

Adapting to a changing climate – is planning policy addressing future flood risk?

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Committee on Climate Change

Flooding: Fears, Facts and the Future
6th February 2015

Statutory roles:

- **To provide independent, expert advice** on climate threats and opportunities
- **To report to Parliament on progress** towards adaptation



Prof Lord John
Krebs (chair)

Prof Sam
Fankhauser



Prof Jim Hall



Prof Dame
Anne Johnson



Prof Martin
Parry







Sir Graham
Wynne



Climate change is likely to change the pattern and severity of extreme weather

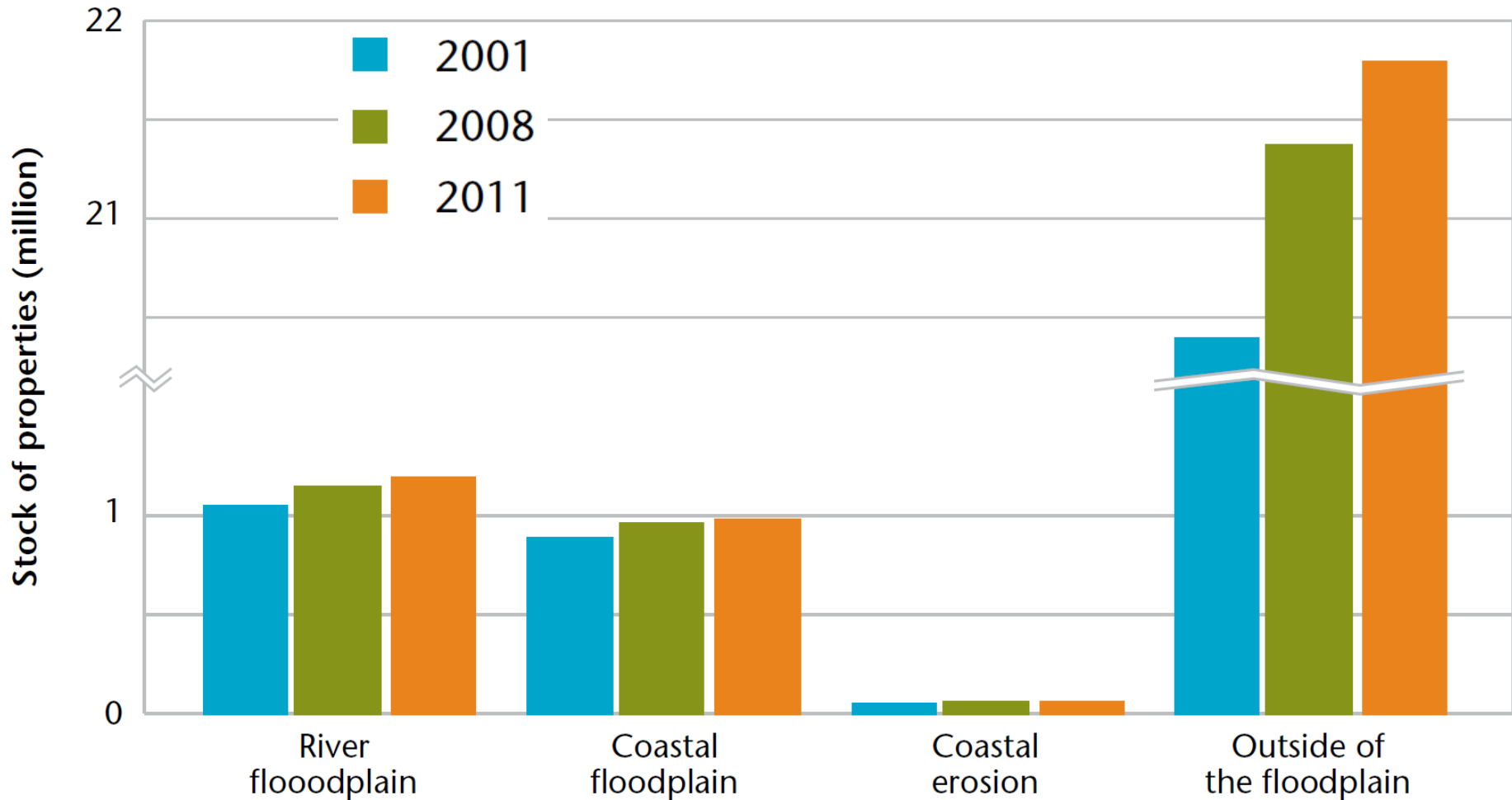
Current return periods for climate hazards in the National Risk Register, and how they could change by 2050s

1-in-200 to 1-in-50 annual chance	1-in-50 to 1-in-2 annual chance	1-in-2 or greater annual chance
Coastal flooding (2013-type surge event)		
Inland flooding (1-in-100 year event)		
	Heavy snow	
	Heatwave (2003-type event)	
	Storms and gales	
Severe drought		

