



Partnership Delivery for Flood & Coast Erosion Schemes

Nick Lyness

Environment Agency Wessex Area Flood & Coast Risk Manager

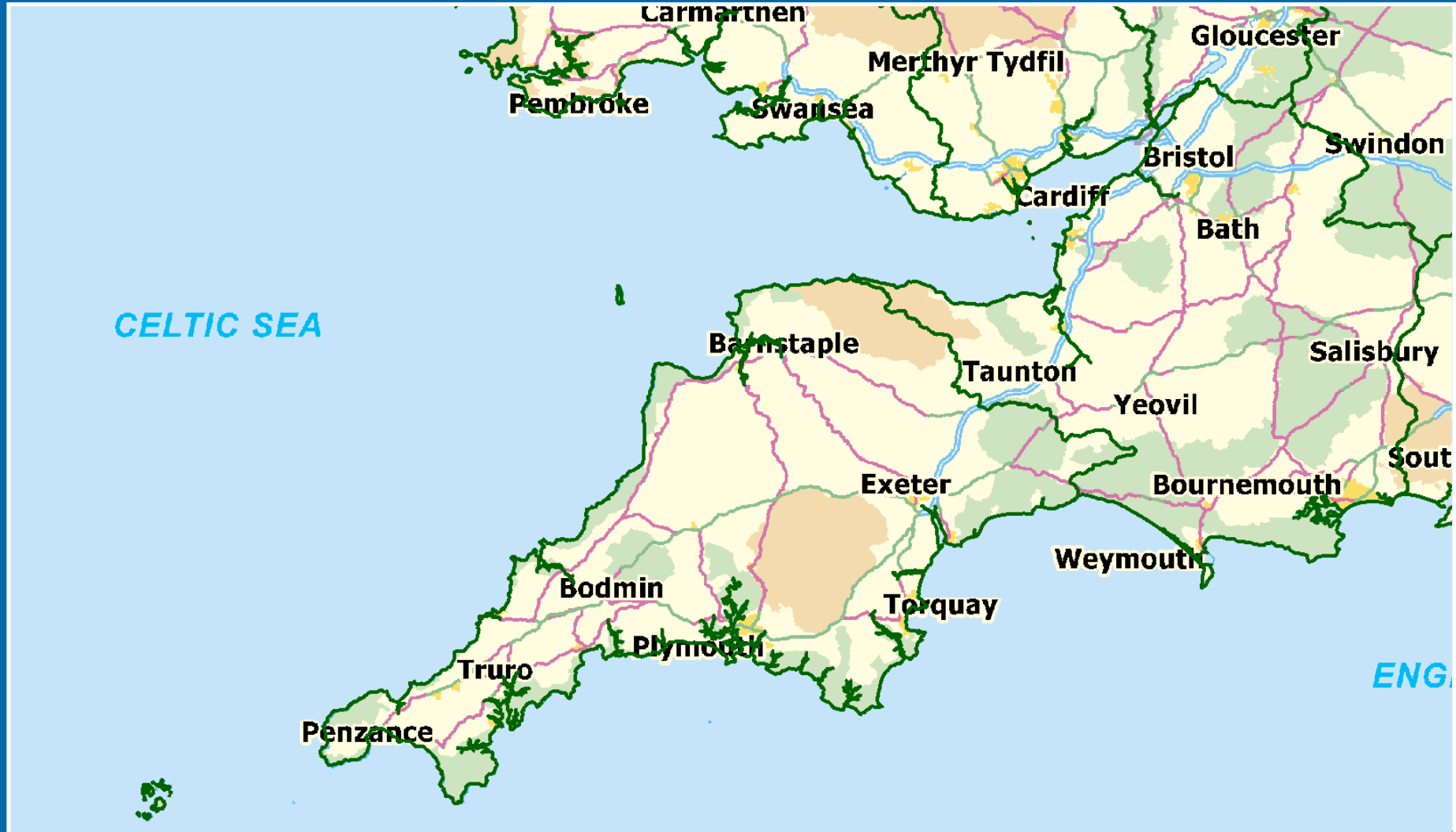
TOPICS

- Introduction
- Why Partnerships
- EA Role
- Challenges and legacy assets
- Partnership Approach
- Sandwich
- Portsmouth
- Whitby
- Cleveleys
- Humber
- Ipswich
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- Weymouth
- Poole
- Summary

South West “A Maritime Region”



Environment
Agency



Preparations for winter 2014/15

National Flood Recovery Programme

Asset repair status

Compiled: 6 October 2014

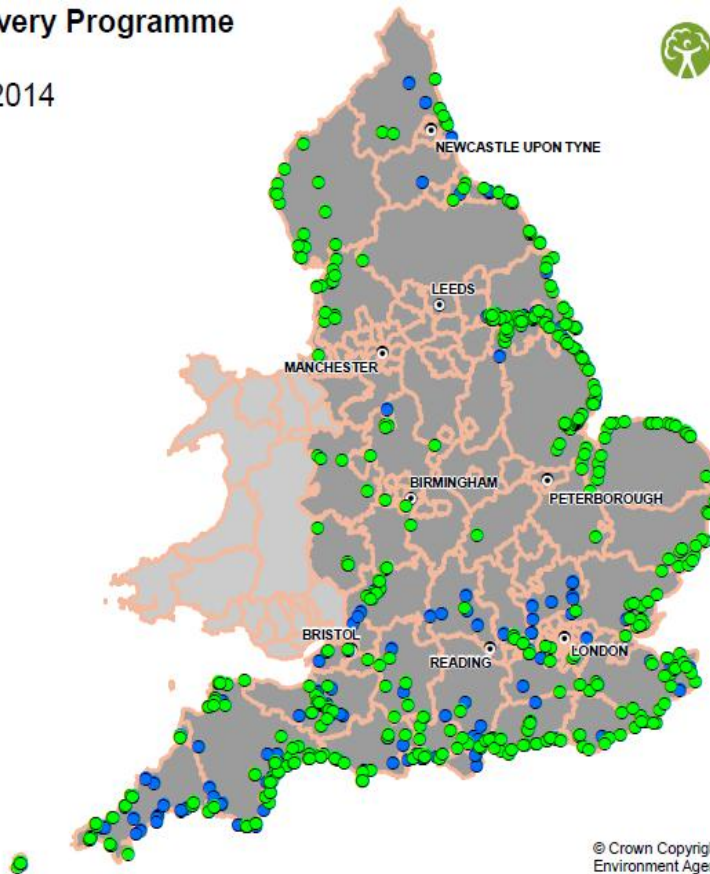


Status

- Complete
- In Progress

LLFAs

- England
- Wales



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Environment Agency, 100026380, 2014.



What storms?

