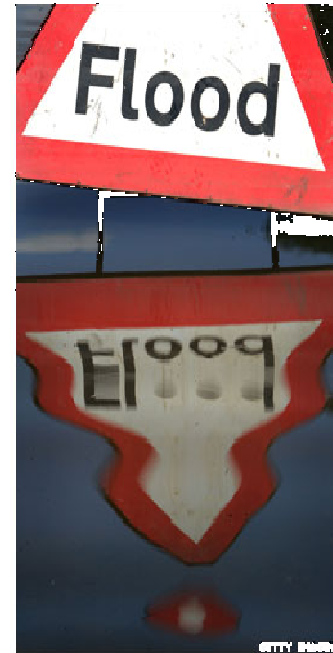


Business Continuity in a Changing Climate: Would your Business Stay Afloat?



Mark Russell

Flood Forecasting Manager, Environment Agency (SW)

ENVEC, 8th October 2009, Winter Gardens, Weston-Super-Mare

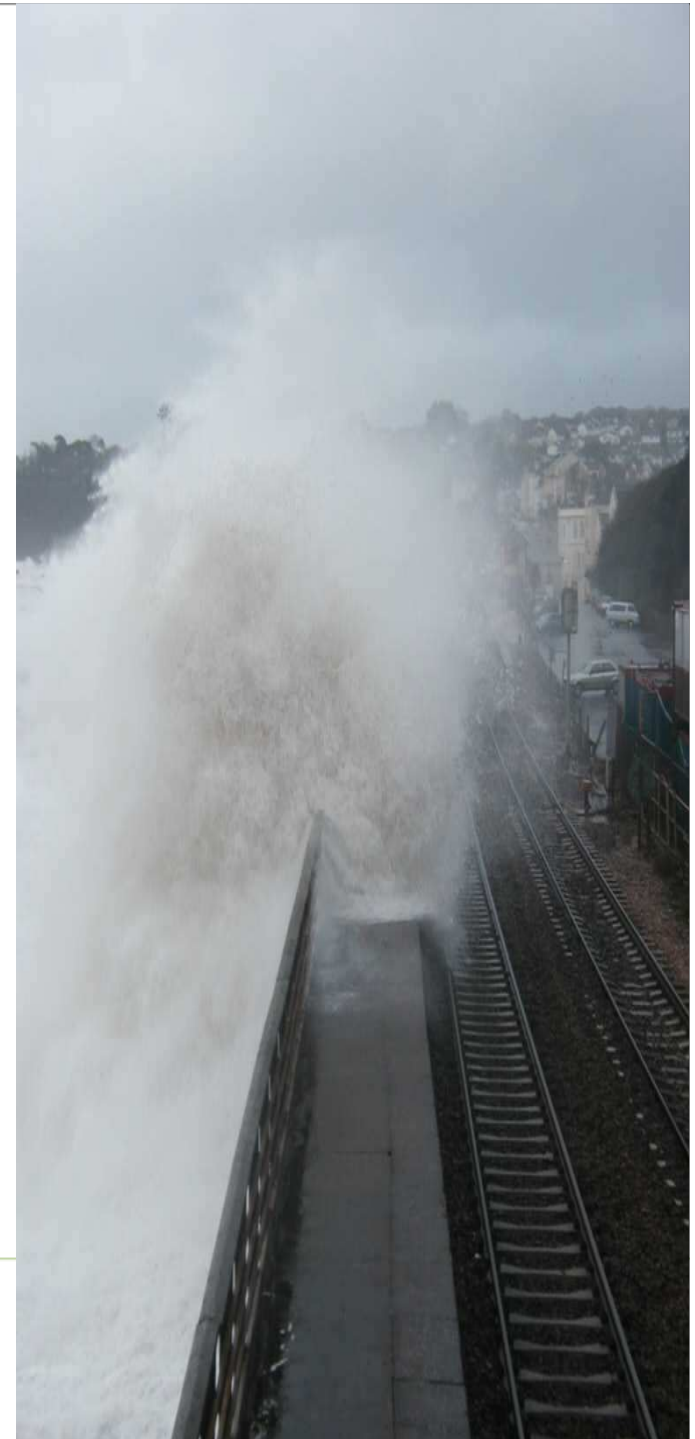


Climate change impacts on flood risk in the South West

Climate change impacts – tides

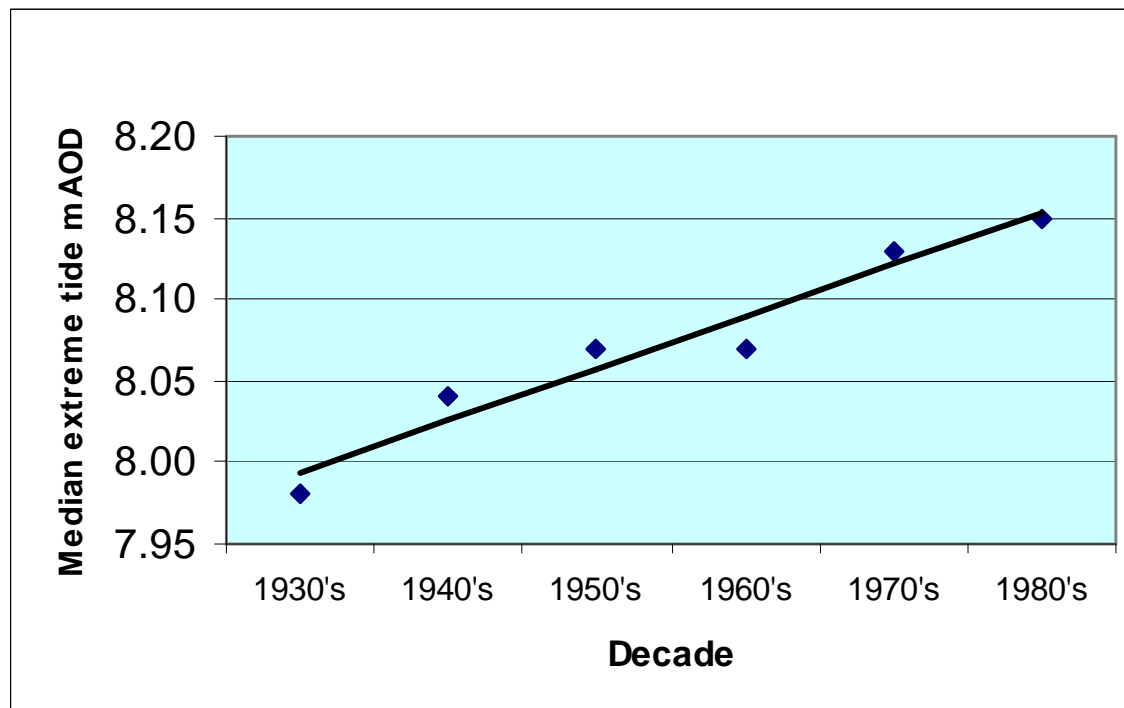
- ➔ New Areas at Flood Risk
- ➔ Longer Duration of Flood – Higher low tides
- ➔ Greater damage from Waves
- ➔ Existing Areas at Increased Flood Risk.