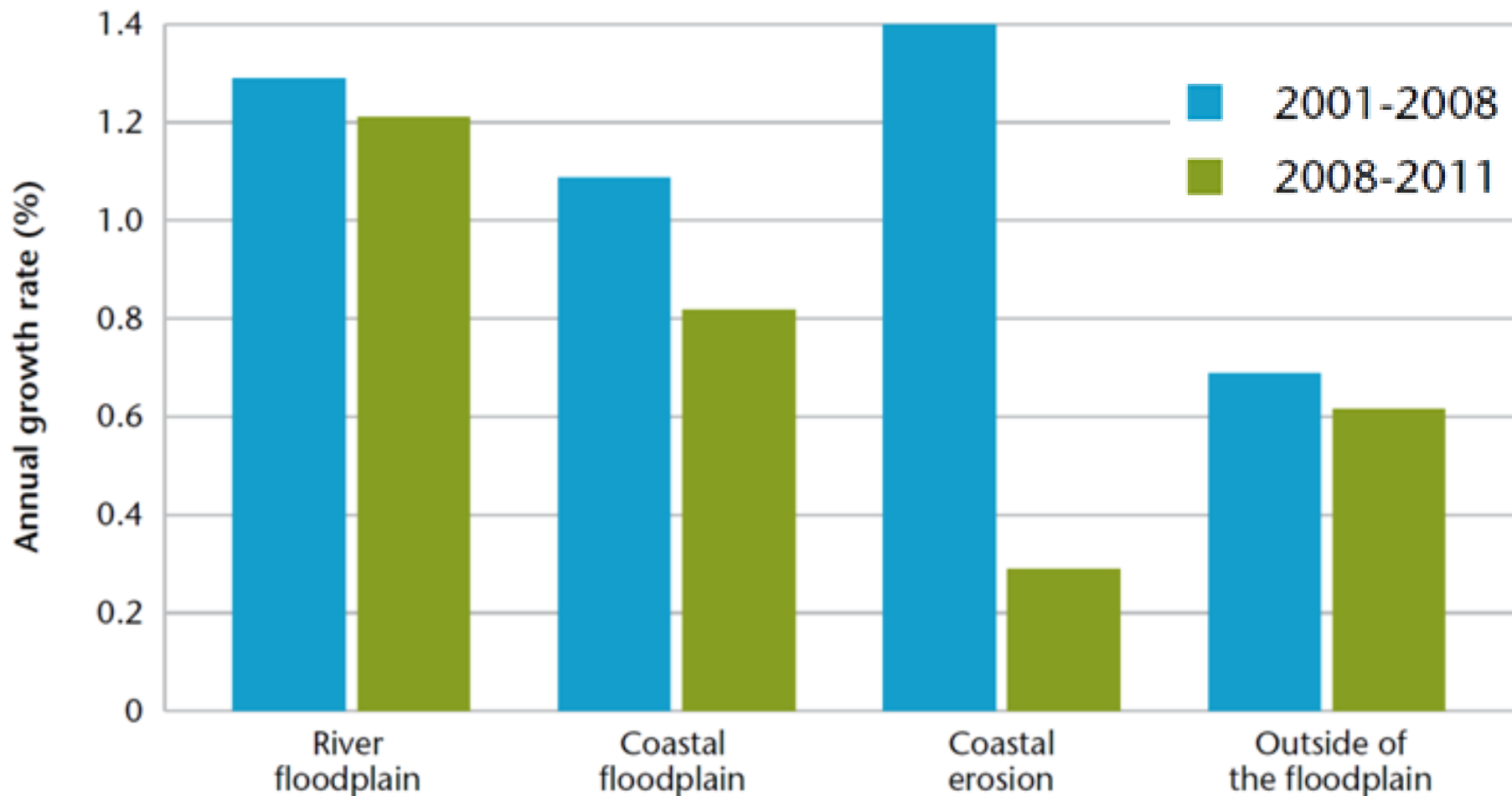


**DEVELOPMENT IN
FLOOD RISK AREAS**

Number of properties on floodplain increased by 214,000 between 2001 and 2011

