



Cabinet Office

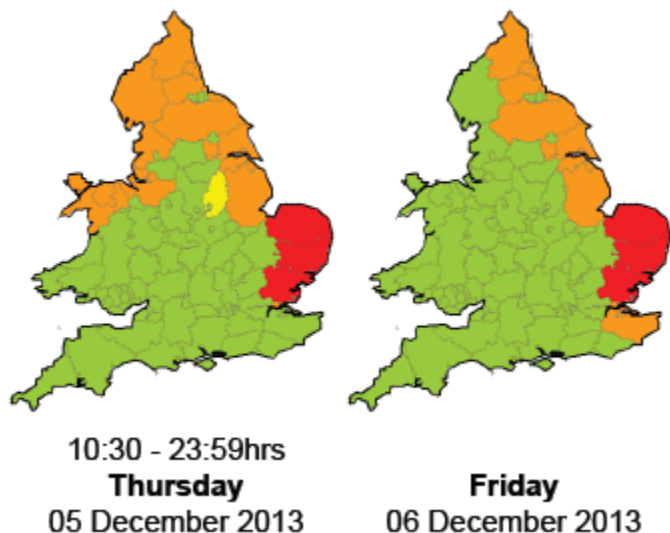
# Flooding in the UK Winter 2013-14

EFDRR 6-8 October 2014

# East Coast Flooding



Cabinet Office



About 1300 properties were reported as flooded in England and Wales. The most significant areas were East Anglia (756) and Yorkshire and the North East (243).

Worst flooding for 60 years; equating to a 1 in 500 year event for large parts of the east coast.

While the storm surge was slightly higher than forecast, with flooding and overtopping of defences occurring in some areas, there was no significant impacts on sectors or critical infrastructure. A second high tide passed largely without incident during the course of the day.

Flood defences protected an estimated **800,000 properties**.

There was flooding at port of Immingham where 40% of UK's strategic salt stocks is stored, but only limited damage with no significant impact expected.



*So does DRR/prevention work??*

	<b>1953</b>	<b>December 2013</b>
Breeches	1200 different locations	3 major breeches
Cost	£50 million (at 1953 prices) or £1.2 billion today	Estimated £400 million for the whole of 2013
Properties flooded	24,000	2,571 (to be confirmed)
Deaths	307	2
Agricultural Land	65,000 ha 46,000 livestock lost	2,700ha
People evacuated	32,000	8,000
Infrastructure	2 Power stations  12 Gas Works  100 miles of roads 200 miles of rail	Port of Immingham Flooded 1 Electricity sub-station in Teeside Flooded Power outage 370,000 homes due to high winds
Flood Warnings	0	160,000 to homes and business 64 severe flood warnings at event peak



## *What happened next?*

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This winter (2013/14), the UK was affected by an exceptional run of winter storms, which carried with them large amounts of rain and led to very serious flooding across southern England. Although no individual storm was regarded as exceptional, the continuity and persistence of the storms was unusual.

For England and Wales this was one of the most exceptional periods of winter rainfall in at least 248 years. The two-month total rainfall (December + January) of over 370mm for the southeast and central southern England region was the wettest (any) 2-month period since 1910.

The Thames, in particular, recorded some of the highest flow rates ever measured and remained exceptionally high for longer than in any previous flood episode since 1883. In January 2014, the Environment Agency Thames Barrier was raised on 13 consecutive occasions to protect people and property.

The UK government held 40 ministerial COBR meetings (including ministerial telecons) during January and February to manage the response and recovery to the flooding events.

The number of households unable to return home is currently 956 (as of September 2014). Of the 4,349 commercial premises affected, only 122 are not yet fully operational.

However, the flood defences, which have been put in place over a number of years, protected more than 1.3million properties since early December).

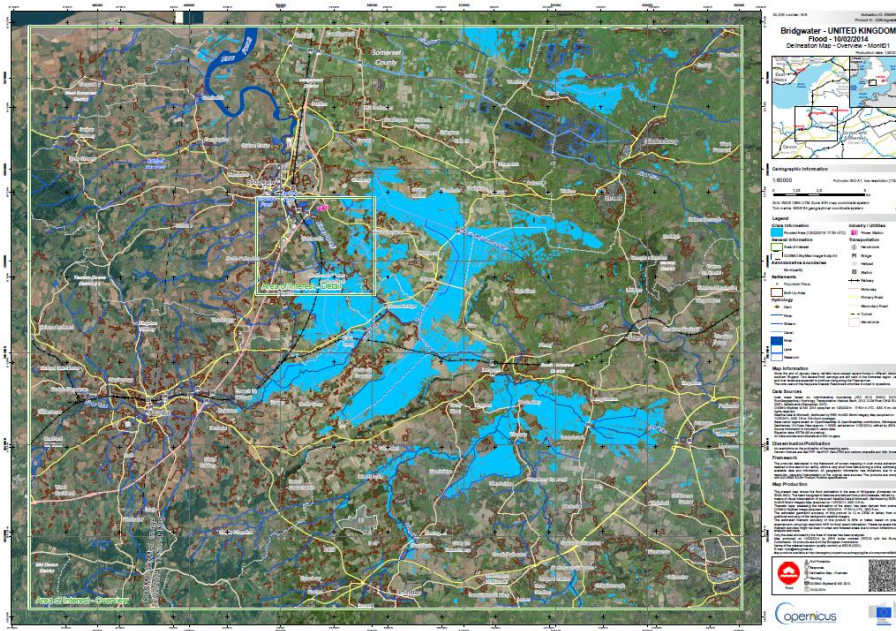
**4100** military personnel were assigned to assist the response right across the UK. Of these 3031 were used in a variety of tasks and just over 1,000 remained in reserve.