Main line railway to Devon and Cornwall, Dawlish

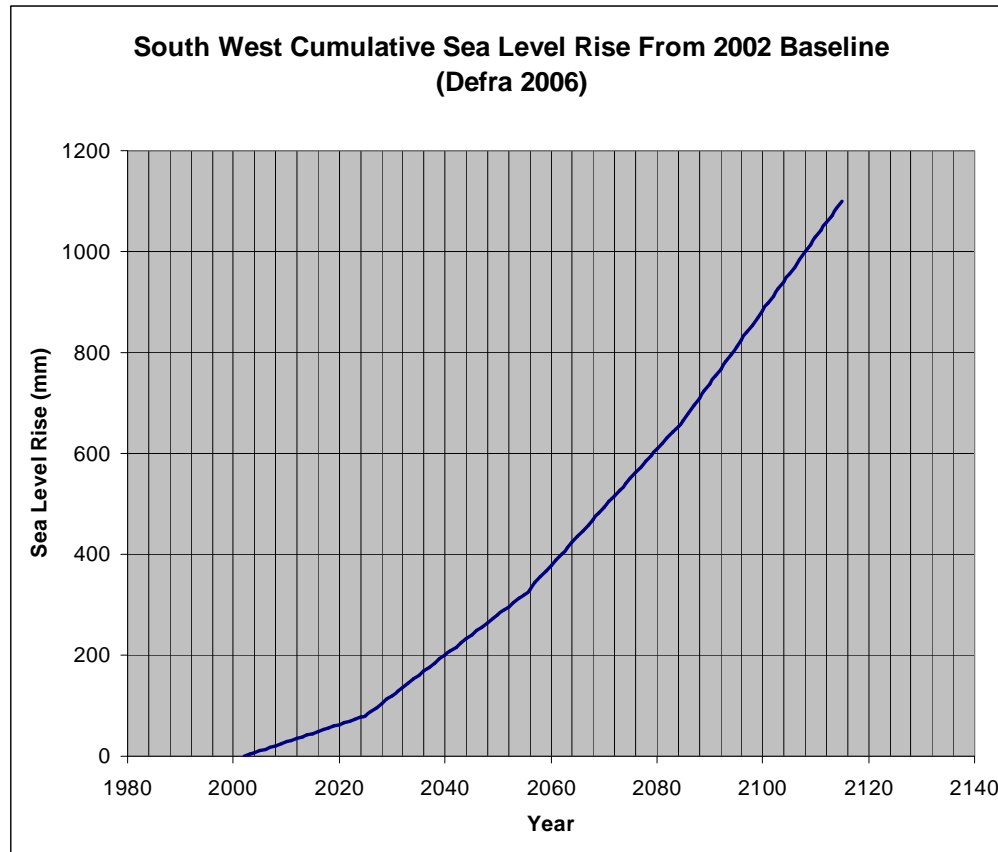


Climate change impacts - tides

➔ Extreme tide levels at Avonmouth

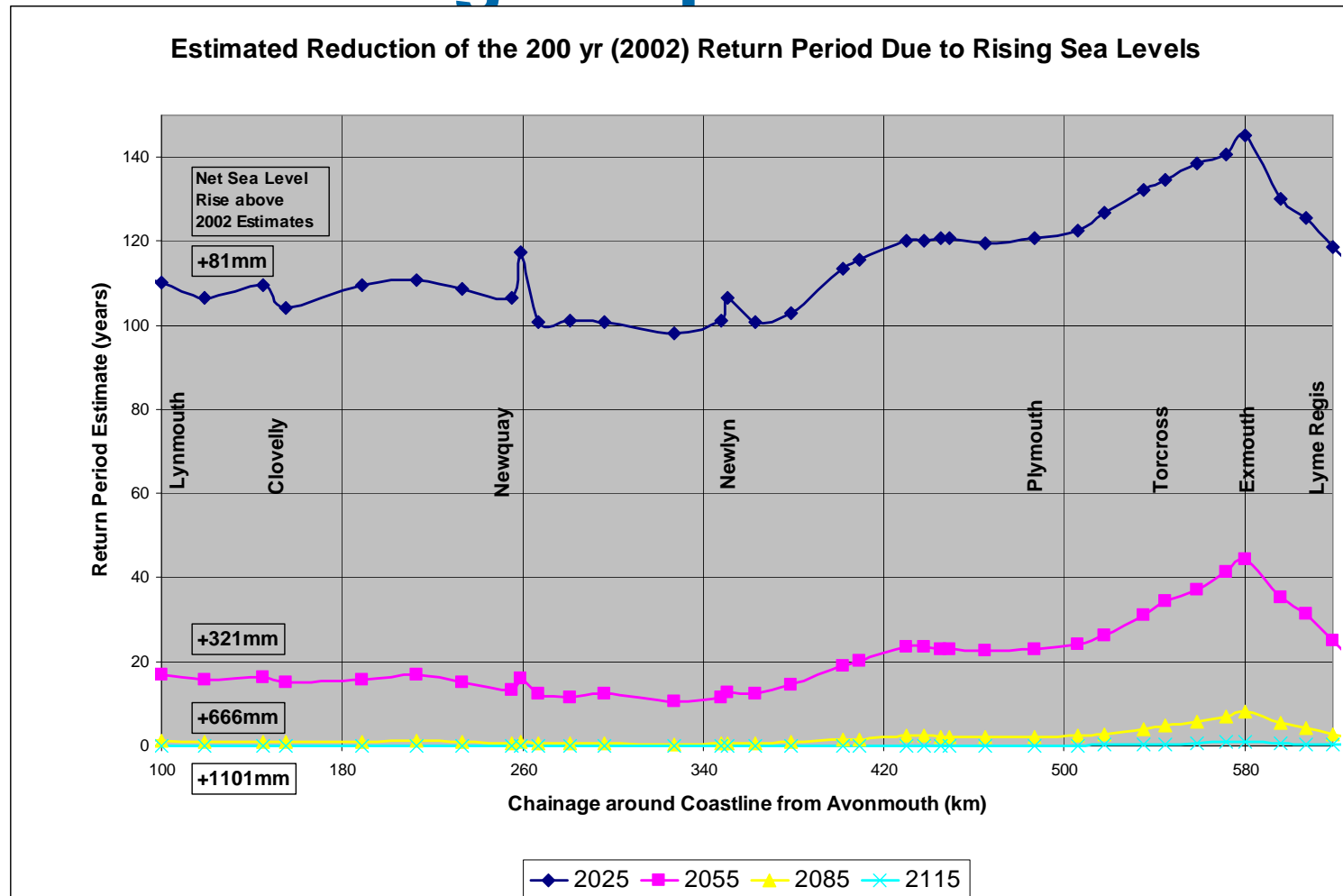


Climate change impacts - tides