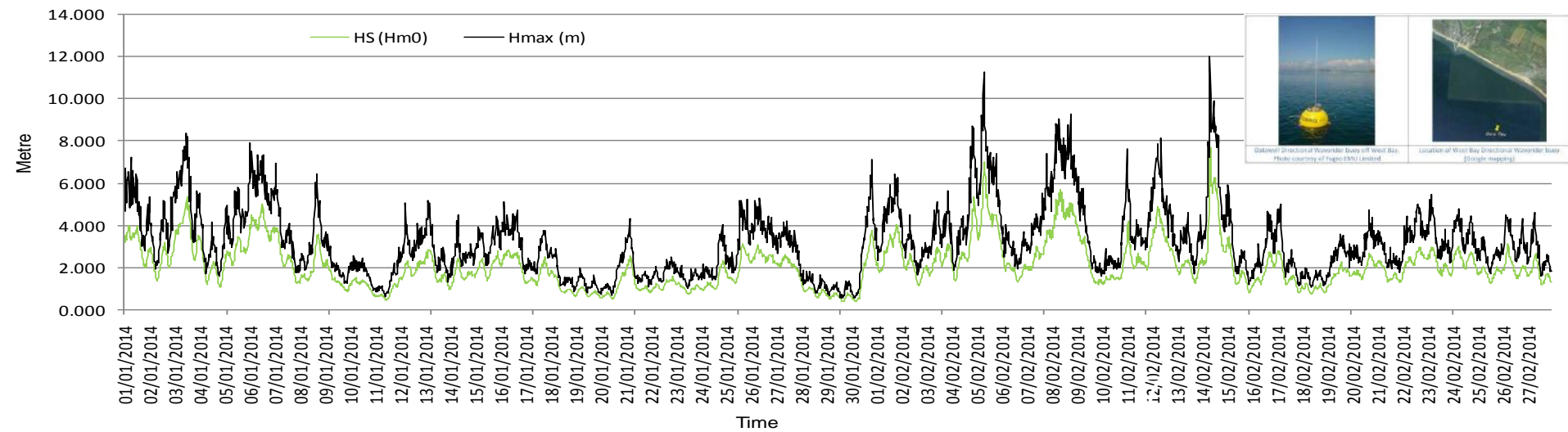
- 22nd to 24th December 2013
- 3rd to 4th January 2014
- 6th to 7th January 2014
- 1st February 2014
- 4th to 9th February 2014
- 12th February 2014
- 14th to 16th February 2014
- 3rd March 2014.



Lyme Regis – The Cobb



Waves & Energy



Burton Bradstock



Landslides & Rockfalls

Burton Bradstock



Portland



Bournemouth



swell 5th February 2014





The Storm of 5th February – Wind Force 8/9 waves 7.5m



Environment
Agency

(Source Guardian
Newspaper 6 February
2014)

Storm Wave Damage



What we manage



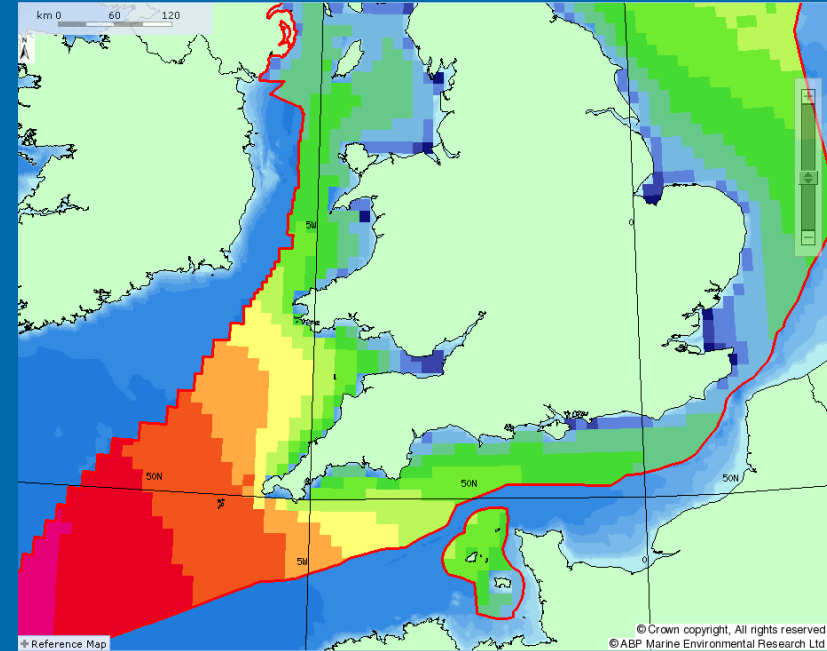
Environment Agency

Non departmental public body, responsible to DEFRA for:

- Climate change mitigation and adaptation
- Sustainable places – spatial planning and development
- Flood and Coastal Risk Management (FCRM)
- Fisheries and biodiversity
- Water and land quality
- Regulating business – e.g. waste management
- Water resource management
- Incident management

Environment Agency and the Coast

- ➡ DEFRA
- ➡ Strategic Overview
- ➡ Powers
- ➡ Evidence
- ➡ Funding
- ➡ Statutory Planning Consultee
- ➡ Climate Change/Sea Level
- ➡ Bathing waters, pollution, etc