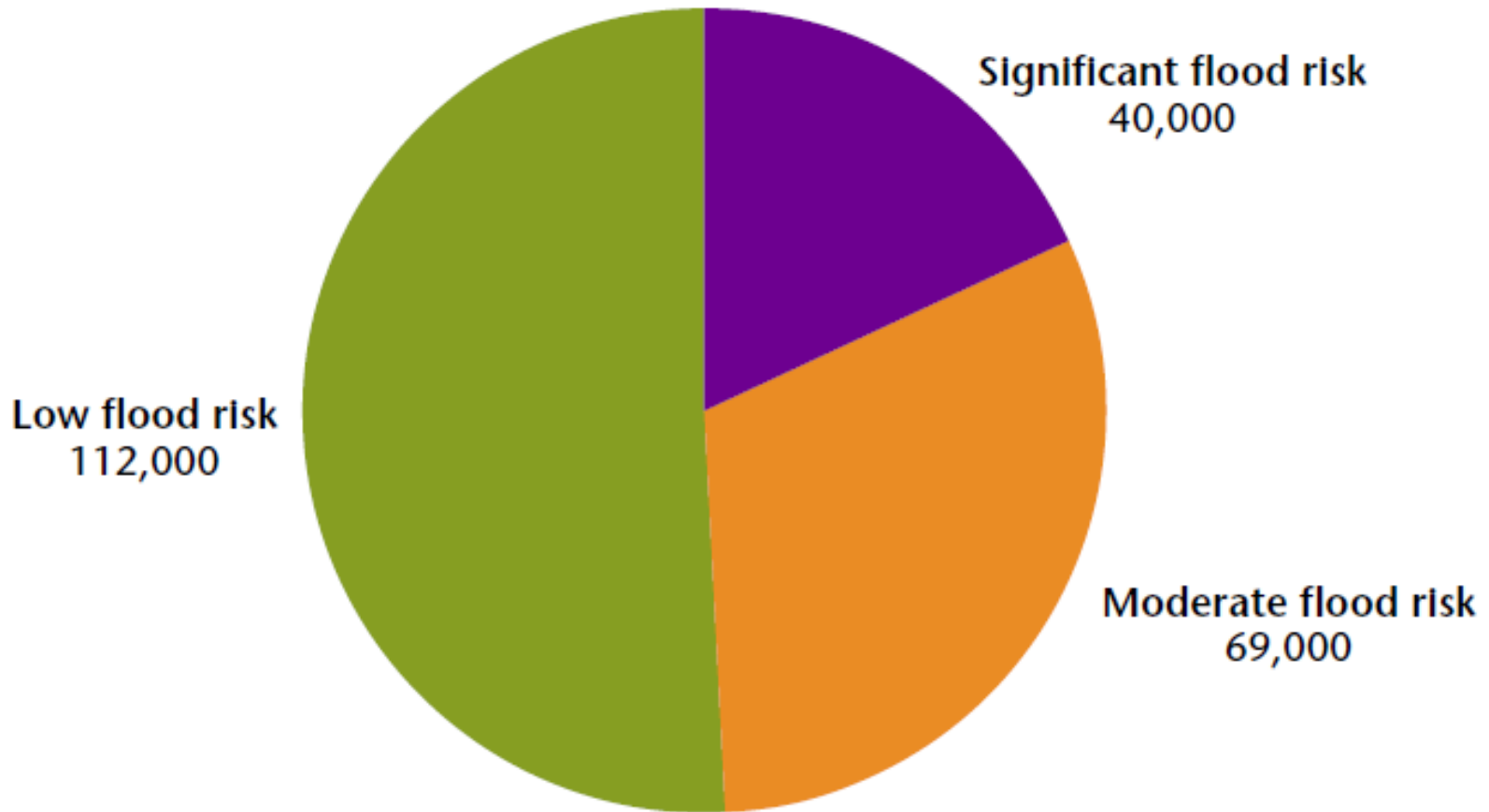


Annual rate of development has been higher on floodplain than outside it

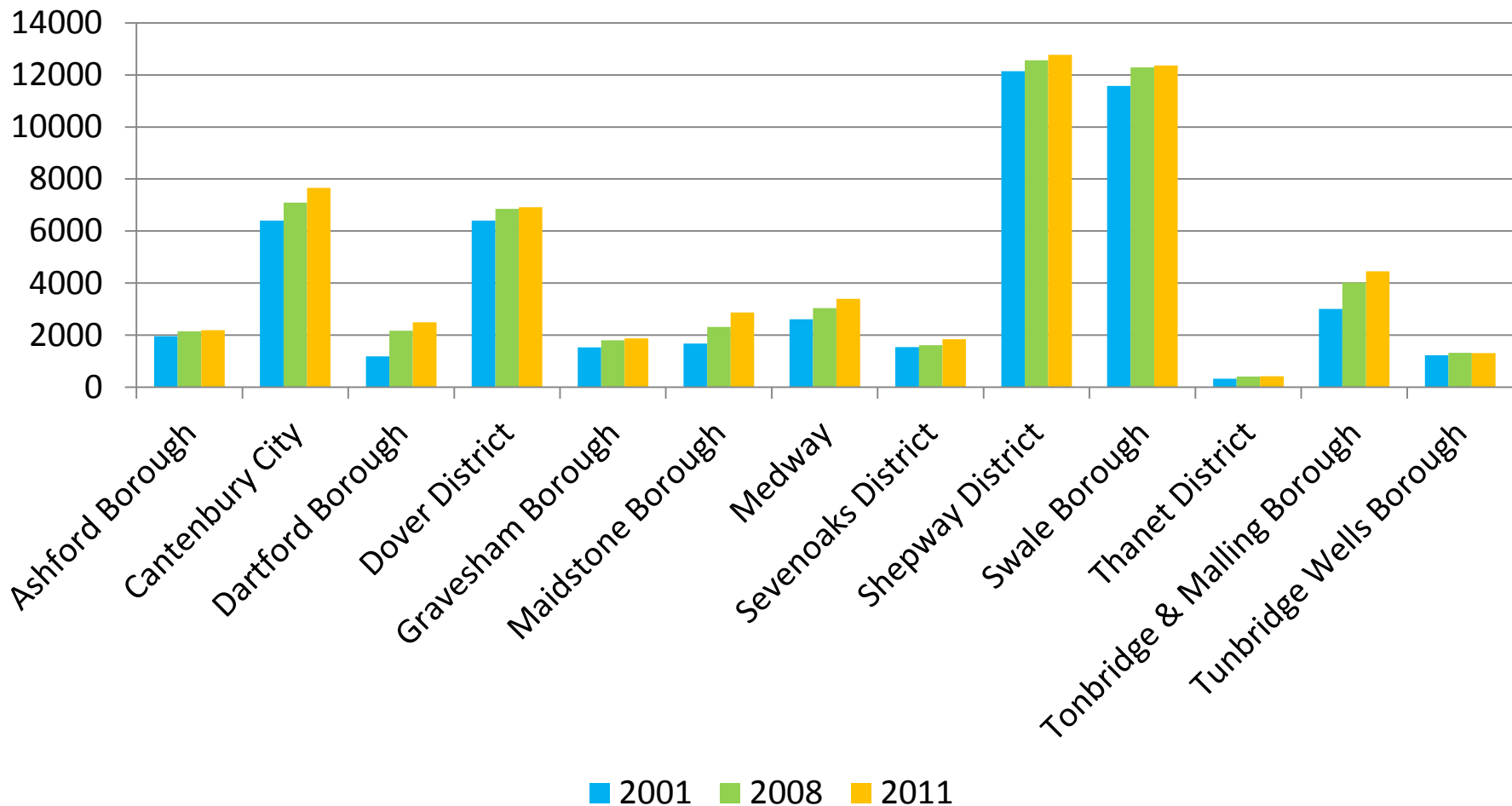