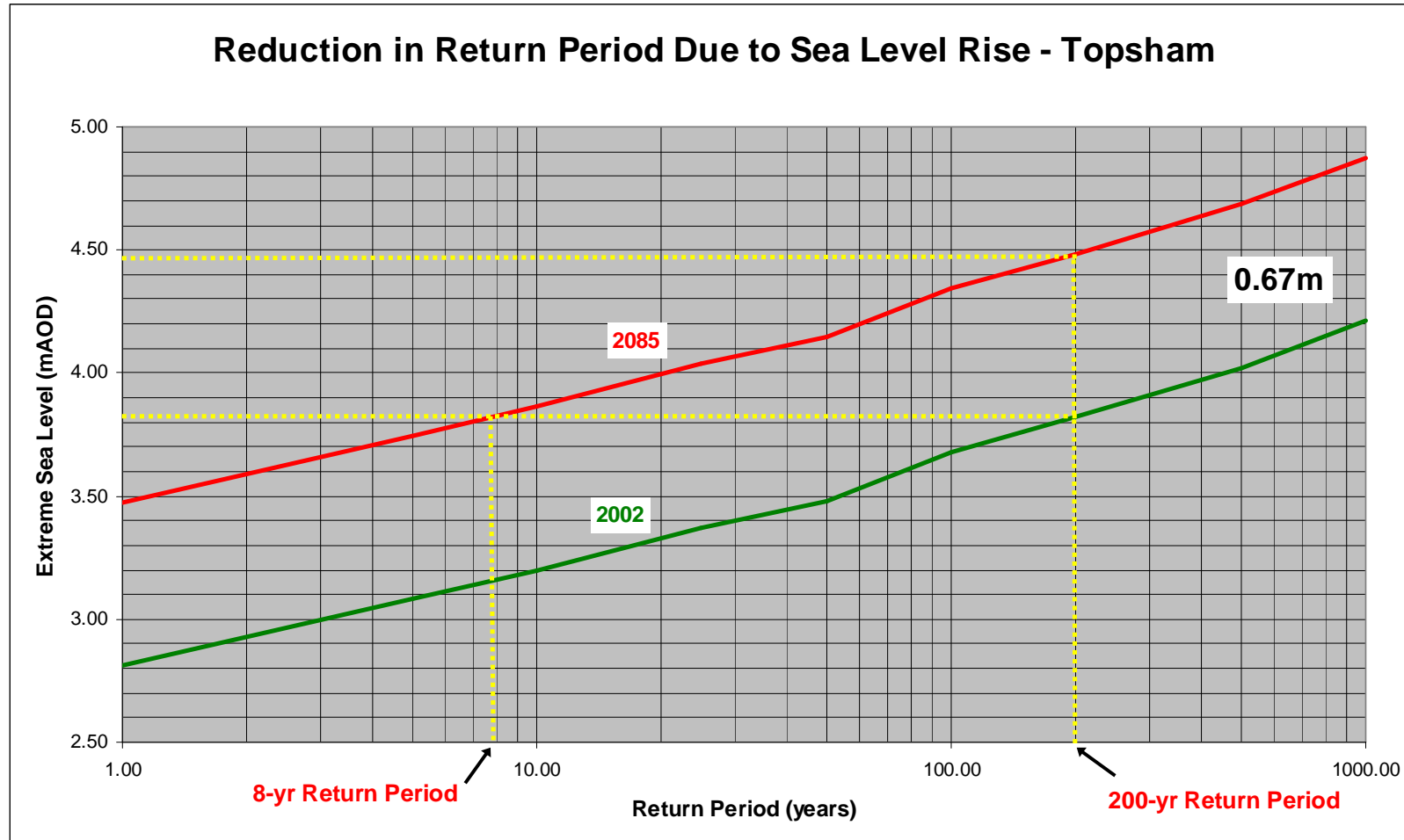


Based on UKCIP 2002

Climate change impacts - tides



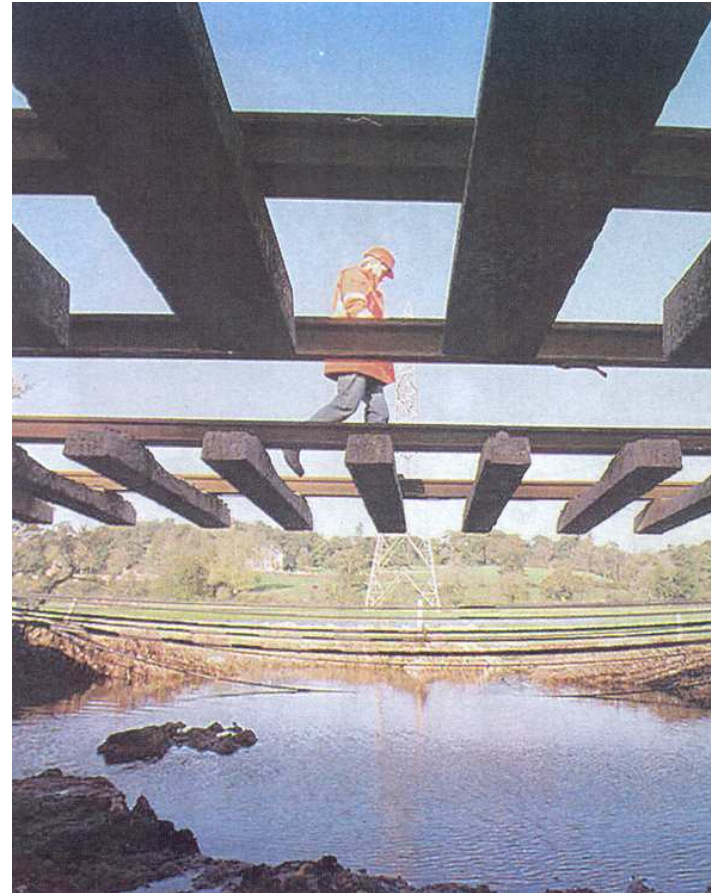
Climate change impacts - tides



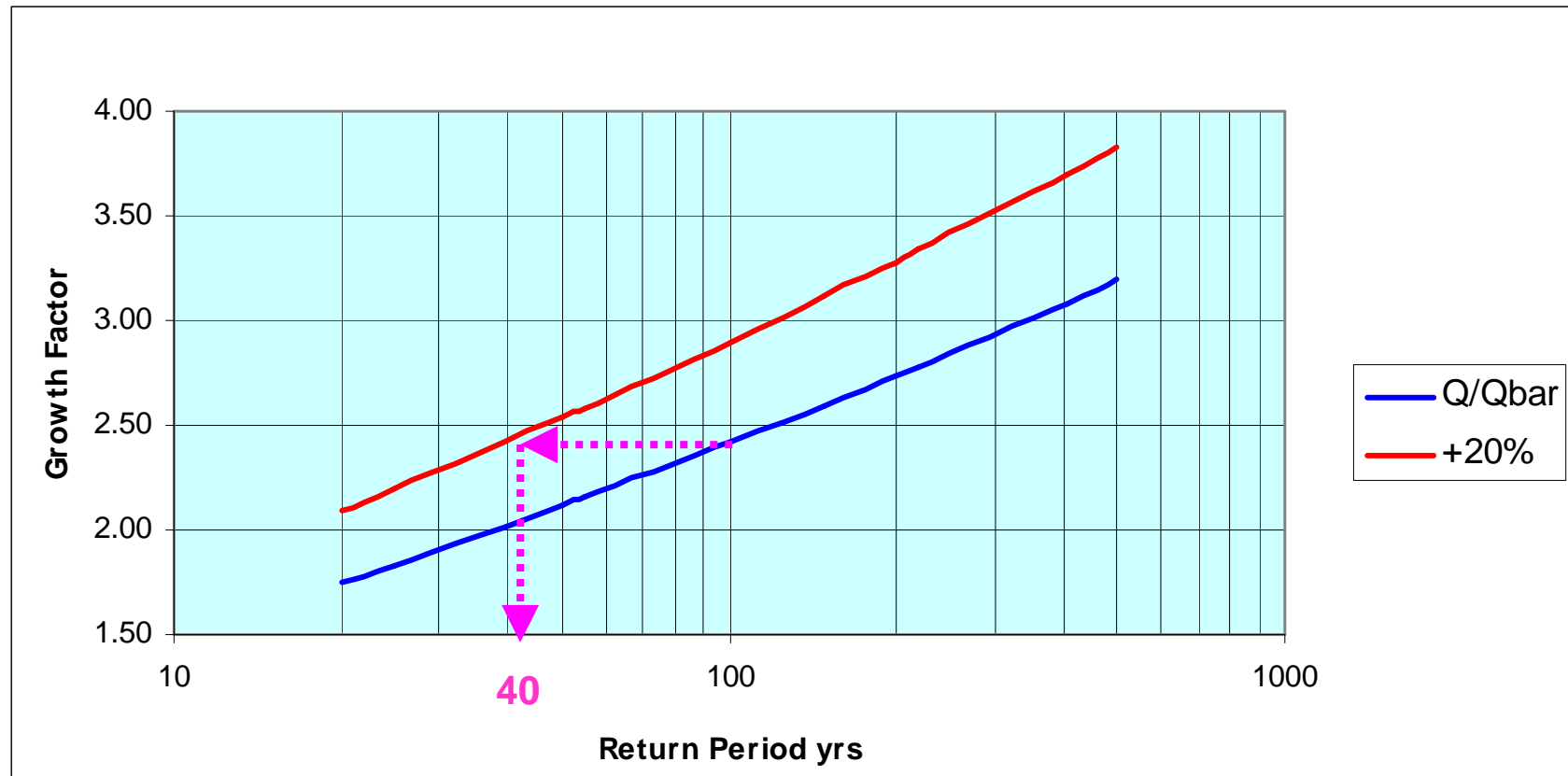
Climate change impacts - rivers