Many Communities Dependant on Existing Infrastructure



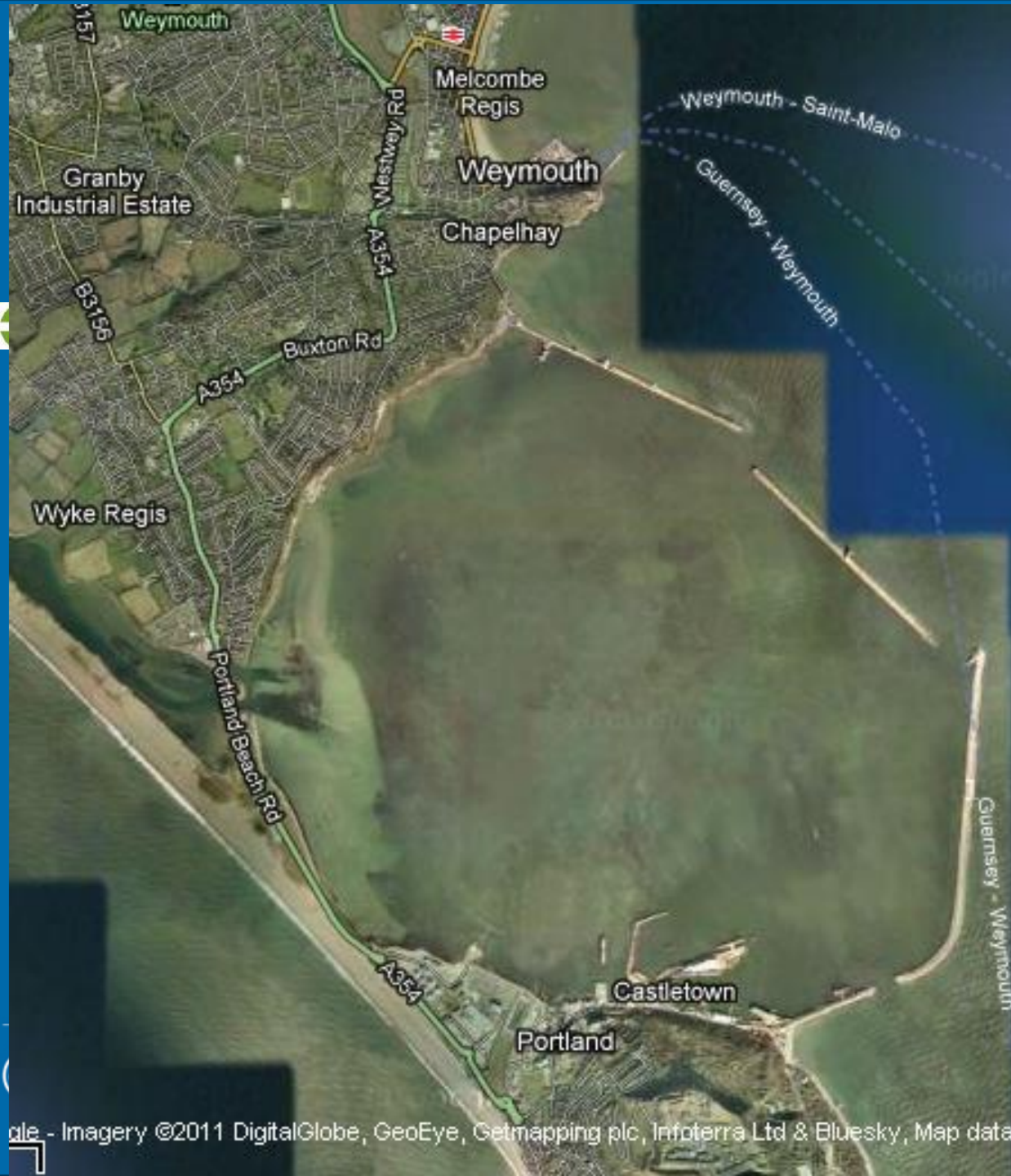






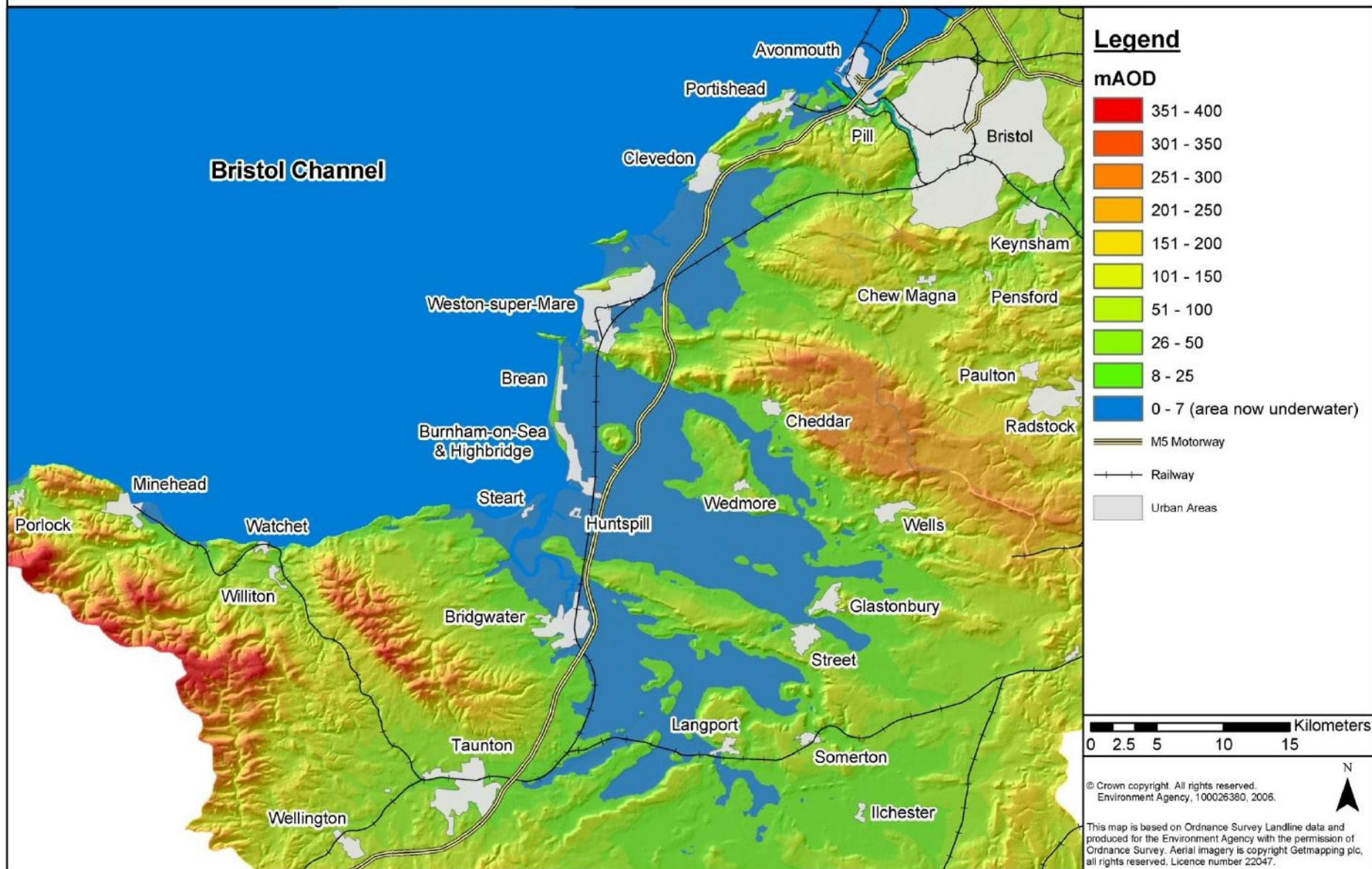
Legacy Assets







Somerset: Unprotected by Sea Defences



The Scale of the problem...

- ➡ In 2010 490,000 properties at Significant risk
- ➡ By 2035 an additional 350,000 will be at risk if investment levels maintained in cash terms.
- ➡ To maintain numbers at risk at 2010 level, investment will need to double to £1040 million plus inflation by 2035 (80% increase on 2010)
- ➡ But... Not all of that has to be funded by Central Government

Investment programme 2015-2021

£2.3 billion capital investment to reduce risk of flooding and coastal erosion

Attracting over **£345 million** in additional funding through partnership contributions



Over **£235 million** planned savings through new, more efficient working, to be re-invested in managing flood risk

45% spent on coastal flood and erosion risk management and

55% on inland flood risk management



Investment programme 2015-2021

300,000 households with a reduced risk of flooding

Households at risk will benefit from improved forecasting, mapping, telemetry and flood warnings



Better protecting **1,800** households through individual property measures

Includes **15,000** households better protected from coastal erosion

At-risk households better protected from flooding from rivers, the sea, groundwater and surface water



Investment programme 2015-2021

Total additional benefits to society from capital investment of **£30.3 billion**

£600 million in benefits through improved biodiversity and local environments



£5.1 billion in long term benefits to transport, infrastructure, commerce and industry



£1.5 billion in benefits to the agriculture sector through flood risk reduction

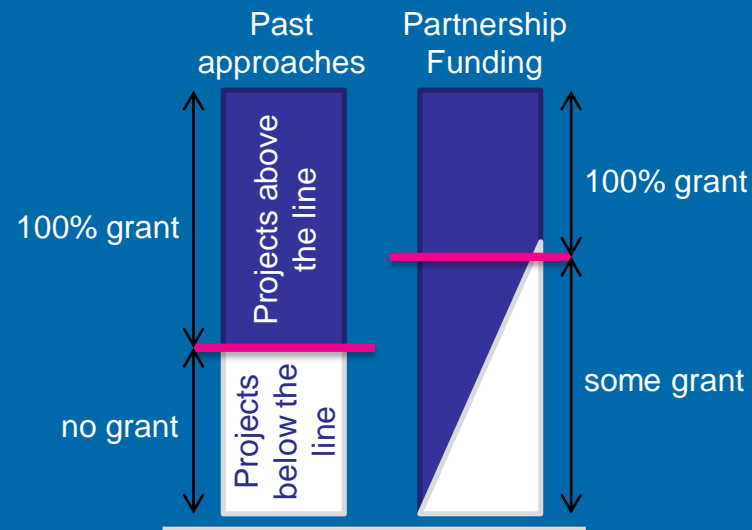


£23.1 billion in benefits through damages avoided from **300,000** households being better protected

Visit gov.uk/government/publications/programme-of-flood-and-coastal-erosion-risk-management-schemes to find out what is happening in your area

Partnership Funding

- ➡ Historically Winner Takes All
- ➡ Increasing Demand
- ➡ Limited Funding
- ➡ Encourage innovation
- ➡ Private participation
- ➡ Integrated Solutions
- ➡ Help those most vulnerable