The South of England was saturated by mid-December, giving the full range of flooding manifestations – tidal, surface (flash), river and groundwater – were experienced over the following 2 months. The impacts on individuals, businesses and infrastructure were substantial.



Groundwater levels were generally below the seasonal average at the end of the autumn in 2013, in one area of the south-east levels rose by 20 metres in around a fortnight.





# Total Flooding all winter

## Properties flooded since the start of December 2013



Approximate numbers of properties flooded (Environment Agency figures)

Early December (Coastal): 2,600

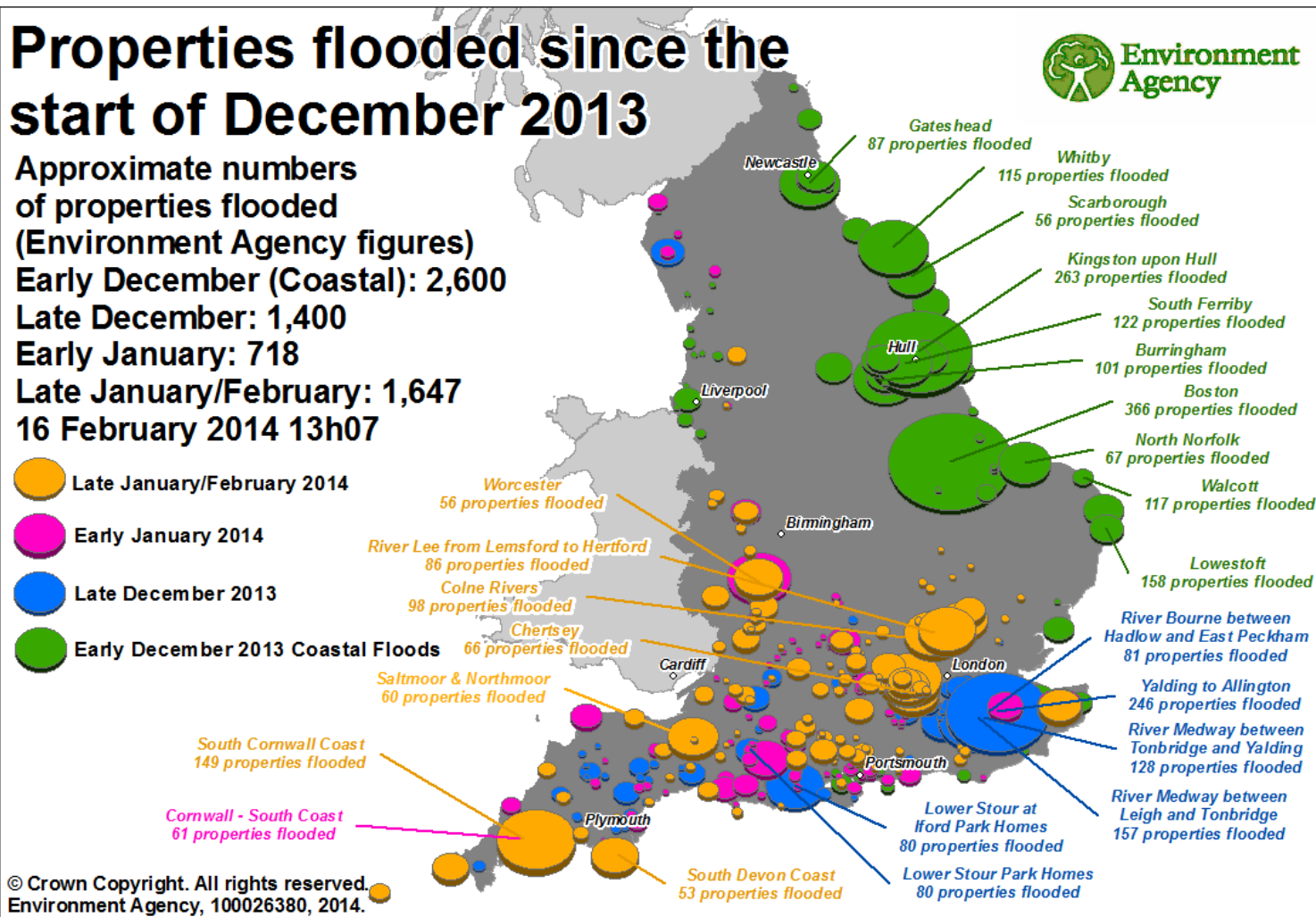
Late December: 1,400

Early January: 718

Late January/February: 1,647

16 February 2014 13h07

- Late January/February 2014
- Early January 2014
- Late December 2013
- Early December 2013 Coastal Floods



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Environment Agency, 100026380, 2014.



# Thanks and any questions