- ➔ Defra advice – up to 20% extra peak flow
- ➔ Low confidence –Based on Severn & Thames
- ➔ Extents in well defined floodplain unlikely to change a great deal
- ➔ Change in frequency is likely to be most notable difference.

Mainline railway for Devon and Cornwall, Exeter, Dec 2000



Climate change impacts - rivers





Impacts of flooding on business continuity

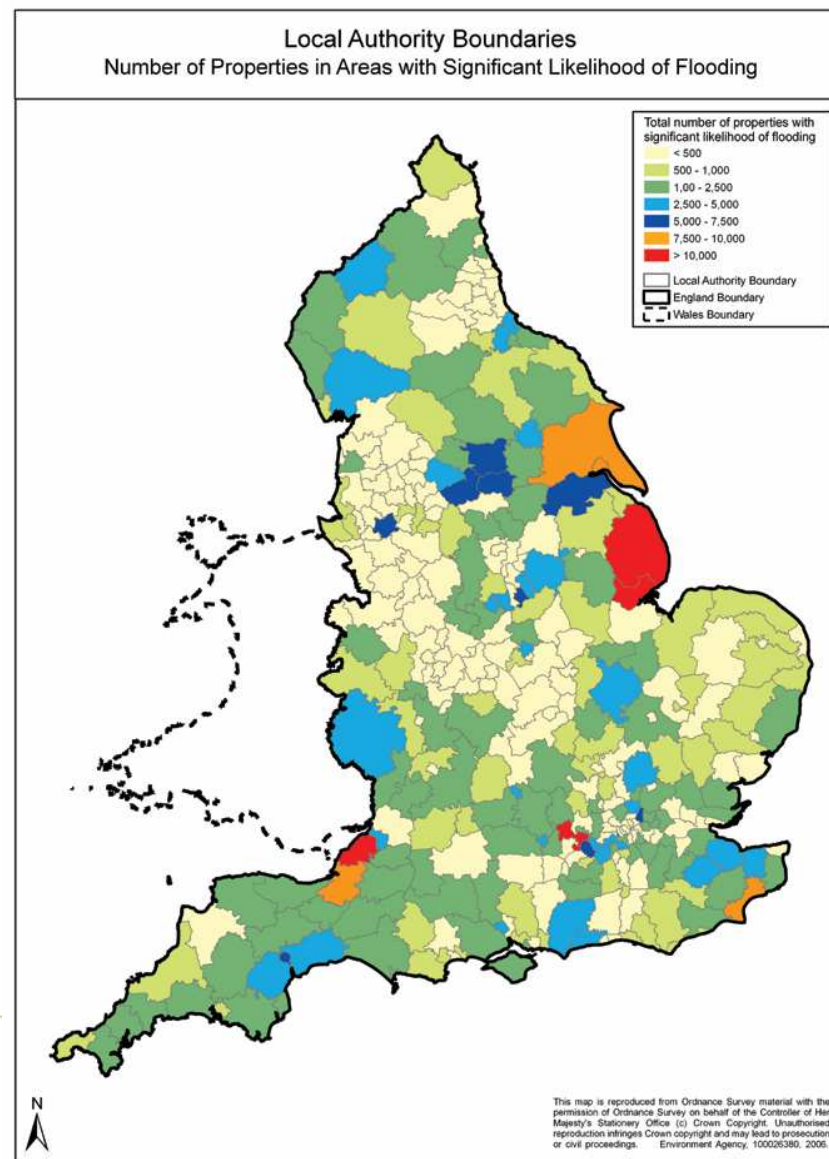
Impacts of flooding on business continuity