Sandwich

Town



Enterprise Zone



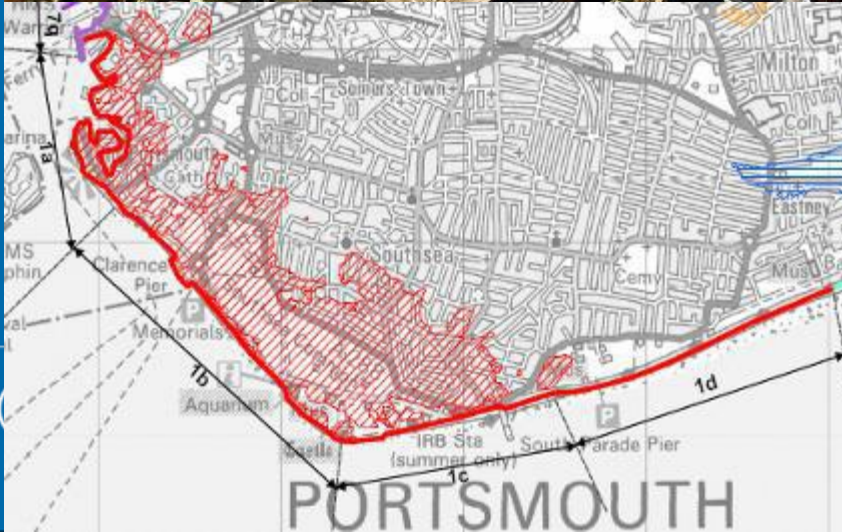
Sandwich Vital Statistics

- ➡ Will cost £23m + £3m lifetime maintenance
- ➡ FCRM economic benefits £224m
- ➡ Protects 486 homes, 90 businesses
- ➡ £12.8m FCRM GiA
- ➡ £6.5m Pfizer
- ➡ £5m Kent County Council
- ➡ Deal includes maintenance payments

