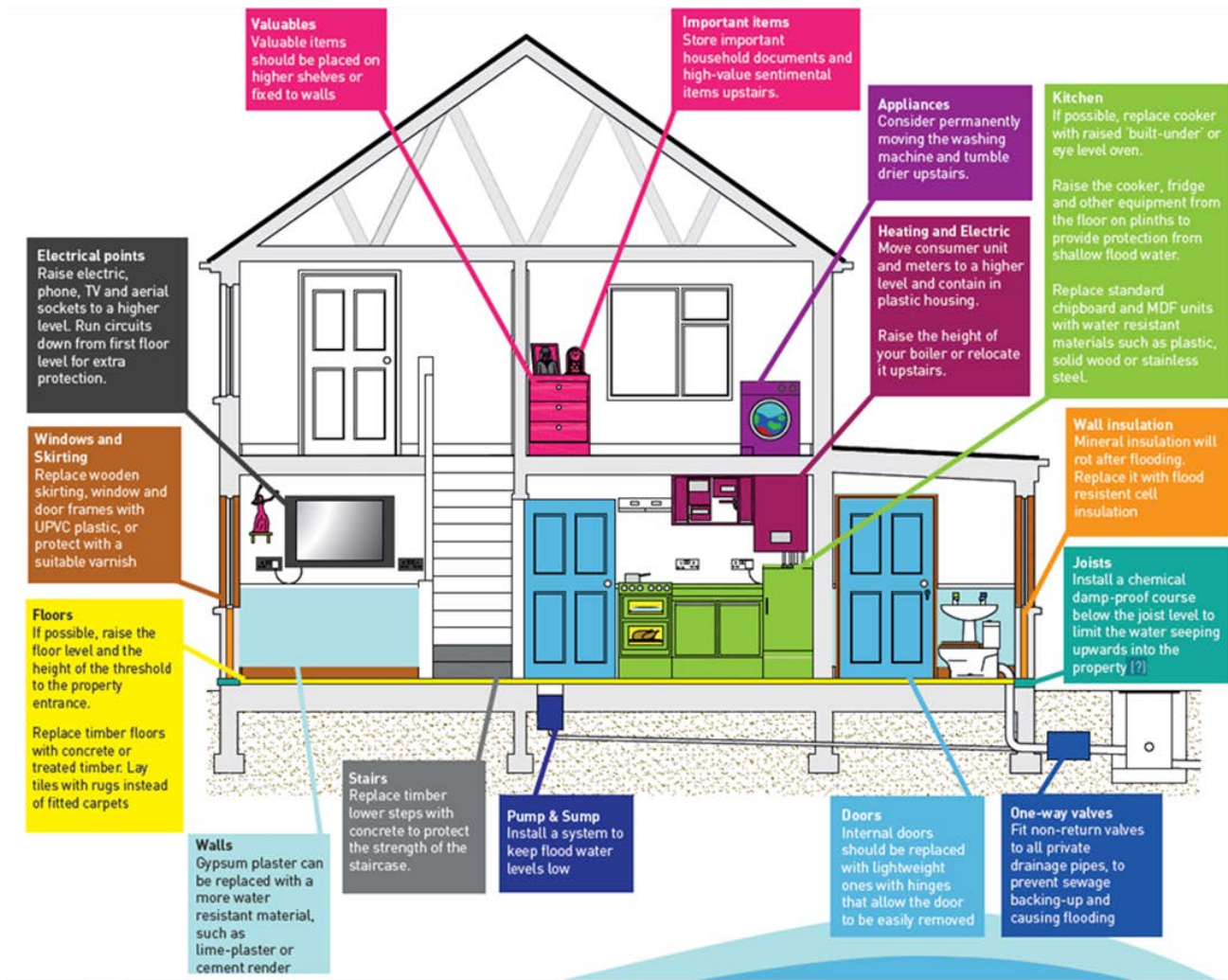
## Budget 2016 - Additional £700m in funding



# Flood Re

**FLOODRE**

# Property Flood Resilience



- Property Level Resilience is a vital part of the Floods toolkit.
- It aims to make people and their property less vulnerable to physical and mental impacts of flooding.
- The approach is used to deal with **residual risk** and **where engineered community schemes are not possible**.