When considering how climate change is going to affect the UK, it's useful to understand the risks that current climate already poses to individuals, landscapes, organisations and the economy, before moving on to explore future climate risks. (UKCIP, 2008)



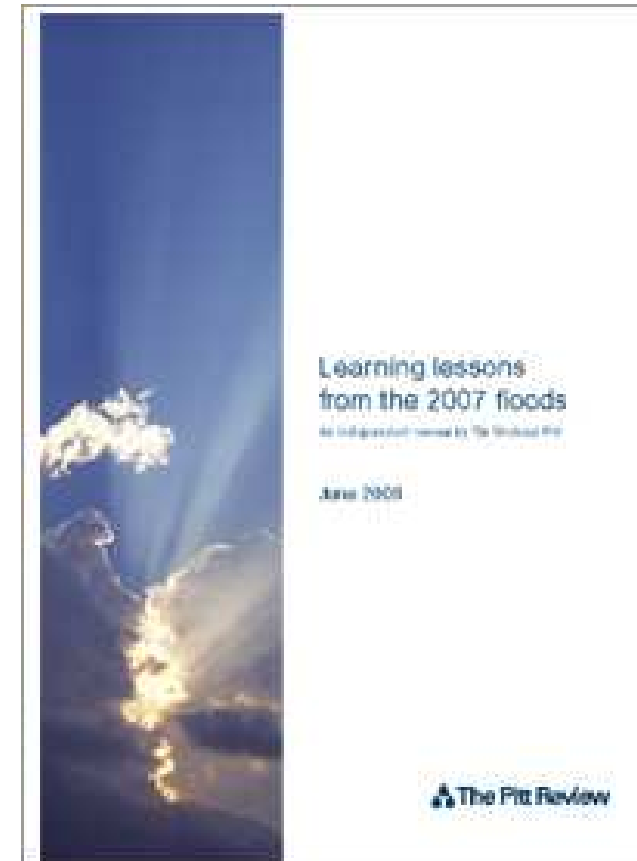
Impacts of flooding on business continuity

- ➔ 1 in 6 properties at risk of flooding
- ➔ Over 175,000 businesses in the floodplain in England and Wales
- ➔ Flood damage often > £50,000



Impacts of flooding on business continuity – Summer 2007

- ➔ 43,000 homes and 5,000 businesses
- ➔ Average period of disruption was 8.75 days
- ➔ 12% said they had taken action to mitigate against the effects of flooding
- ➔ 1.6% were considering relocating to premises less vulnerable to flooding



Impacts of flooding on business continuity – Summer 2007 – An example from Sheffield