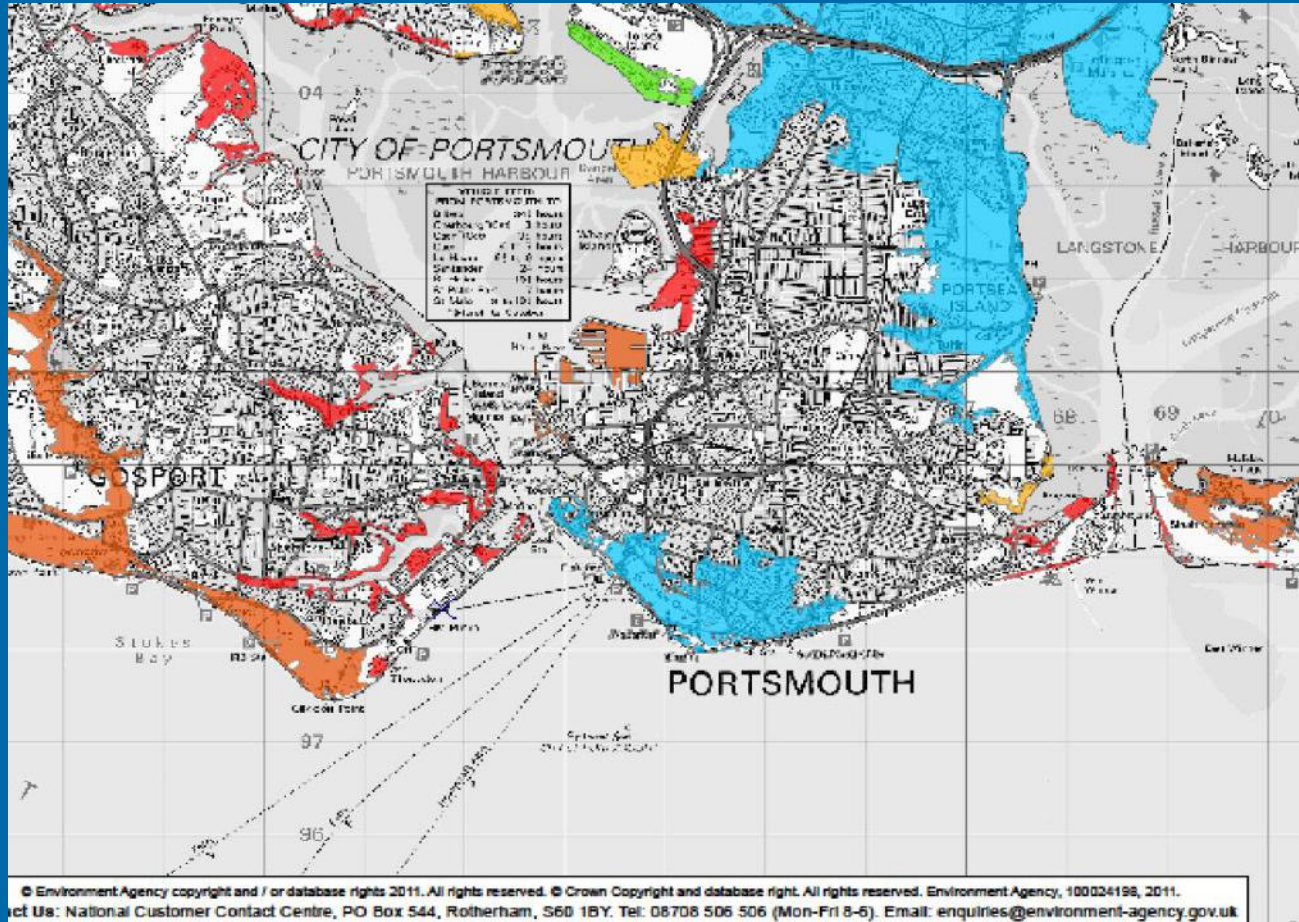
Portsmouth: strategic approach

Lower contribution need

Higher contribution need



Quantifying the funding shortfall



Cleveleys

➡ 8000 properties protected

➡ £20 million

➡ Defra/Wyre council/European regional Development Fund (ERDF) funding



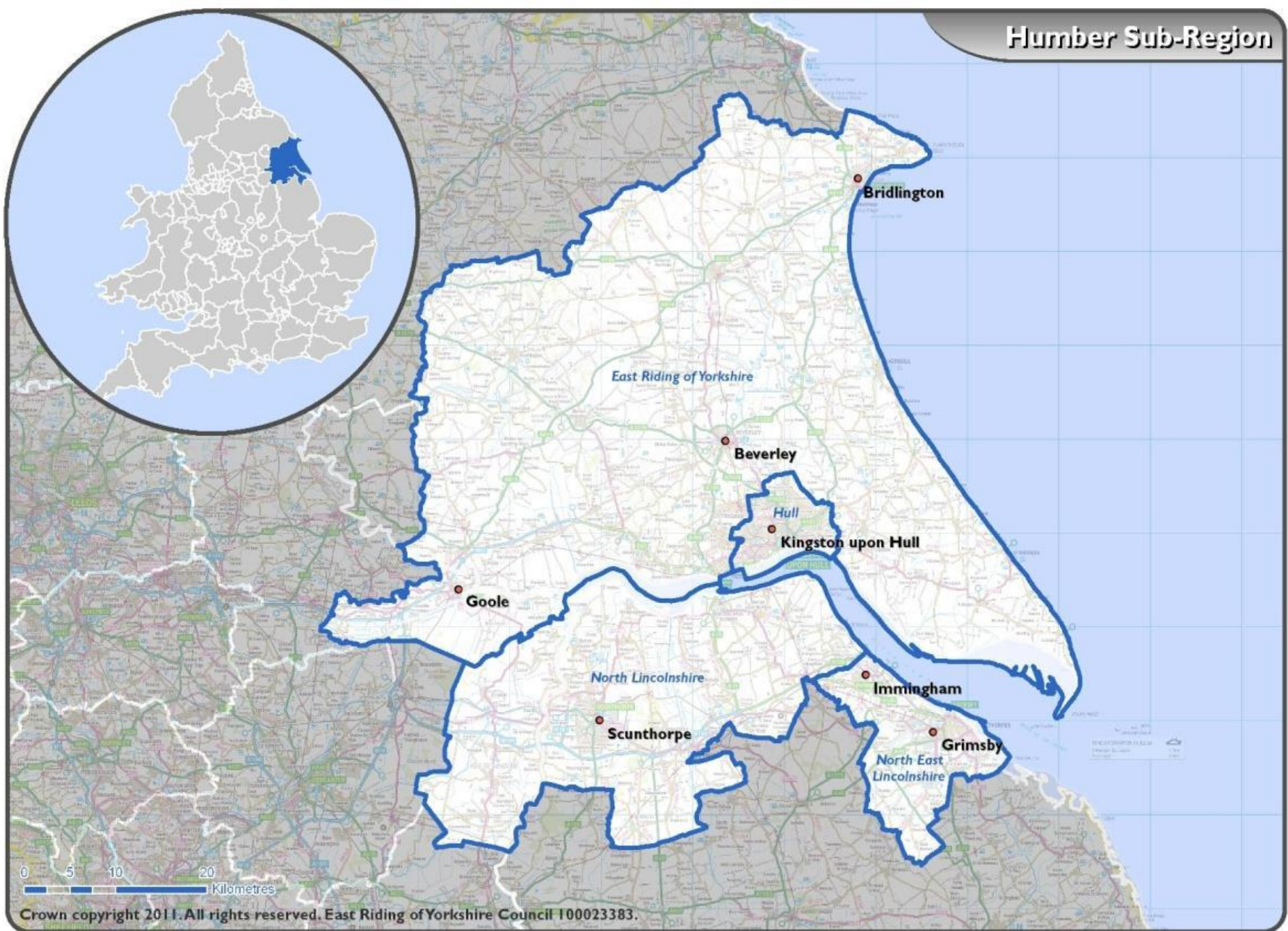
Whitby Harbour Piers

- ➡ 159 properties protected (flood)
- ➡ 684 properties protected (erosion)
- ➡ £8.5 million scheme with £4.2 million funding from Scarborough BC



The Humber Economic Ambitions





Growth investn

90% 

of Hull & East Riding properties
flooded in 2007 taken out of
similar flood risk

3,000 

jobs safeguarded by investment
in Albert Dock flood defences

3,000 

new homes enabled in North
Lincolnshire through investment
in flood defences

251,485 

sqm of commercial property
protected from flooding

£3m 

Investment in Albert Dock
flood defences

£3m 

Investment in Hull &
Holderness Flood Project

£13.3m 

Investment in Lincolnshire
Lakes Flood Risk Strategy

£28.3m 

Investment in flood defences
for Cottingham, Orchard Park,
Anlaby, East Ella and River Hull

62,228
properties
with reduced
flood risk
across the
Humber



Hope we can show as an example to the rest of the country how we can improve the speed of planning without compromising our statutory obligations” - Lord Haskins, LEP Chair.



North Lincolnshire Council

Ipswich Tidal Barrier



1970s 15km flood defence 1 in 20 SOP

New Barrier will provide 1 in 300 SOP


1,608 houses & 422 businesses at risk

Scheme cost £58.5m

FDGIA £20.2m Local Levy £1.2m

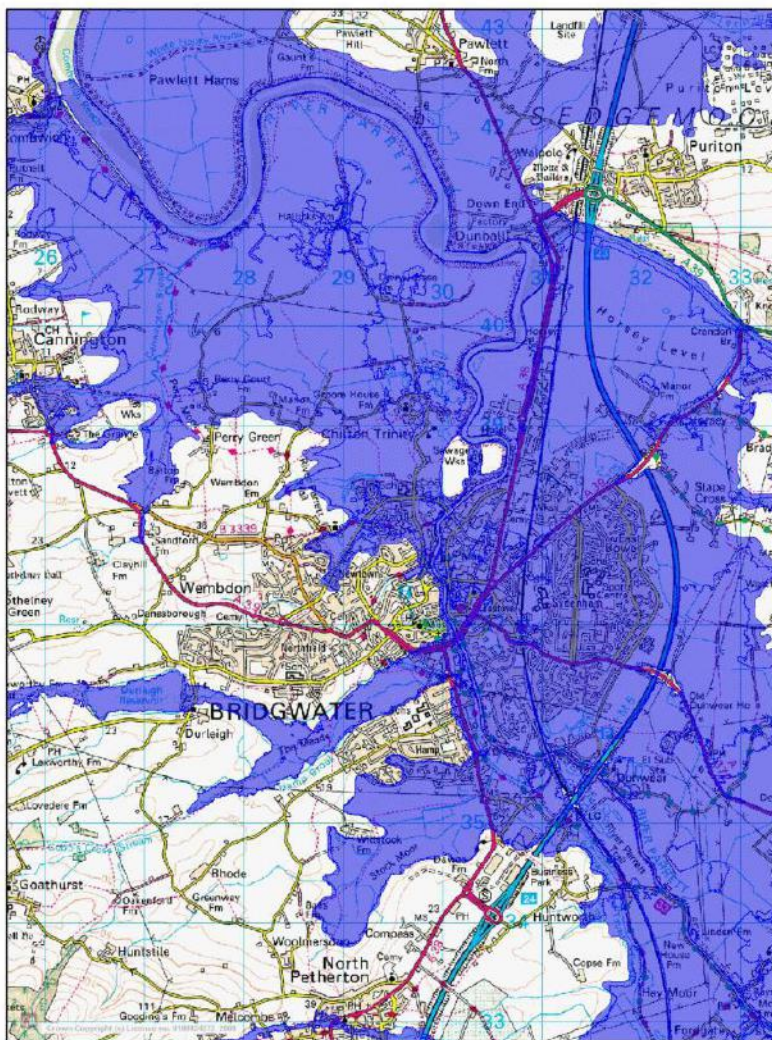
Rest £37.1m Regional Growth, LEP, IBC, Private

4,000 new jobs and 10Ha for development



The image shows a row of historic buildings in Bridgwater, England, viewed from across a river. The buildings are multi-story, with various colors including white, red, blue, and brown. Some have decorative gables and many windows. A stone wall runs along the riverbank in front of the buildings. In the foreground, there is a grassy bank with some tall grass and a tree branch with leaves hanging down from the top. The sky is blue with some clouds.