One-fifth of all floodplain development in areas of significant flood risk

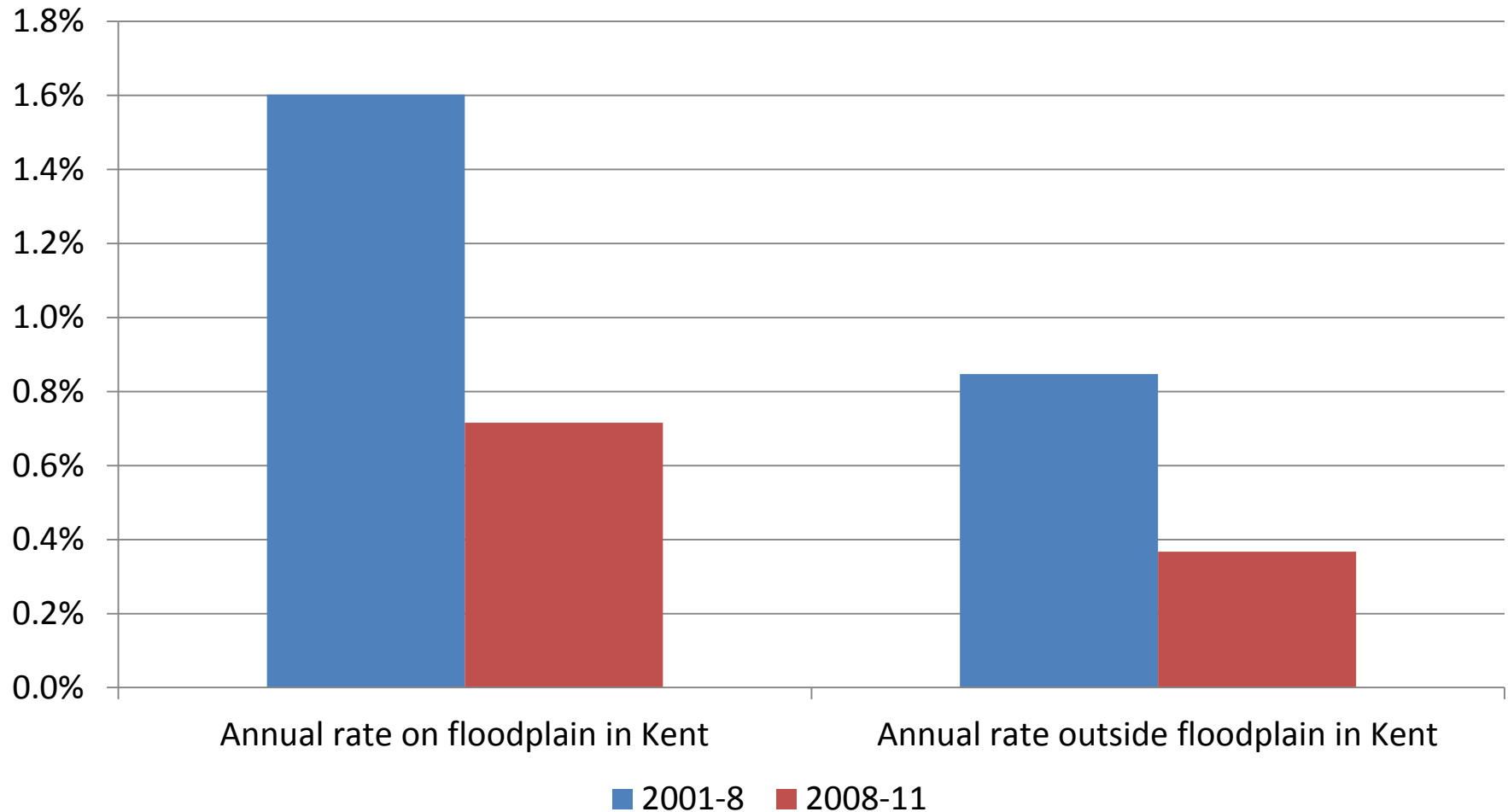
Increase in number of properties in flood risk areas, 2001 to 2011