# What does Property Flood Resilience look like

## 2013 Flooding East Peckham Kent

- Flood gates and flood boards slowed the water entry sufficiently to allow furniture to be raised on bricks
- Floors and exterior walls sealed - water did ooze through the floor but was swept into a sump containing a submersible pump. Located in the living room.
- A gully inside the house took water from a drain near the front door straight to the sump.
- Despite 18 inches of floodwater outside, the Property Level Protection measures kept most of the water away, with only an inch inside.
- Neighbours helped clean up and sweep water from house



# Bonfield PLR Action Plan

- **Peter Bonfield, CEO of BRE (formally the Building Research Establishment)** invited a range of experts to join a Roundtable to use their skills and experience to innovate and find ways to incentivise the uptake of property flood resilience by consumers.
  - **Ultimate ambition** – an environment where it is standard practice for properties at high flood risk to have been made resilient
  - **Themes:**
    - ❑ **Increase uptake of the property level resilience grant** following Storms Desmond and Eva, and to learn from this experience;
    - ❑ Better embed **resilience in the insurance business** and in **Small and Medium Enterprises** (small businesses) at flood risk;
    - ❑ Improve the sharing of information on resilience measures, specifically through developing a **one-stop shop web portal**;
    - ❑ Develop the **skills and standards** necessary to deliver property level resilient measures to a consistently high and well understood standard;
    - ❑ Address the **communications and behavioural challenges** that hamper uptake of property level resilience measures.
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# Property Resistance and Resilience – making it normal !

## Start

- Engage and empower customers
- Deliver “one-stop” effective services
- Professionalise market

