

COASTAL FLOODING AND INSURANCE RISKS

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Coastal flooding is one of the greatest risks facing the UK and the rest of the world, according to insurers and reinsurers. Insurers are becoming more reluctant to insure homes built in vulnerable flood risk areas, especially coastal communities. (1) Flood Re was set up by the British government and insurance industry to help insure homes at risk of flooding but it does NOT provide cover for homes built after 2009, leasehold or rented properties. (2) As a result, new homes built on Chichester's low lying coastal plain will increasingly struggle to obtain insurance or even mortgages as sea levels continue to rise.(3)

The Manhood peninsula already is a High Risk Area and has suffered at least two 'once in a hundred year' flood events since 2012, leaving households homeless.¹ The UK Climate Impacts Programme says Sussex faces one of the biggest threats from storm surges and rising sea levels over the next fifty years. The EA currently predicts sea level rise of up to 1.6 metres for the south east coastline by 2125 but it states that predictions will have to be constantly be revised. US based Climate Central predicts sea level rise of up to 3 metres by 2100 at current CO2 emission levels. Either of these predictions would result in continual inundation of sea water across the Manhood peninsula and in all the coastal and harbour settlements.² A multi agency report published in 1999, more than two decades ago, *Rising to the Challenge – Impacts of Climate Change in the South East in the 21st Century* warned that the coastal towns of Sussex would be more vulnerable to flooding and concluded that "a strong presumption against development in flood risk areas will be needed to avoid an increase in risks to lives and property."³

¹ https://www.westsussex.gov.uk/media/5607/manhood_peninsula_swmp_final_report.pdf ² <u>https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances#table-3</u>

https://ss2.climatecentral.org/#12/50.7693/-0.8715?show=satellite&projections=1-K14_RCP85-SLR&level=3&unit=meters&pois=hide

https://coastal.climatecentral.org/map/11/-

0.8529/50.7595/?theme=sea_level_rise&map_type=coastal_dem_comparison&contiguous=true&elevation_m odel=coastal_dem&forecast_year=2100&pathway=rcp85&percentile=p95&return_level=return_level_0&slr model=kopp_2017

https://www.google.co.uk/amp/s/www.carbonbrief.org/interactive-what-will-2c-and-4c-of-warming-meanfor-global-sea-level-rise/amp

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https://www.scientificamerican.com/article/sea-level-could-rise-at-least-6-meters/

³ <u>https://ukcip.ouce.ox.ac.uk/wp-content/PDFs/SE_summary.pdf</u>





IMAGE: Selsey Flooding

There are attempts being made locally to defend the south coast. The Southern Regional Flood & Coastal Committee (RFCC) was established in 2010. Carbon Brief 2017 reported that the Government was spending £25,526,000 in five local projects. Eighty homes were being protected from coastal erosion and another 1030 from flooding in the Chichester area. In Bognor Regis and Littlehampton £19,892,000 was being spent to protect 210 homes from coastal erosion and another 990 from flooding. The Government will be spending £800 million pa on flood and coastal defences nationally to attempt to stop £1400 million in damage.⁴ However, with sea level rise estimates continuing to increase existing coastal defences are almost certain to be inadequate in future decades.⁵

Flood damage is not just structural – there are mental health consequences. The stress of extensive damage, threat of repeat flooding and possible withdrawal of insurance cover can make properties unsaleable and cause long term depression in victims. The socially disadvantaged are the hardest hit as they are less able to afford flooding insurance and less able to pay for expensive repairs. People who are ill or have disabilities will be more vulnerable to the immediate hazard of a flood and to health risks from polluted floodwaters. Relative sea-level rise could increase the risk of coastal flooding by 2 to 4 times although specific locations could experience changes well outside of the range. The South of England is sinking slowly which of course produces increased sea levels. 10-33% increase in projected sea level rises over global warming sea level increases over next century.⁶ This is also proved by the Thames Barrier which when completed in 1984 was expected to close 2-3 times a year. It is now raised 6-7 times a year and there are discussions as to whether it needs to be heightened.