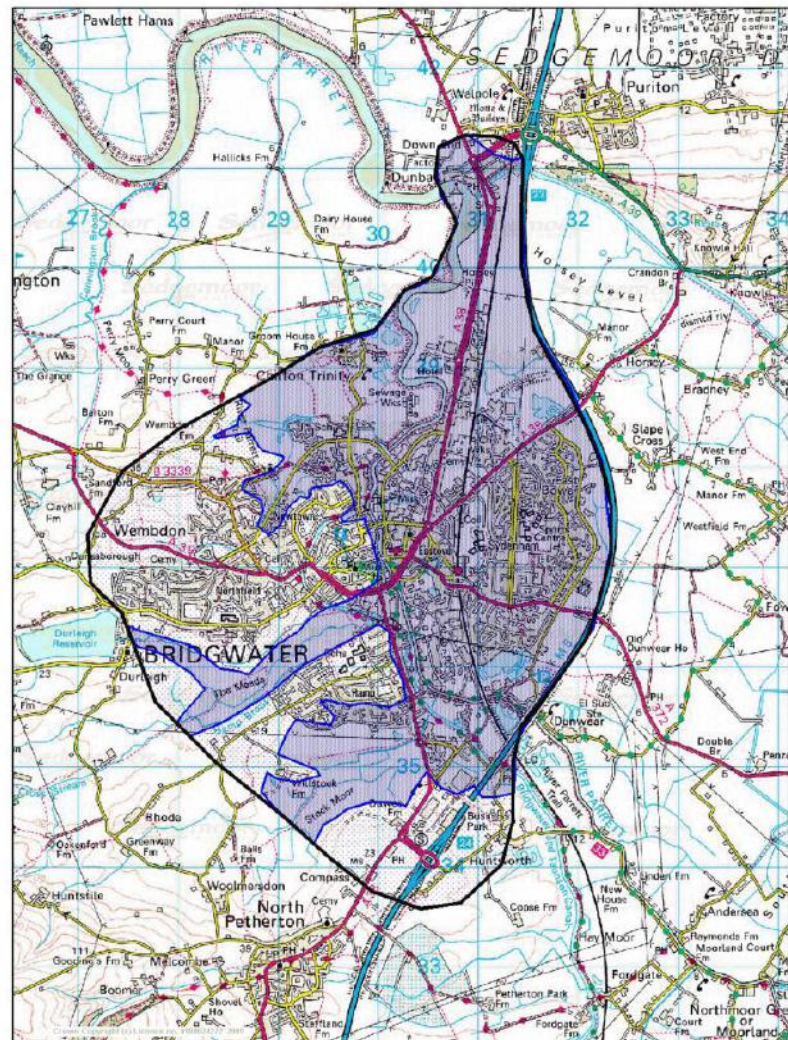
Bridgwater: Case Study



Sedgemoor
IN SOMERSET

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Date 3/7/2009
Scale 1/40000
at A4 size



Sedgemoor
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The Planning Background

- ➡ Planned Growth and urban regeneration in Bridgwater required a strategic rather than a piecemeal approach to flood risk.
- ➡ Preferred flood risk solution is a Surge Barrier known as 'The Parrett Barrier' - estimated cost £25m. Identified in Lower Parrett and Tone flood Risk Management Strategy.
- ➡ Need for policy approach to deal with PPS25 requirements for new development to be safe for its lifetime taking climate change into account
- ➡ Draft Supplementary Planning Document (SPD) was completed in 3 months – EA/SDC. – delivers a 'roof tax' on all new development
- ➡ In Excess of £3million already collected and held by SDC

Illustrative of proposed River Parrett Tidal Surge Barrier – Gates Closed



Weston-super-Mare



Weston Villages – Urban Extension

- ➡ North Somerset Council identified as 2nd highest flood risk in country.
- ➡ Partner with NSC since 2006 to develop the Weston Vision. Integrated plan for flood risk management, employment, housing, regeneration and tourism
- ➡ Sea Defences and Seafront Enhancements completed 2010.
- ➡ The Weston Villages urban extension will include 5,500 new homes and at least 37.7ha of employment land
- ➡ Extensive flood risk to existing properties and Weston Villages addressed through comprehensive £10million flood management solutions to the Uphill Great Rhyne & River Banwell.

- Low Standard of Flood Defence
- Decline in public realm
- Few quality hotels
- Decline in tourism numbers
- Poor public image



Defra – the wider picture

High priority but little funding nationally

Integrated bid proposal – linked to future regeneration

“demonstrates a joined up approach from government by allowing the Council to make use of regeneration funds which might otherwise be lost”



Seafront Enhancements

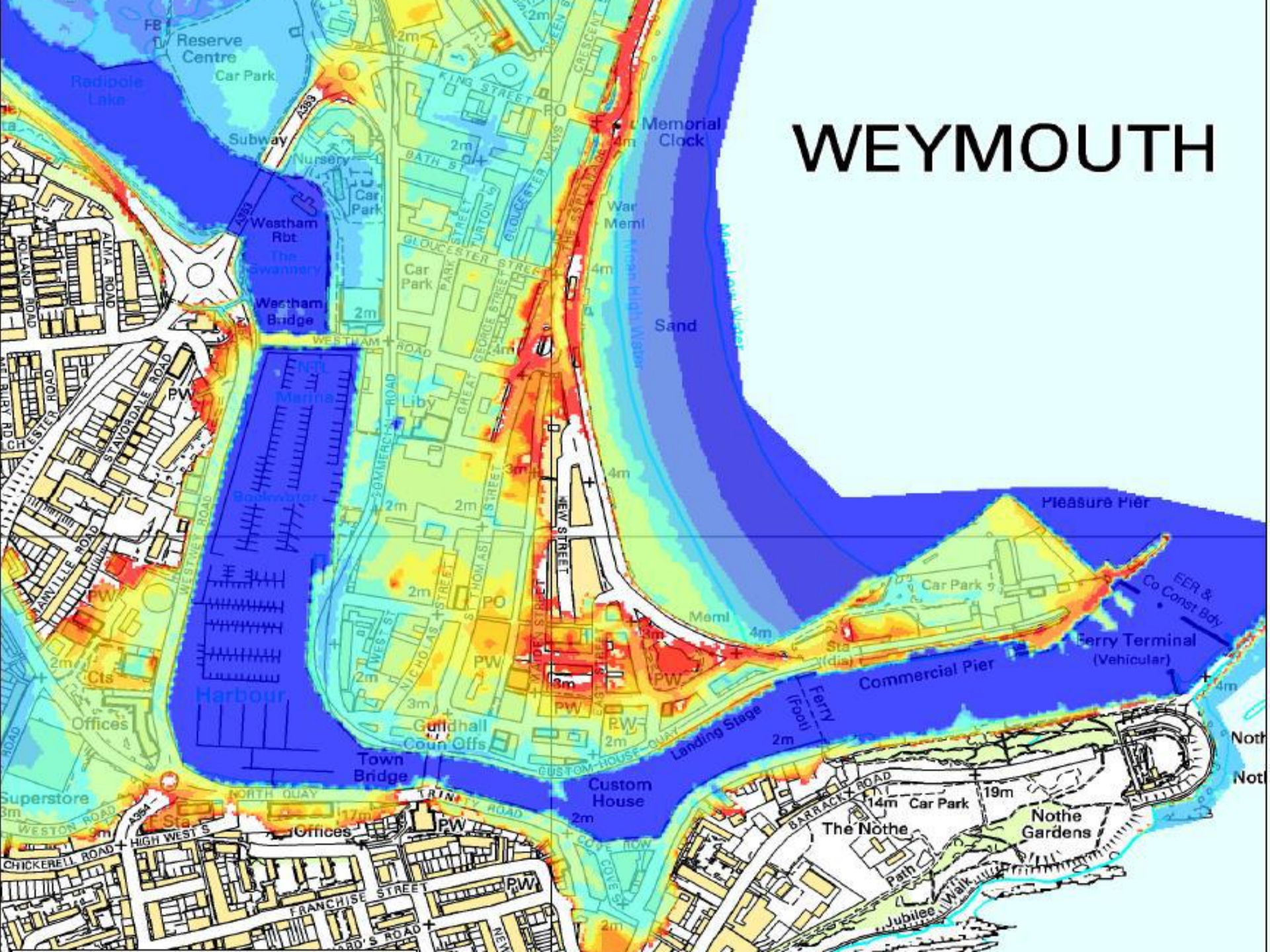


Economic impacts

- ➡ Tourism generates 200m/yr plus
- ➡ 7,000,000 visitors in 2010
- ➡ Increased spend/visitor from £41.24 in 2007 to £57.98 in 2011