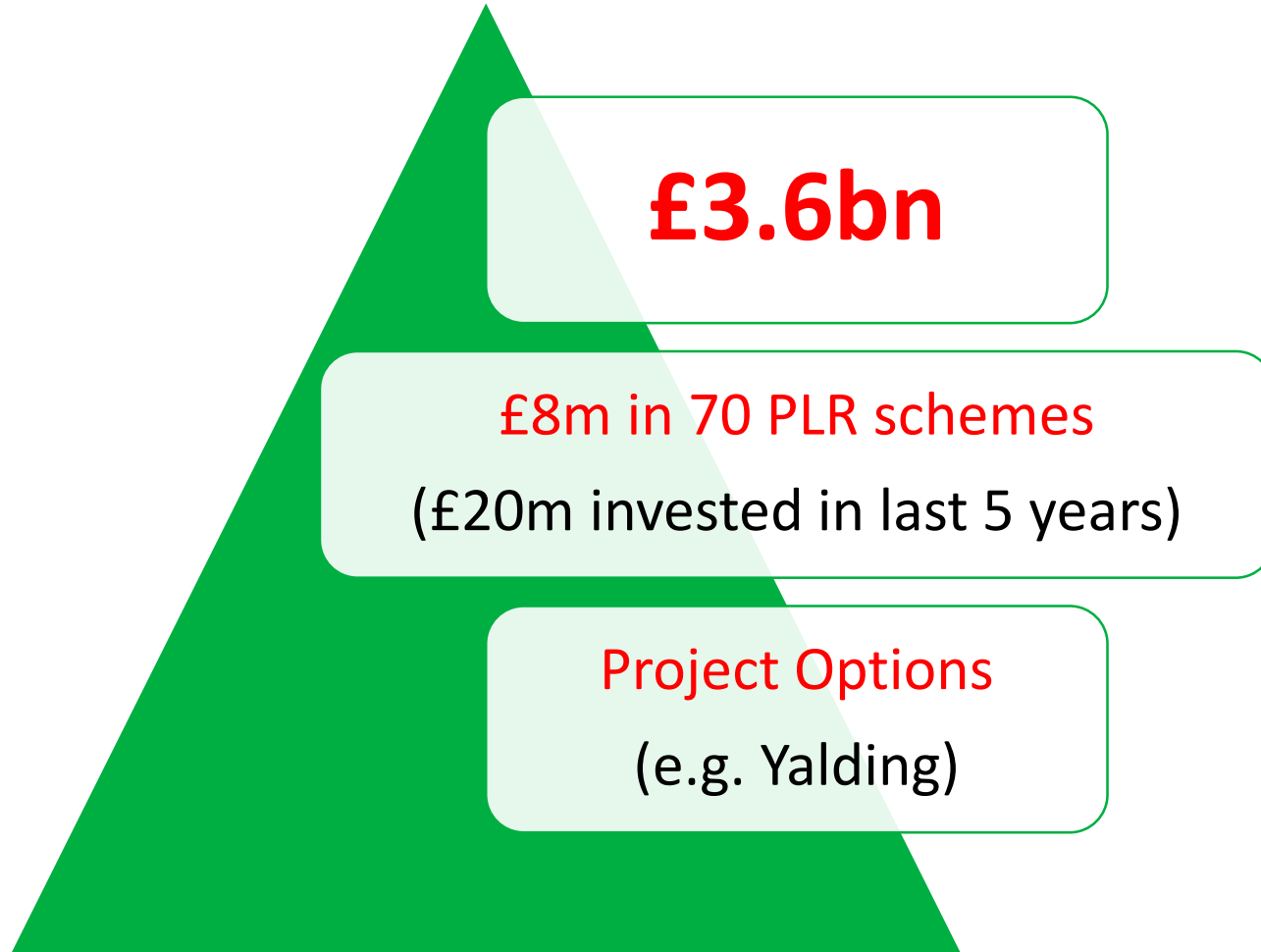
## Benefits

- Less property and contents damage
- Reduced recovery time
- Public health, community cohesion and economic vitality

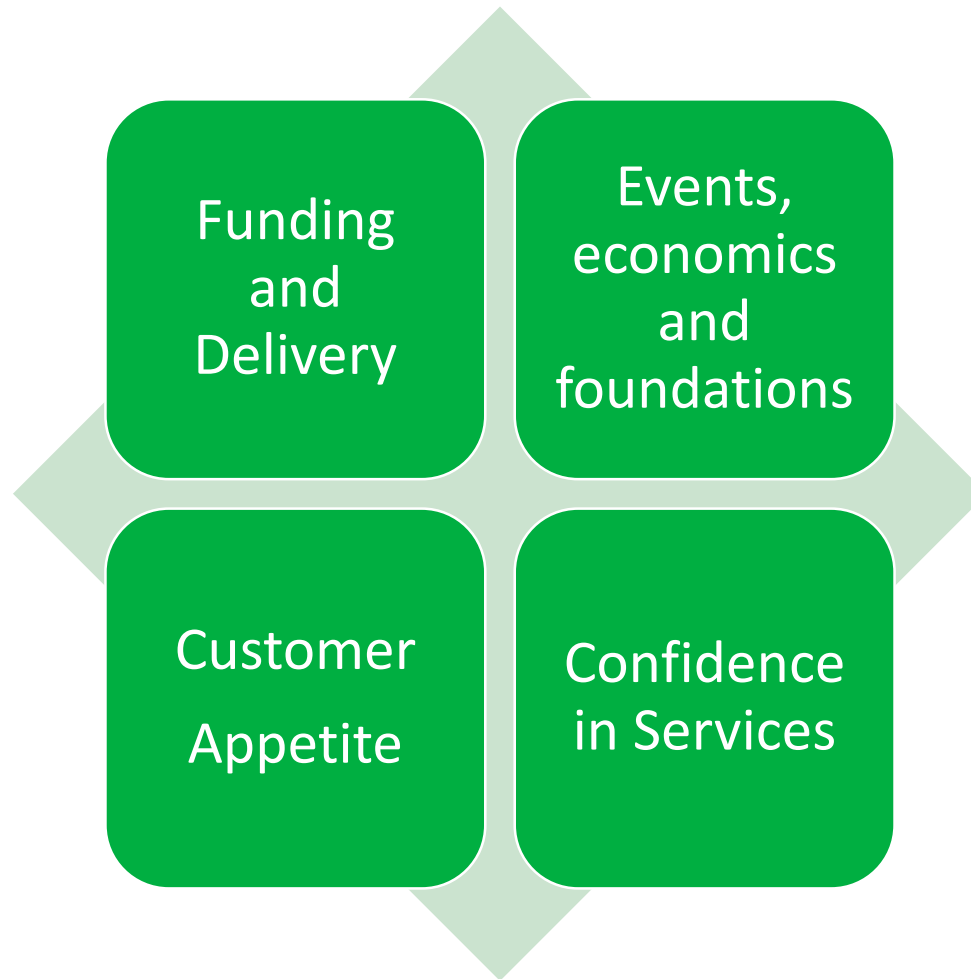
## Confidence

- Role of public investment
- Variability of demand – too event driven !
- Drivers and operators

# Capital flood investment in England 2015-21



# What next ?



# Water and Flood Risk Management



Questions