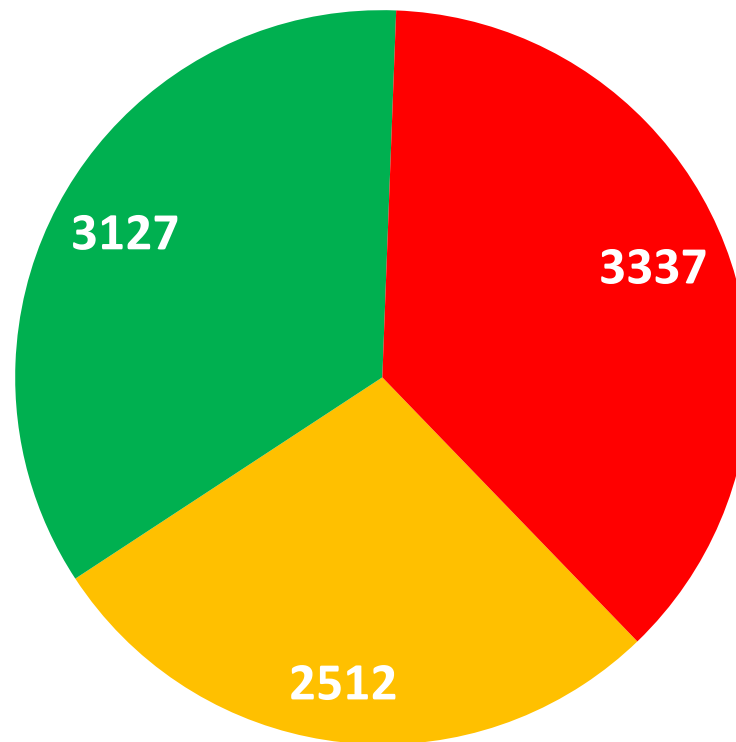
Number of properties on floodplain increased by 9,000 across Kent



Annual rate of development higher on floodplain than outside it, in line with rest of England

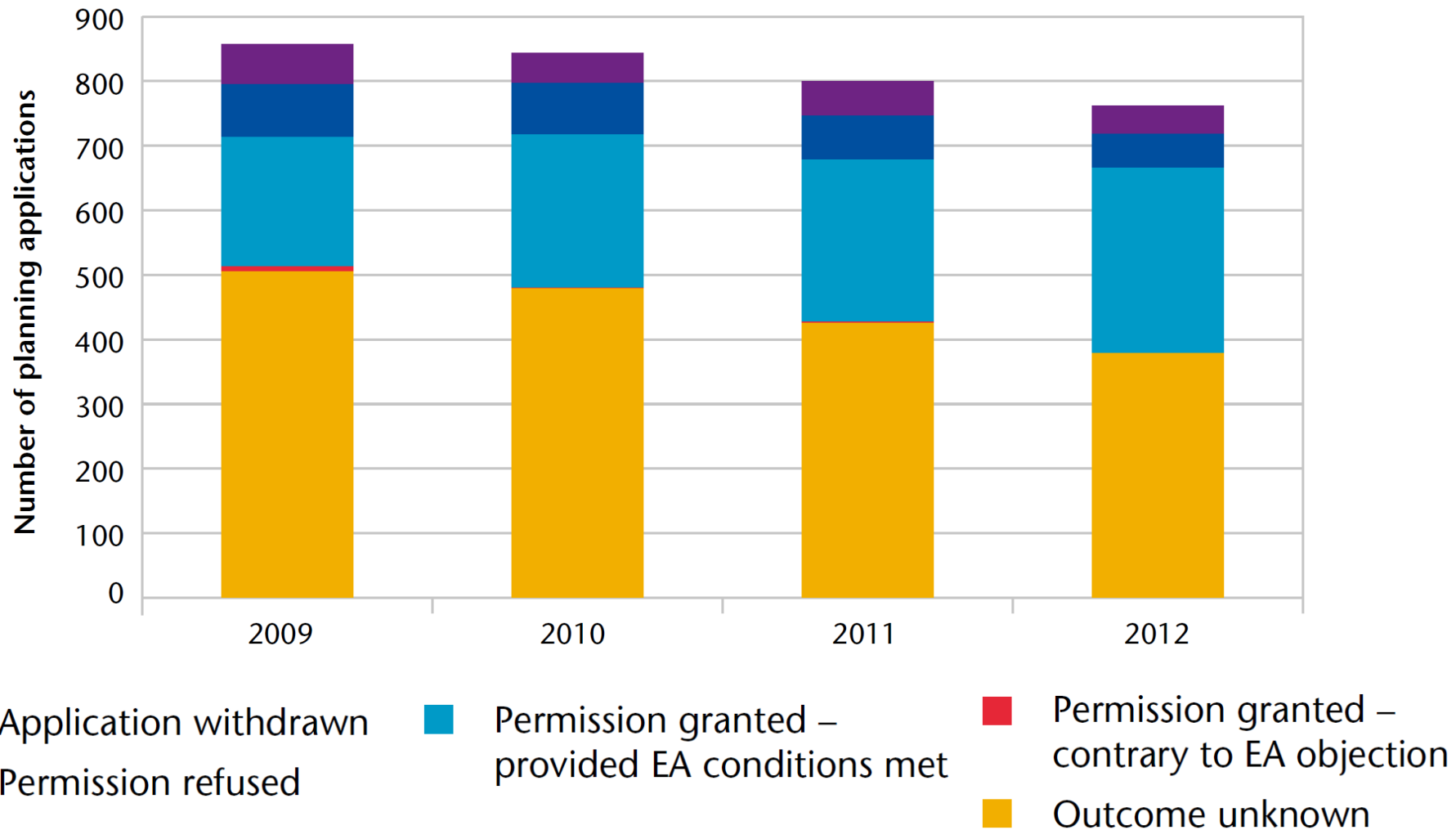


However, a higher proportion (37%) of floodplain development was in areas of significant risk