- ➔ 1:30 pm
- ➔ 1:50 pm
- ➔ 2 pm
- ➔ 3:30 pm
- ➔ Next day

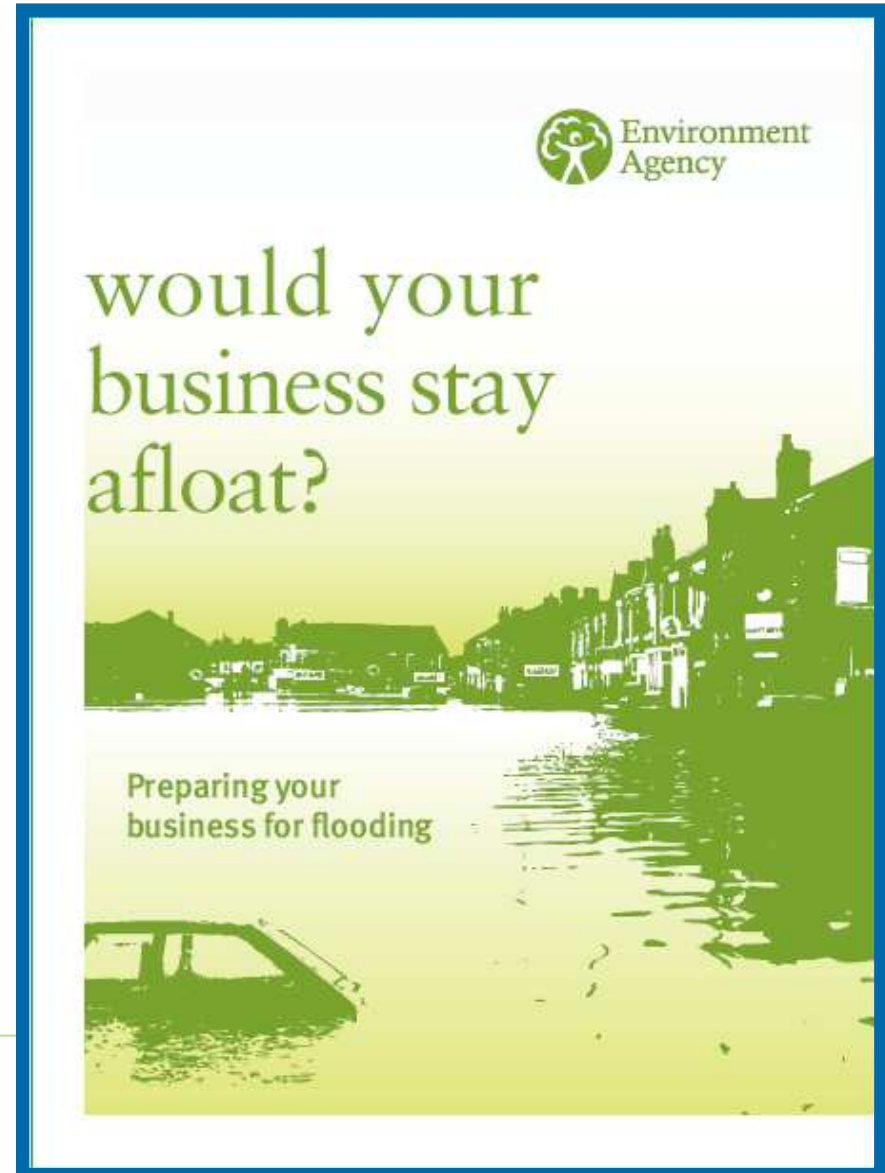




Environment Agency Actions

Environment Agency Actions – Would your business stay afloat?

- ➔ National campaigns
- ➔ National toolkits –
Would your business stay afloat?
- ➔ Targeted local campaigns
- ➔ Partnerships



Environment Agency Actions – Would your business stay afloat?

- ➔ Know if you are at risk
- ➔ Sign up for flood warnings
- ➔ Prepare a flood plan

This is a draft template for a business that you can use as a guide

Flood plan for Jax Bloop Ltd dated 1 December 2008

Registered address

Postcode

Staff contact list
please continue on a separate sheet if necessary

Name	Address	Telephone/ mobile	Emergency contact	Emergency telephone and address
Jax Bloop	32 The Drive, Highway, HT1 4SE	01234 567890 (0789) 4321 901	Jax Bloop	31 The Avenue, Highway, HT1 4SE

Note staff who may require assistance in the event of a flood.

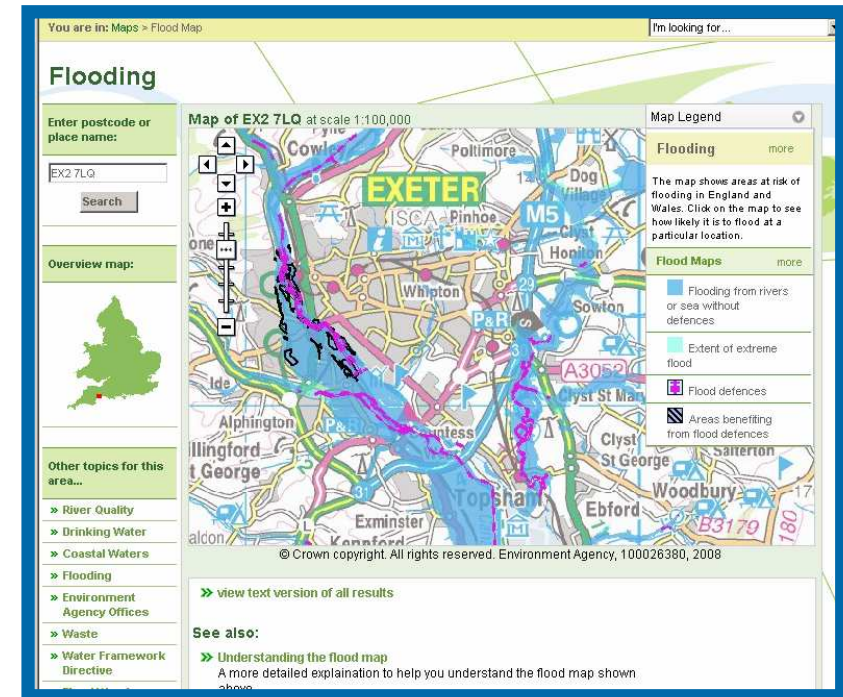
Members of staff with special needs	Office location

Key locations

Service cut-off	Description of location
Electricity	
Gas	
Water	

Answer the following if applicable

	Description of location	How to protect from a flood (e.g. move, cover, tie down)
First Aid Kit		
Oil based products (gasoline, oil, cooking oil etc.)		
Chemicals (including cleaning products)		



Environment Agency Actions – Would your business stay afloat?