WEYMOUTH



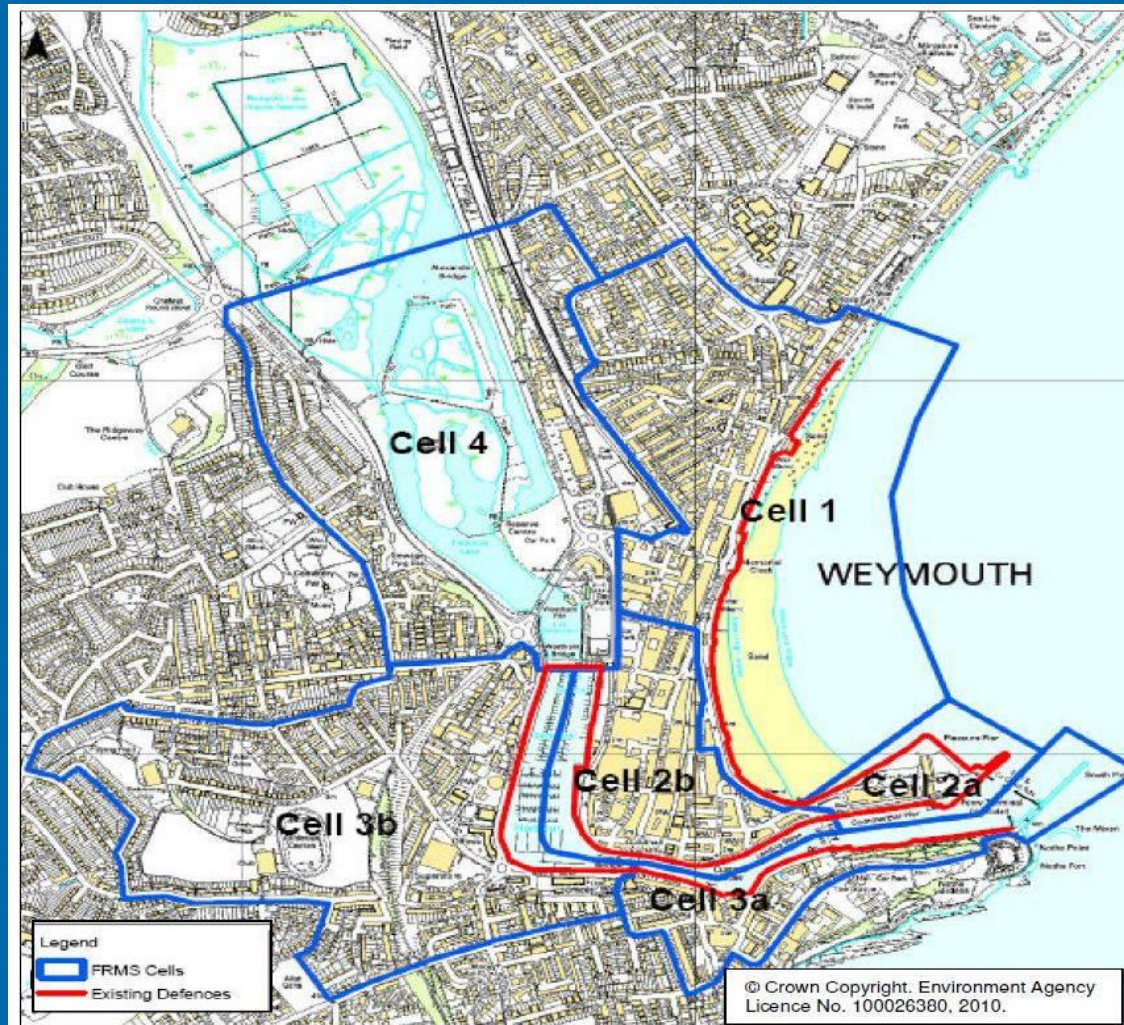
The proposed flood defence scheme does not meet national eligibility criteria for Defra Grant in Aid funding

This means that in the short term, development will be constrained (due to flood risk) and in the longer term the town will suffer more frequent direct economic, social and environmental flooding impacts

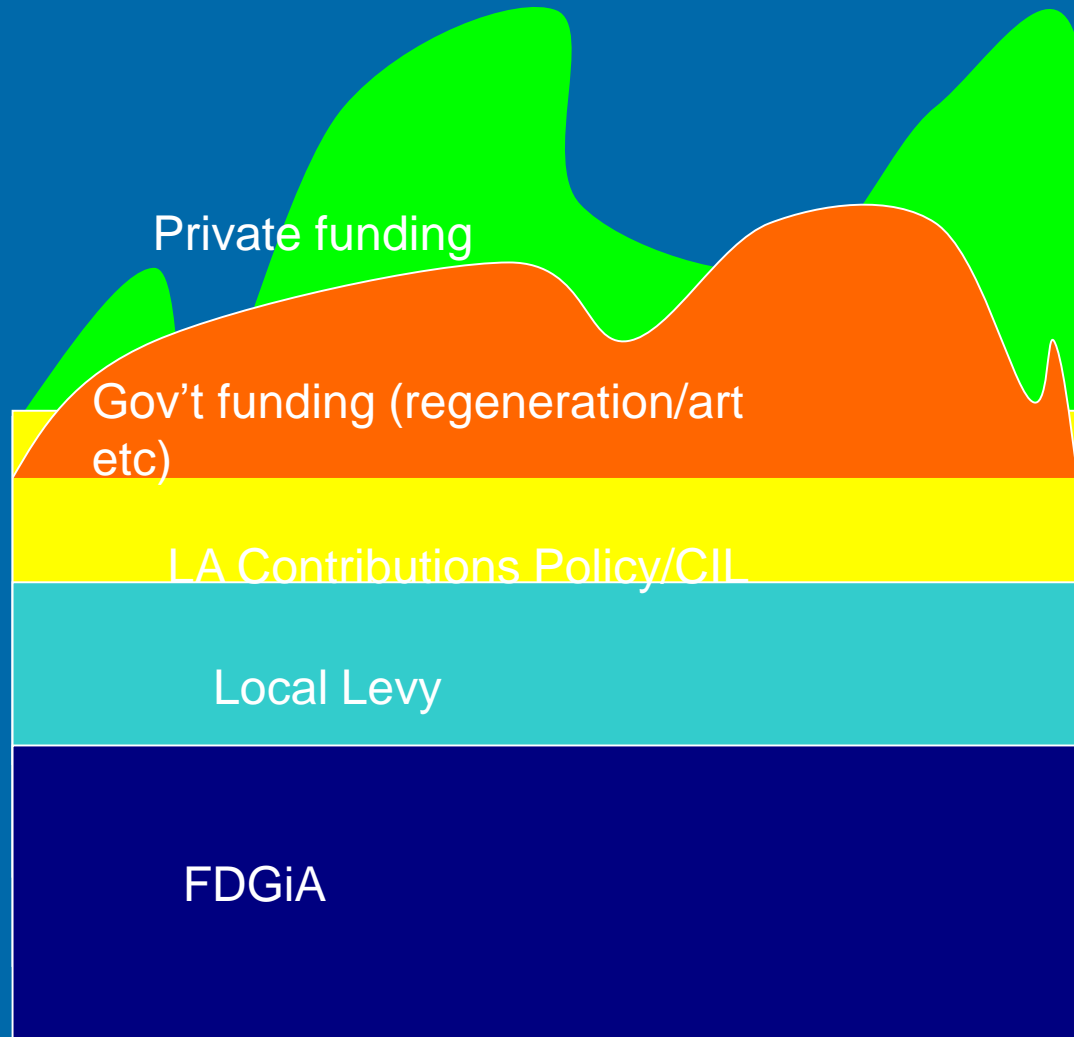
The Opportunity...