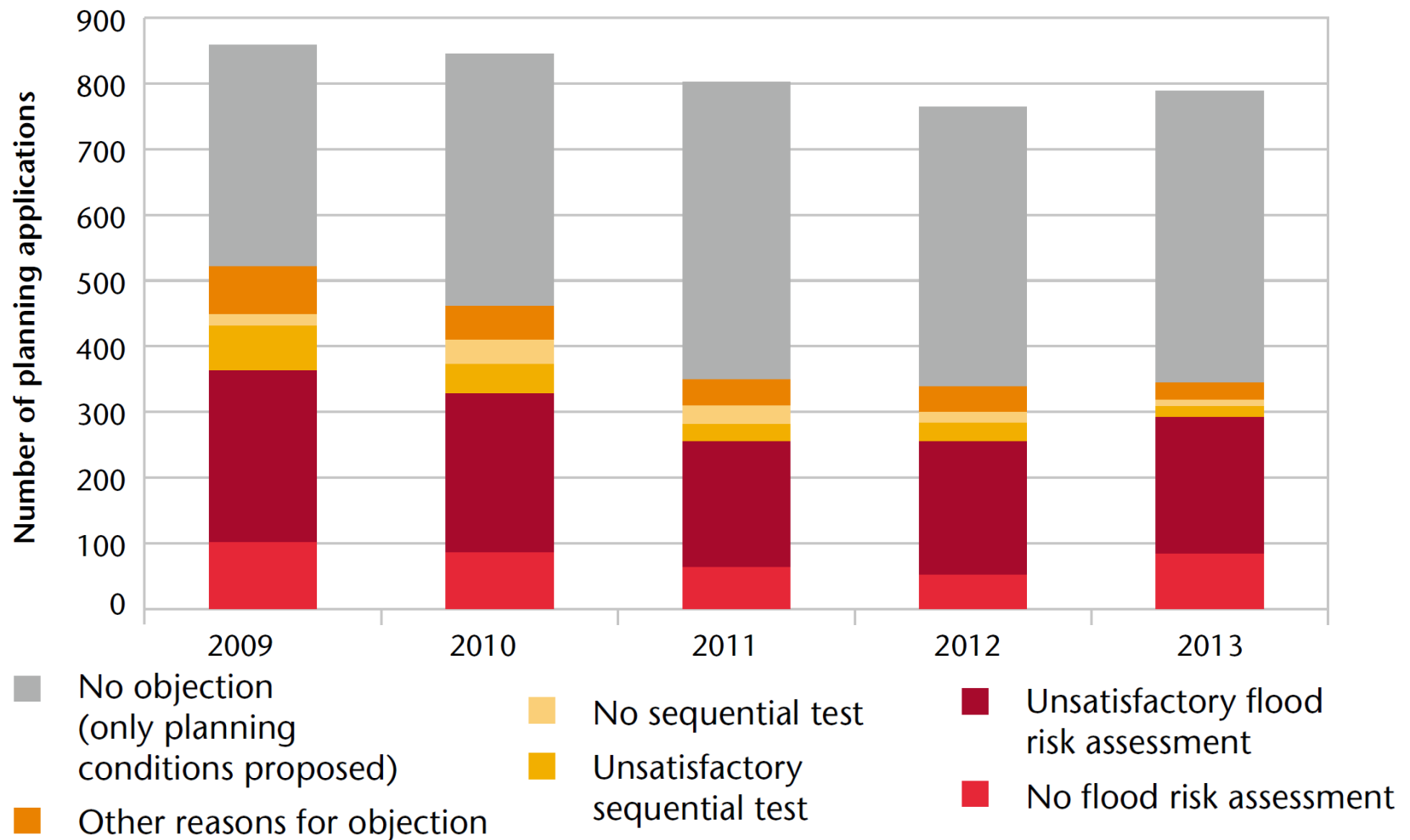
■ Moderate ■ Low ■ Significant

Environment Agency advice is followed in almost all cases where specific advice is provided