➔ SMEs are difficult to engage:

- ➔ Not located near an obvious source of water
- ➔ Area had not been flooded before
- ➔ Flooding seen as 'once in a lifetime' event
- ➔ Too many other problems to worry
- ➔ Not their responsibility

Environment Agency Actions - Caravan and Campsites



Environment Agency Actions – Caravan and Campsites



Flood action!

In the event of a flood warning



Gather your family and leave the caravan



Report to your assembly point at



Do not walk or drive through floodwater

Six inches can knock you off your feet, two feet can float your car



In an emergency call 999

Site manager: _____

For flood advice phone
the Environment Agency's
Floodline **0845 988 1188***



*BT calls cost up to 2p/min plus 6p set-up fee from your home. Other providers and mobiles may vary.

GESWOR0800X-EP

Person responsible for
activating evacuation plan
Emergency contact number



flood evacuation plan

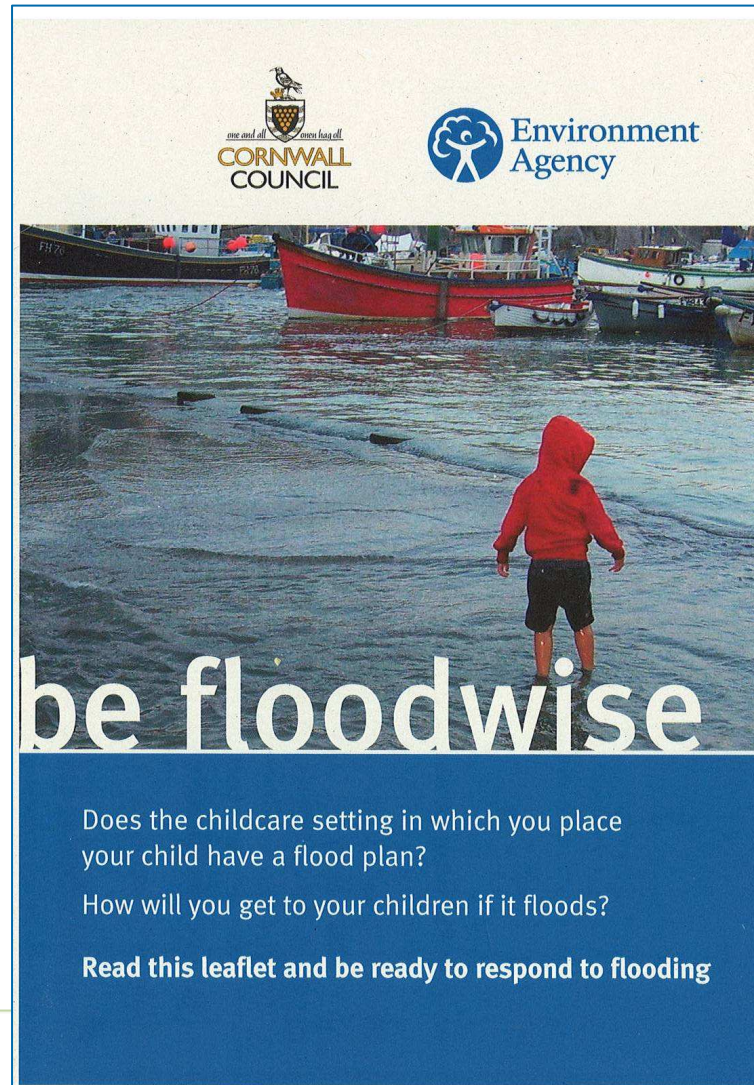
For caravan and camping sites

Site name	<input type="text"/>	Address	<input type="text"/>	Tel:	<input type="text"/>
Floodline quickdial number	<input type="text"/>	Which Environment Agency flood warnings are you registered to receive?	<input type="text"/>		
Local flood warning trigger <small>i.e. when water reaches bottom of the bridge, sound siren</small>	<input type="text"/>				
Evacuation Assembly Point	<input type="text"/>				

Be prepared for flooding. Act now



Environment Agency Actions – Parents of children under 5



Environment Agency Actions - partnerships



Future proof: Preparing your business for a changing climate

Summary

- ⇒ Flood risk is already a significant business risk in the South West
- ⇒ Flood risk is likely to increase in the future from climate change
- ⇒ Many businesses are not adapted to current flood risk
- ⇒ Flood risk to businesses should be managed as part of wider business continuity
- ⇒ We need to join forces to improve business continuity in the South West



Contacts

➔ Mark Russell

➔ mark.russell@environment-agency.gov.uk

➔ 01392 352412

➔ Floodline

➔ 0845 9881188

➔ Website

www.environment-agency.gov.uk/flood