The disastrous consequences of coastal flooding were seen in the 2013 and 2019 coastal flooding of Boston and Skegness in Lincolnshire, an area where most homes are at significant flood risk.⁷ In both these floods hundreds of households were evacuated and businesses closed.

⁴ Assets.publishing service.gov.uk – Foresight Programme.

⁵ <u>https://5d0e6579-f20c-40a0-acbf-</u>

⁸c4ac274613b.filesusr.com/ugd/dae4df bc46d604a4ae4965a574ea0054fd1582.pdf

⁶ Durham University Report October 2009 funded by Natural Environment Research Council.

⁷ Association of British Insurers.



As a result of these devastating floods the Boston Barrier is now being created across The Haven river. At a cost of £90 million 14000 houses will be protected – roughly £7000 per house in central government funding.⁸

After the Storms Desmond, Eva and Frank in 2015 George Osborne, Chancellor of the Exchequer at the time, announced an extra £700 million for flood risk management. This was paid for by raising the Insurance Purchase Tax from 9.5% to 10% on all premiums.

The Marsh & McLennan Global Risk Report 2019, produced by one of the world's leading insurance brokers, points out that environmental risks have surpassed economic risk as issues of greatest concern. Extreme weather, failure of climate change mitigation and adaption and natural catastrophes have been among the top five global risks for three years running. The threat of coastal flooding sits at the nexus of all three and it is becoming more likely and more severe. Damage to critical infrastructure affects access to power, food, clean water and sanitation with serious implications for public health.⁹

As significant flood events have increased significantly in recent decades the availability of insurance cover has become a cause for concern.¹⁰ Flood Re is a reinsurance/insurance vehicle set up jointly by the British government and insurance industry to provide fall back flood insurance for households who find it difficult to obtain insurance in the conventional market. When created in 2016 Flood Re was expected to exist for 25 years as it was supposed to be a catalyst for better flood planning by government and local authorities. But Flood Re does NOT apply to houses built after 2009 or to rental homes. However, if local authorities and government continue to allow homes to be built in flood risk areas and "as levels of risk rise there will be more questions about uninsurability and what you do about it," according to Andy Bord, Flood Re's chief executive. Arno Hilberts, Vice President at risk modelling company RMS also warns: "You will reach a threshold where insurance systems don't really work."¹¹

To increase the financial problems and insecurity of those living near the coast further still, increased levels of flood risk and reduced insurance availability is also likely to lead to a reduction in mortgage availability for homes in coastal areas.¹²

https://www.theguardian.com/uk-news/2019/jun/15/lincolnshire-flooding-homes-evacuated-river-steepingwainfleet

https://www.lincolnshirelive.co.uk/news/local-news/major-part-bostons-future-flood-3503179

⁹ The Marsh & McLennan Global Risk Report 2019

¹² <u>http://www.ouazad.com/resources/paper_kahn_ouazad.pdf</u>

https://www.marketwatch.com/story/climate-change-could-impact-your-mortgage-even-if-you-live-nowherenear-a-coast-2019-09-30

⁸ https://www.bbc.co.uk/news/uk-england-lincolnshire-30225852

¹⁰ https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/publication/impact-of-climate-change-on-the-uk-insurance-sector.pdf

¹¹ Financial Times 2 February 2020; Business Day 19 February 2020

https://www.mpamag.com/news/global-warming-threatens-the-30year-mortgage-coastal-housing-markets-225947.aspx



- (1) <u>https://www.marsh.com/uk/insights/research/the-global-risks-report-2019.html</u>
- (2) <u>https://floodre.co.uk</u>
- (3) <u>https://www.theguardian.com/news/2019/sep/18/weatherwatch-do-30-year-mortages-</u> make-sense-as-sea-levels-rise-faster-annually

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https://www.barrfoundation.org/blog/new-study-identifies-massive-risk-to-coastal-property-fromsea-level-rise

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