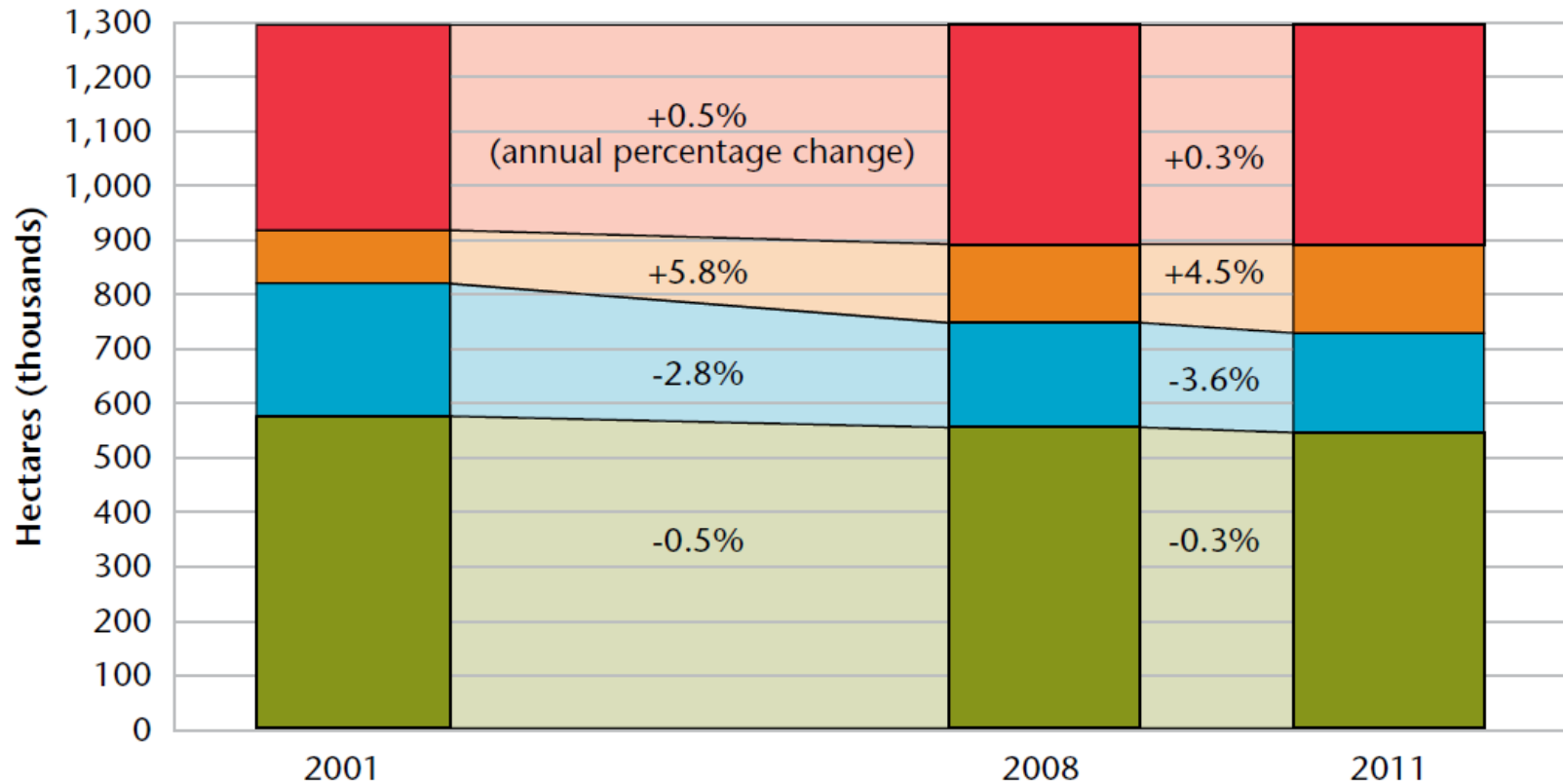
Over one-third of planning applications on the floodplain did not adequately assess flood risk