A phased approach
&

An agreed mechanism
for contributions



Available Funding



The Local Planning Background

- ➡ *Strategic flood defence solution required if significant planned growth at Weymouth is to be accommodated, given extent of flood risk.*
- ➡ *Preferred solution is:*
 - *Replacement of quayside defences*
 - *Wave return wall and cut-off to Esplanade*
 - *Tidal surge barrier to Weymouth Harbour*
 - *Estimated cost £66 million*
- ➡ *Delivered through SPD, but will be superseded by Community Infrastructure Levy (CIL) 2014*

Recommendation

Short Term (0-20yrs)

Medium Term (20- 50yrs)

Long Term (50-100yrs)

Improve defences

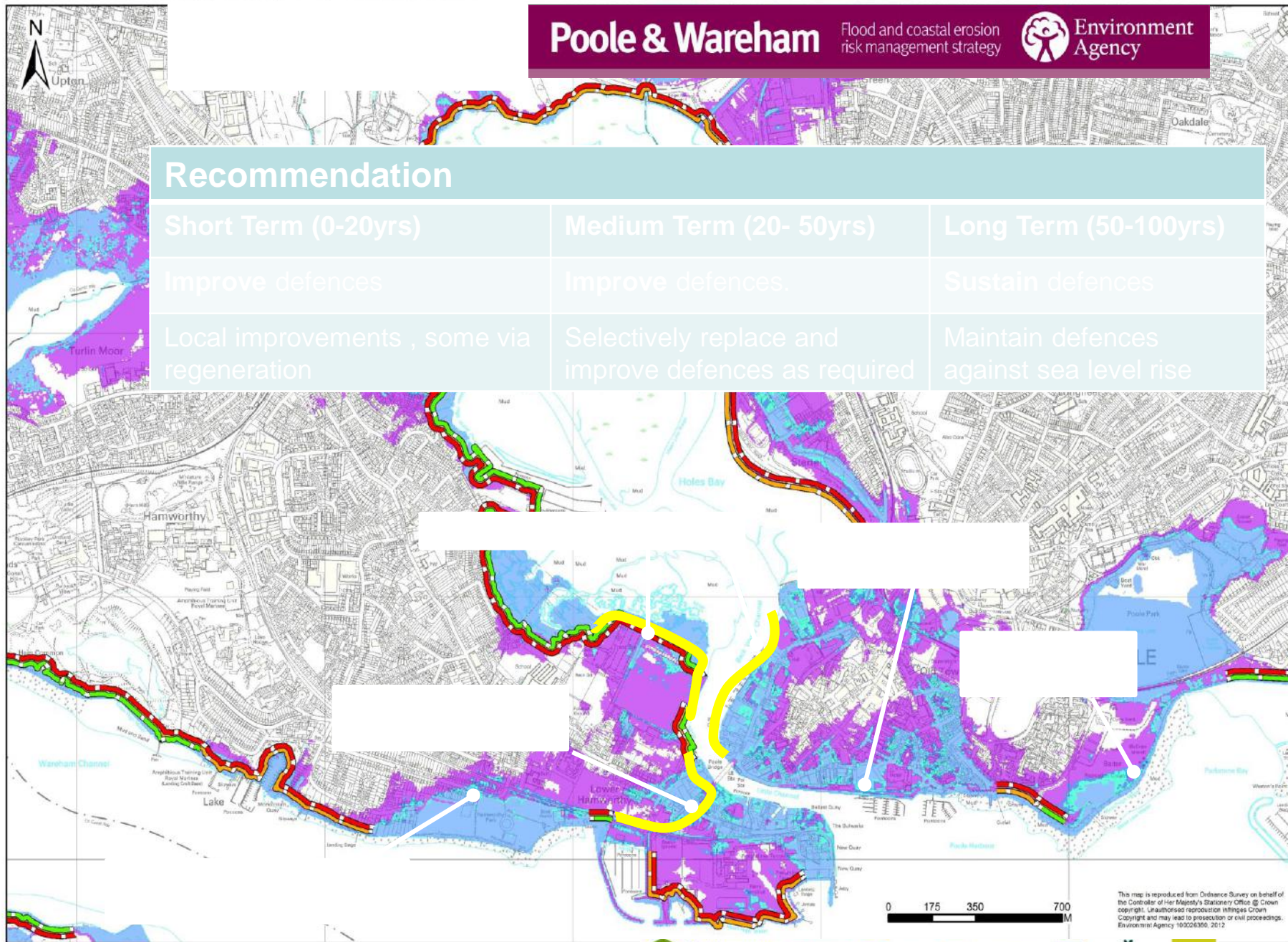
Improve defences.

Sustain defences

Local improvements , some via
regeneration

Selectively replace and
improve defences as required

Maintain defences
against sea level rise



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Environment Agency 100025360, 2012

Dealing with Residual Flood Risk

- ➡ Locating highly & more vulnerable uses such as residential on parts of the site at less risk of flooding
- ➡ Using ground floors of buildings for less vulnerable and water compatible uses i.e. commercial development, non residential institutions, marinas, amenity open space, nature conservation, car parking
- ➡ Raising floor levels where appropriate in design terms & taking into account access considerations
- ➡ Using flood resilient construction methods such as – water resistant materials for floors, walls & fixtures, siting electrical controls, cables etc above flood level.
- ➡ A town centre flood warning & evacuation plan

Flood Risk Management Strategy

- Infrastructure delivery through development and regeneration
- Community Infrastructure Levy

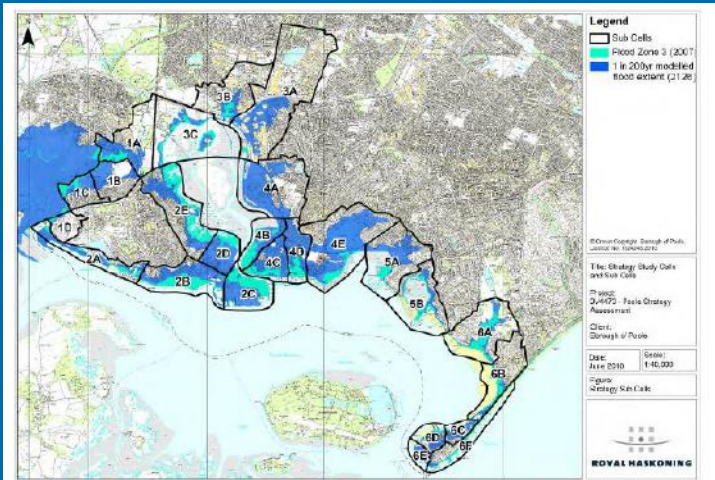


Figure 5.1: Strategy Study Cells and Sub Cells



Conundrum/Opportunity?

- ➡ Investment in Flood Defence infrastructure significantly boosts confidence and inward investment
- ➡ Average ratio of £8 benefit for every £1 invested

Make sustainable development easier

- ➡ Offer joint Client Relationship Manager (CRM) - coordinator and 'enabler',
- ➡ Respond promptly & collectively to investors' requests for early engagement
- ➡ Set out expectations, standards and requirements early, including the information needed to determine permits and licenses.
- ➡ Meet statutory response times. Where this is not possible, let Statutory Agency and Local Authority CRMs know within 7 working days.

Lessons Learned

- ➡ Developing long term relationships takes time & effort
- ➡ Get in early
- ➡ We have to 'come to the table' with something to offer
- ➡ Different organizations have different timelines, priorities and drivers
- ➡ Flexibility and openness are fundamental
- ➡ Taking and sharing measured financial risks
- ➡ The overriding control on this engagement model is **development viability** – i.e the size of the 'cake' & can only be cut so many ways
- ➡ Partnership working is all about compromise – understanding and working with the agenda of others
- ➡ Understand and bridge future funding gaps