Reasons for Environment Agency objections to new development



Natural and permeable surfaces in urban areas are gradually being lost

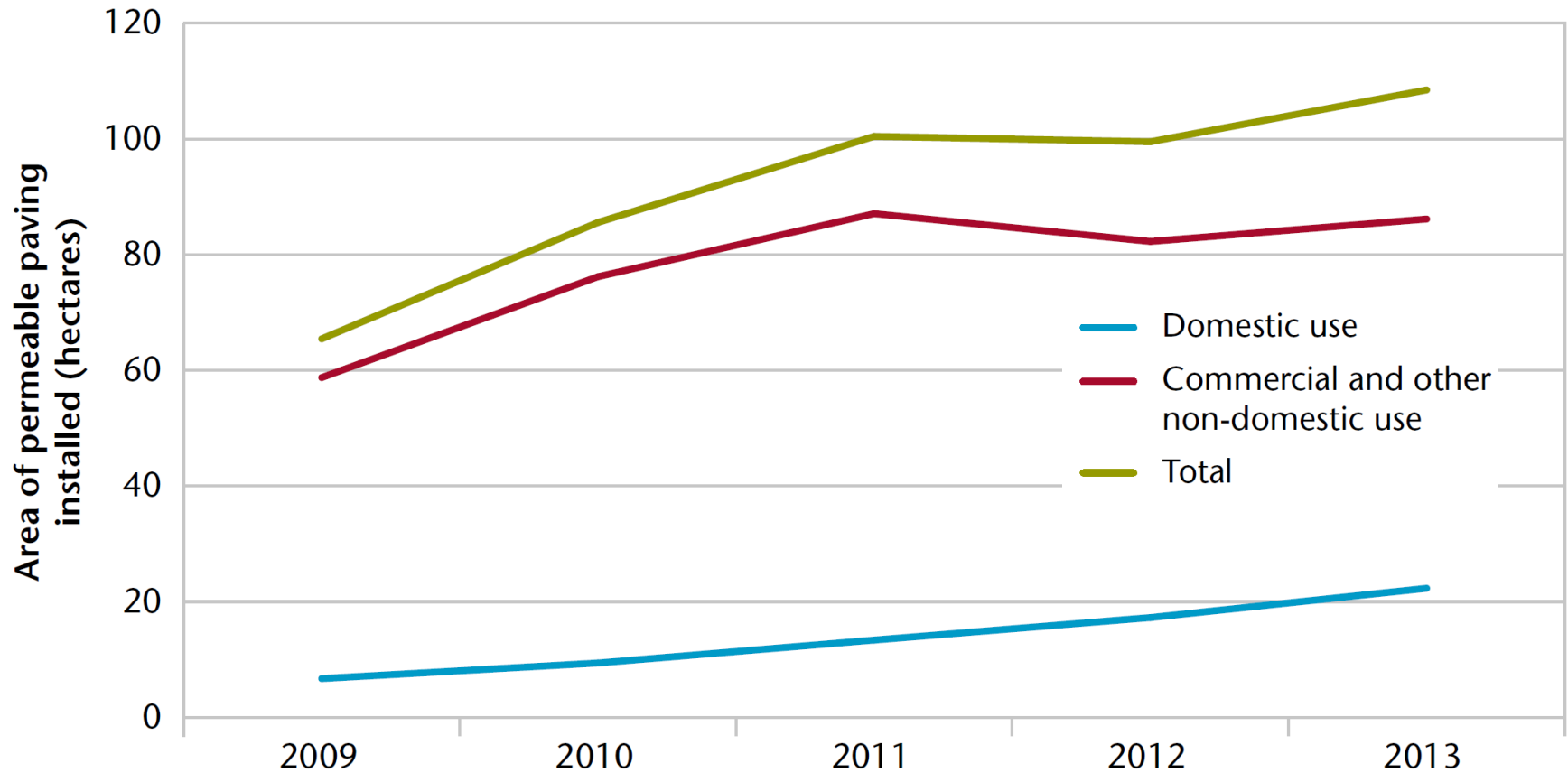
Ground cover in urban areas



Surface type

- Manmade
- Multiple (permeable)
- Multiple (impermeable)
- Natural

Permeable paving has increased slowly, but 90% of hard surfaces remain impermeable

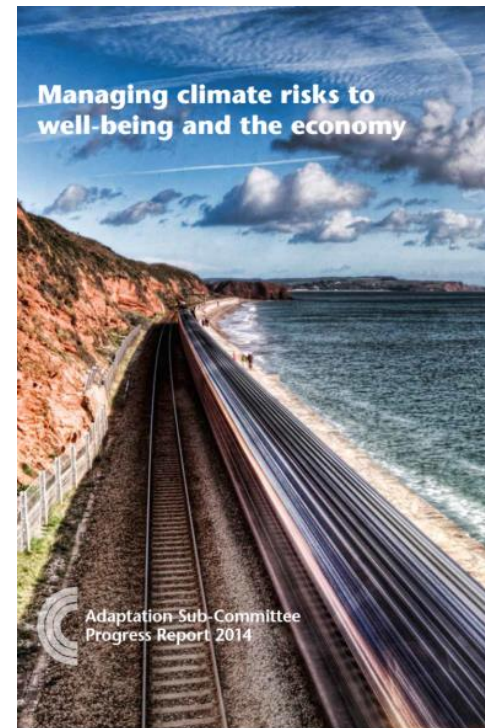
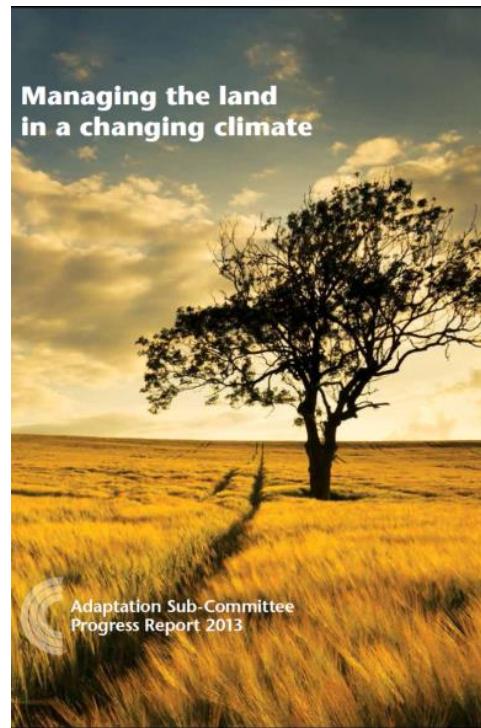
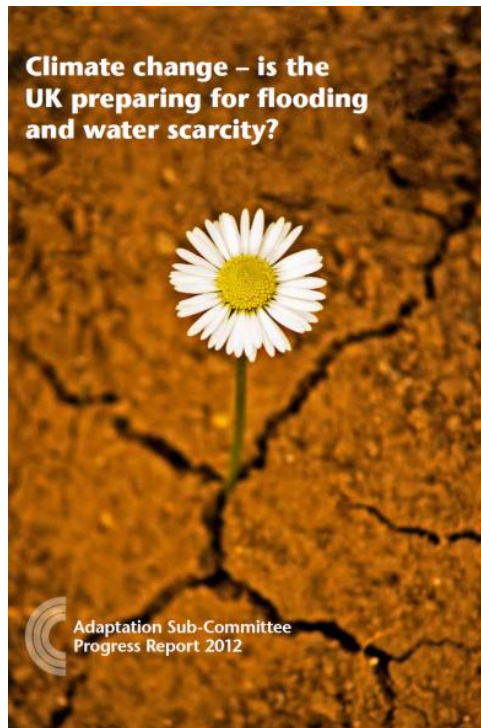


Key messages

- **New development on the floodplain continues, some of which is in areas of significant risk, and is increasing the reliance on flood defences..**
- **Major development in flood risk areas appears to be proceeding, or is refused, in line with EA advice. However specific advice is not provided on thousands of minor planning applications in the floodplain each year.**
- **Key recommendations made by the 2008 Pitt Review to require sustainable drainage in new development remain outstanding and need to be taken forward urgently.**

For further information

- Reports available at: <http://www.theccc.org.uk/publications/>



- June 2015: First statutory report to Parliament on adaptation progress
- July 2016: 2nd UK Climate Change Risk Assessment - Evidence Report

Adaptation Sub-Committee

<http://www.theccc.org.uk>

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